IBM

NCP Release 5 Data Flow

Student Text

NCP Release 5 Data Flow

Student Text

Minor Revision, November 1980
This is a minor revision of the previous edition,
SR20-4513-3 and includes TNL SN23-1047.

All rights reserved. No portion of this text may be reproduced without express permission of the author.

Preface

This publication is a student text on data flow in the IBM 3704 and 3705 Communications Controllers network control program (NCP), release 5 data flow. This publication does *not* include information on Advanced Communications Function (ACF) Network Control Program (NCP), which supports multiple, concurrent channel adapters in NCP mode or in multidomain networks.

Prerequisite knowledge of the IBM 3704 and 3705 Communications Controllers is required to understand this material. The prerequisite information may be obtained in the following:

IBM 3704 and 3705 Communications Controllers Hardware (SR20-4544)

IBM 3704 and 3705 Communications Controllers NCP Programming (SR20-4568)

Advanced Function NCP and Related Host Traces (SR20-4510)

IBM 3704 and 3705 Control Program Generation and Utilties Guide and Reference Manual (GC30-3008)

A quiz appears at the end of each major section, with the answers given in Appendix B. You will need the following handbook to answer the questions.

IBM 3704 and 3705 Program Reference Handbook (GY30-3012)

If you require additional information, please refer to:

IBM 3704 and 3705 Communications Controllers, Network Control Program/VS Program Logic Manual (SY30-3013).

IBM 3704 and 3705 Communications Controllers Principles of Operation (GC30-3004)

List of Illustrations

Contents

Hardware and Programming Structure

Objective

Upon completion of this topic the student should be able to identify the levels of programming and interrupt scheduling.

Review of Hardware Facilities

Before going on to the components of the SDLC network, this section reviews the hardware facilities which are used in the programming design, as well as dispatching code and techniques. In later sections the modules are related to an interrupt level or to a dispatched module. In either case a knowledge of the hardware and dispatcher is required.

Levels of Programming

Because the communications controller is an interrupt-driven unit, the NCP directing the operation of that unit is made up of smaller programs or levels. Interrupts can be caused by the channel, the communication lines, or the program itself.

The controller has five program levels. Program level 1 has the highest priority; program level 5 (referred to as the background level) has the lowest priority. Because level 5 has the lowest priority, level 5 code runs when levels 1 through 4 are not executing. For a complete description of the five levels of the controller and the interrupt facility, refer to *IBM 3704 and 3705 Communications Controllers Principles of Operation* (GC30-3004), Chapter 2: System Structure.

Figure 1.1 is a chart of the programming levels indicating the operations performed at each level, the starting address, and the means by which the level gets control. Note that when an attempt is made to execute an instruction at location X'0000', the NCP detects a 'branch to zero', regardless of the program level.

Level	Operations Performed	Starting Address	Means of Getting Control
5	• Interpretation of commands from host. • Control of polling and addressing. • Decoding and execution of system examination and modification requests. • Data handling functions. • Block handling functions. • Initiation and termination of line I/O. • Panel functions. • Boundary network node (BNN) processing. • Physical services functions. • Function management.	N/A	• Default from other four levels.
4*	• Buffer management. • Queue management. • Task dispatching. • Supervisory services.	X'0180'	• PCI. • SVC.
3	• Interval timer functions. • Handling of panel functions. • Channel adapter management. • Communication processing deffered from level 2. • Intermediate network node (INN) processing.	X'0100'	• PCI. • Type 1, type 2, type 3 and type 4 CA. • Interval timer. • Panel INTERRUPT push button.
2	• Buffer service for communication lines. • Character service for communication lines. • Bit service for communication lines.	X'0080'	• Type 1, type 2, and type 3 scanner.
1	• Machine check handling. • Program check handling. • Adapter check handling. • IPL procedure. • Address trace facilities.	X'0010'	• IPL. • Address exception check. • Type 1, type 2, type 3 and type 4 CA checks. • Type 1, type 2, and type 3 scanner checks. • Address compare. • Protection check. • Input/output check.
x	• Detection of branch to zero.	X'0000'	• Branch to zero.

* Level 4 operations can also be performed at levels 1 and 3.

Figure 1.1. Program Levels

Level 1, Address X'0010'

When a level 1 interrupt occurs, control is given to the level 1 router, which is located at address X'0010'. By examining the contents of external registers, the router determines the cause of the interrupt and passes control to one of the following handlers: the program exception check-handler, the address trace module, the channel adapter check-router, the communications adapter check-handler, or the abend module.

Level 2, Address X'0080'

When a level 2 interrupt occurs, control is given to address location X'0080'. The level 2 router determines if the interrupt was a normal character service request. The address of the router is located in the CCB. The level 2 router itself processes hardware error and exceptional conditions.

Level 3, Address X'0100'

When a level 3 interrupt occurs, control is given to address location X'0100'. By examining the external registers, the level 3 router determines the cause of the interrupt, then passes control to one of the following interrupt handlers: the channel adapter input/output supervisor, the communications-line timer service, the communications control program queue-handler (signaled by a PCI), or the panel support module.

Level 4, Address X'0180'

When a level 4 interrupt occurs, control is given to address location X'0180', the level 4 interrupt handler. An SVC interrupt occurs when a supervisor macro is issued in program level 5. The program issuing the macro specifies certain parameters. After decoding the SVC code, the supervisor nucleus loads these parameters into registers and calls the appropriate supervisor SVC routine to process the request. If the interrupt is a program-controlled interrupt (PCI), the interrupt handler branches to the address in the PCI vector table to process the request.

Level 5

All level 5 tasks are dispatched by the level 4 task dispatcher. The entry point of each task is provided as a field in the queue control block (QCB), which is scheduled by placing the QCB in one of the supervisor dispatching queues. The dispatching of level 5 tasks is covered later in the supervisor section.

Interrupt Scheduling

Each programming level, except level 5, has an 'interrupt pending' latch and an 'interrupt entered' latch. An 'interrupt pending' latch is set for levels 1, 2, 3, or 4 by hardware service requirements. If a program check occurs, the level 1 'interrupt pending' latch is set. If a line requires service, the level 2 'interrupt pending' latch is set. Channel service requires the level 3 'interrupt pending' latch to be set. The level 3 latch is set for service by the channel adapter, but service is initiated by a PCI (OUT X'7C') from the level 4 supervisor. Level 4 is initiated in levels 1 and 3 by a PCI (OUT X'7D') or by supervisor calls (SVC) from level 5.

Interrupt levels may be masked off to prevent interrupts. Levels 2 through 5 may be totally suppressed. Level 1 may be masked to ignore channel adapter and scanner interrupts for test purposes. If the level is not masked off and an interrupt is pending, the interrupt is not allowed if any of the following conditions exist:

- A higher-priority interrupt request is present.
- The program level to be interrupted is already entered ('interrupt entered' latch is on).
- The program level to be interrupted is masked.
- A type 3 communication scanner cycle-steal request exists.
- A type 2 or 3 channel adapter cycle-steal request exists.

At the time an interrupt is honored, the 'interrupt entered' latch for that program level is turned on. The 'interrupt entered' latch is a hardware latch which signals the controller that the associated program level has been entered. As long as this latch is on, no other interrupts to this program level are honored. The general registers and condition latches for this level are safe from change by another interrupt. The 'interrupt entered' latch is turned off either by an EXIT instruction executed at this level or by a reset condition to the entire controller.

After each instruction is executed, the controller tests for priority conditions before executing the next instruction. The type 3 communications scanner and type 2 or 3 channel adapter cycle-steal requests occur between instructions. In addition, a higher-priority program level may need control. If level 3 code is executing ('interrupt entered' latch on) before executing each additional instruction the controller checks, in sequence, the 'level 1 entered' latch, 'level 1 pending' latch, 'level 2 entered' latch, 'level 2 pending' latch, and 'level 3 entered' latch. This sequence returns control to level 3 for another instruction execution.

If a second level 3 interrupt was pending, it is not checked in the sequence because the 'interrupt entered' latch is tested first. If the 'level 2 pending' latch was set, as in the previous example, level 2 code starts executing. The 'level 2 interrupt entered' latch is turned on and level 2 executes until an EXIT instruction turns off the 'interrupt entered' latch. When the between-instruction check is made after the level 2 EXIT instruction, the level 2 interrupt entered latch is off, so the 'level 2 interrupt pending' latch is checked. If that latch is on, the level 2 code executes again with the 'interrupted entered' latch turned on a second time. If the 'level 2 pending' latch is not on, the check returns control to level 3 where the 'interrupt entered' latch is still on. The level 3 code continues, unaware of the interrupt.

Hardware and Programming Structure Summary

The IBM 3704 and 3705 Communications Controllers provide hardware support for five programming levels. The first four levels are interrupt-driven code, each having an absolute hardware address to begin instruction execution. The fifth level is dispatched under the control of the level 4 supervisor.

Network Control Program Overview and Data Flow

Objective

Upon completion of this topic, the student should be able to identify the major programming components of NCP, and the flow of control and data between major components.

Identifying the Major Components

This section identifies the major components of the network control program and the program level in which the components operate. This material serves as the foundation upon which the detail of future sections is built. The major components of the network are covered in the order of subsequent topics.

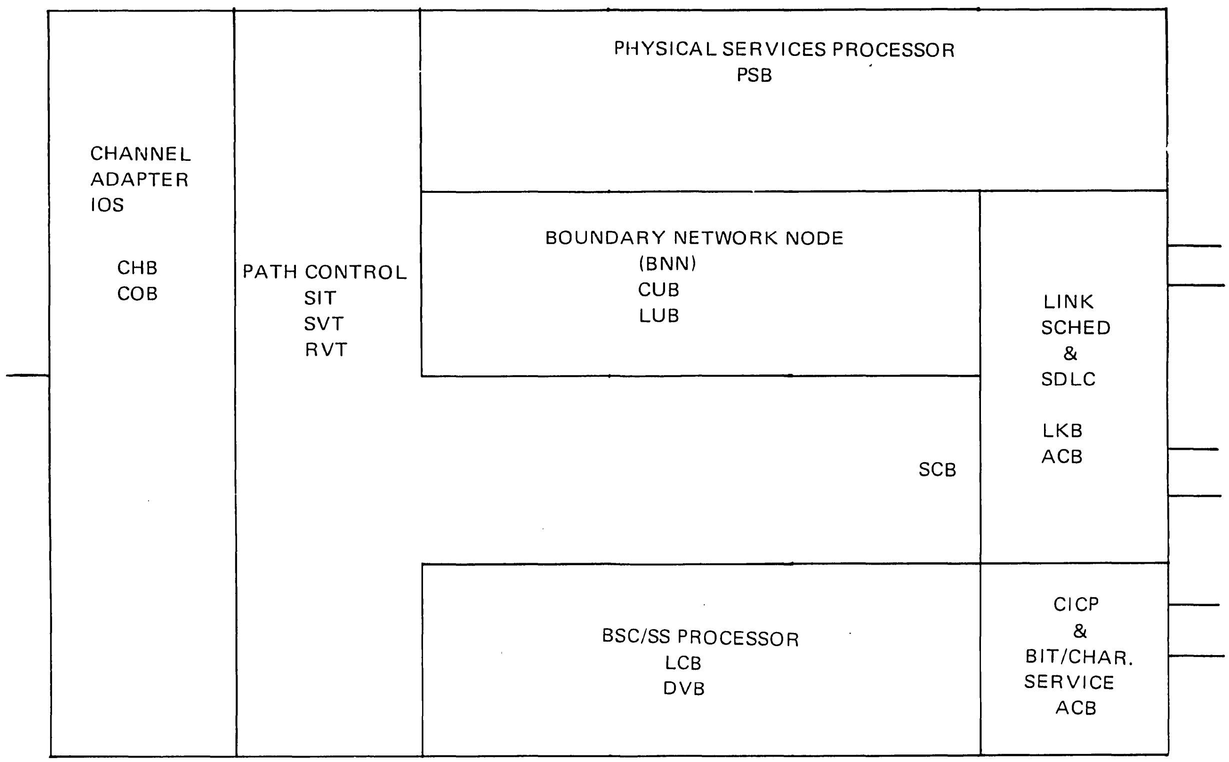

Figure 2.1. NCP Components

Network Control Program Supervisor

The NCP supervisor serves primarily as the interface between the background tasks running in level 5 and the routines running in levels 1, 3, and 4. When levels 1, 3, or 4 require data to be processed by background tasks, the tasks are scheduled via the supervisor. The supervisor queues the data and schedules the correct background processing task. Conversely, as background tasks require initiation of input or output, manipulation of queues, management of buffers, and similar tasks, the task requests are presented to the supervisor. The supervisor then processes those requests as required.

The supervisor executes in level 4. The primary control blocks used by the supervisor are: byte direct addressables (XDB), halfword direct addressables

(XDH), word direct addressables (XDA), queue control blocks (QCB), path information units (PIU), and the SVC vector table. The supervisor code is executed and provides services for all of the routines identified in this section.

Channel Adapter IOS

The channel adapter module is used to monitor and control the hardware channel adapters within the 3704 or 3705 controller during a data transfer to or from the host. There are four types of channel adapters; however, only two types are used for programming purposes within the controller. Therefore, there are only two types of IOS modules: one to control the type 1 or type 4 adapter, the other to control the type 2 or type 3 adapter.

Type 1 or 4 adapter

The 3704 supports a type 1 adapter only. A 3705 can have a type 1 or 4 adapter for NCP mode or PEP mode, or the type 1 or 4 adapter can be used for emulation programming for (EP), with a second adapter for NCP mode only. A type 1 or 4 channel adapter for operation in NCP mode uses a channel operation block (COB). The channel modules operate in program level 3 via a level 3 interrupt from the channel adapter hardware.

Type 2 or Type 3 Adapter

The 3705 operates in NCP mode with a type 2 channel adapter to a single processor or a type 3 channel adapter to two tightly coupled multiprocessors. A type 2 or type 3 channel adapter uses a channel control block (CHB). The channel module operates in program level 3 via a level 3 interrupt from the channel adapter hardware.

Path Control

Path control code is executed on outbound PIUs by a branch from the channel code. Path control inbound, which is different code, is executed on inbound PIUs by a branch from the link scheduler.

Path Control Out

'Path control out' directs the flow of path information units (PIUs) from the channel adapter IOS to its proper destination. 'Path control out' uses the destination address field (DAF) from the PIU to access entries in the subarea index table (SIT), subarea vector table (SVT), and resource vector table (RVT). The 'path control out' routine locates the appropriate path for the PIU and places the PIU on a queue control block (QCB) for processing by NCP physical services, boundary network node, link scheduler (SCB), or the BSC/SS processor. This module operates in program level 3 via a branch from the channel IOS.

After the boundary network node processing completes, an outbound PIU is passed to 'path control out delayed', which converts the PIU from FID1 to FID2 or FID3, segments the FID2 or FID3 as required, and places the PIU on the link outbound queue.

Path Control In

'Path control in' is divided into two parts: immediate and delayed. When a PIU is received on a link, 'path control in immediate' is invoked by a branch from the link scheduler. 'Path control in immediate' checks for a PIU source of a remote controller (SCB); if the PIU is from a remote, the PIU is immediately queued on the channel intermediate queue for the host. If the PIU is not from a remote, the PIU is queued on the CUB link inbound queue and 'path control in immediate' exits from level 3.

The PIU queued on the CUB link inbound queue invokes a level 5 task of 'path control in delayed'. This task processes the PIU to identify the source logical unit or CUB physical services, then branches to an appropriate boundary network node connection point manager IN (CPM-IN) for additional processing.

Network Control Program Physical Services

NCP physical services interfaces with system services control point (SSCP) of the host to provide control functions for the NCP. NCP physical services provide functions such as activating or deactivating links, contacting physical units, and other control functions. These modules use the physical services control block (PSB). The physical services routines operate in program level 5 via the task dispatcher. 'Path control out' schedules physical services by PIU requests. Responses to SSCP are queued directly to channel adapter IOS.

The NCP physical services has a 'connection point manager-in' queue (inbound error-handler queue), which is invoked by the link scheduler at the completion of a 'dial', 'answer', 'contact', or break in a link.

Boundary Network Node

The boundary network node modules provide the interface to SDLC type 1 and type 2 devices. Remote 3704 and 3705 controllers are not included in this code, as PIUs destined for a remote are enqueued directly on a station control block (SCB) by 'path control out'. These modules control the session initiation and session status for the physical units and logical units attached to this 3704 and 3705 controller. These modules operate in program level 5 via task dispatching. Type 1 and 2 physical units are defined by the common physical unit control block (CUB); logical units are defined by the logical unit control block (LUB). BNN modules are scheduled when they receive a PIU from 'path control out'. BNN enqueues PIUs from the host on a link outbound queue for the link scheduler. BNN enqueues PIUs for the host on the channel intermediate queue.

Link Scheduler

The link scheduler executes in program level 3. The link scheduler is invoked for a specific link by an 'activate link' command. The link scheduler has two basic functions: data transfer or command processing.

The link scheduler uses the service order table (SOT) to locate the physical units for that specific link. Each physical unit is checked for active status. If the physical unit is active, the link outbound queue is checked for outbound PIUs to transmit. After any allowed outbound PIU traffic has been sent, the physical unit is polled for inbound PIUs. When all physical units have been checked for data service at least once, the link scheduler switches to control functions. One control function ('dial', 'answer', 'contact', 'discontact') is attempted for one physical unit before the link scheduler returns to data transfer mode.

If there are no outbound PIUs for a link and if no active physical unit has inbound PIUs in response to polling, after the control cycle the scheduler suspends polling for a user-specified pause. Data queued to be transmitted is sent, but polling is suspended.

The link scheduler uses the link control block (LKB) to schedule link operations and maintain link status. The LKB is generated by a LINE macro of an SDLC group. The common physical unit block (CUB) or station control block (SCB) is used to schedule the station control and maintain station status for any SDLC physical unit.

SDLC Routines

The SDLC routines are used for the actual transmission of data on the link. The adapter control block (ACB) is used for link control. These routines operate in program level 2 via an interrupt from the hardware scanner.

SDLC routines are initiated by the link scheduler, providing addresses of processing routines in the character control block (CCB) and enabling the link for interrupts to begin processing.

BSC/SS Processor

The BSC/SS processor supports the BSC/SS devices in NCP mode that are attached to this communications controller. The processor uses the line control block (LCB) and the device control block (DVB) to schedule and control commands issued to these devices. Command processors are used to define the commands and the work scheduler is used to schedule the necessary tasks to complete the command. Command decoders and initialization routines initialize the lines and control their operation; character-service routines handle the actual transmission of data across the line. Both types of routines use the adapter control block (ACB). The command processors, work scheduler, and scheduler tasks operate in program level 5 via task dispatching. The command decoders and initialization routines operate in program level 3 via a PCI level 3. The character service routines operate in level 2 via a hardware interrupt from the scanner.

Unless BSC or SS devices are also defined for NCP mode, BSC/SS processor support is not included in a network of SDLC terminals. The processor support routines are not included if BSC/SS devices are operated in emulation mode of a partitioned emulation program (PEP).

Overview Summary

There are four basic paths through the local controller from the host. The path that is taken depends upon the destination of the path information unit (PIU). The destination and sequences are as follows:

- Physical services destination

  Channel adapter IOS, path control out, physical services processor

- SDLC device or logical unit destination

  Channel adapter IOS, path control out, boundary network node, link scheduler, SDLC routines

- Remote controller destination

  Channel adapter IOS, path control out, link scheduler, SDLC routines

- BSC/SS processor destination

  Channel adapter IOS, path control out, BSC/SS processor, CICP

There are four paths through the local controller to the host, as follows:

- Physical services source

  Physical services processor, channel adapter IOS

- Type 1 or type 2 physical or logical unit source

  SDLC routine, link scheduler, path control in immediate, path control in delayed, boundary network node, channel adapter IOS

- Type 4 physical unit source

  SDLC routine, link scheduler, path control in immediate, channel adapter IOS

- BSC/SS processor source

  CICP, BSC/SS processor, channel adapter IOS

Network Control Program Supervisor

Objective

Upon completion of this topic the student should be able to identify and locate the supervisor dispatching queues, identify supervisor services, and explain how the services are requested.

Purpose of the Supervisor

The NCP supervisor serves primarily as the interface between background tasks running in level 5 and routines running in levels 1, 3, and 4. When levels 1, 3, or 4 require data or a stimulus to be processed by the background tasks, the task is scheduled via the supervisor. The supervisor queues the data and schedules the correct background processing task. Conversely, as background tasks require initiation of input or output, manipulation of queues, management of buffers, etc., the task requests are presented to the supervisor. The supervisor then processes those requests as required.

The supervisor can be entered from the level 4 interrupt handler or via a branch from levels 1, 3, or 4. The supervisor is entered from levels 1, 3, and 4 as a result of supervisor macros which expand to include a branch to the supervisor. This branch is created because of the SUPV=operand of any of the supervisor macros being coded YES. The supervisor routine is then being executed as level 1 or level 3 code rather than level 4 code because it was entered directly, not because of an interrupt. Level 5 always uses a level 4 SVC interrupt to request supervisor services. If level 3 has placed work on the supervisor dispatching queue, the level 4 PCI interrupt latch is set for future processing.

Entry to the level 4 interrupt handler at address X'180' is caused in one of two ways: a level 5 SVC macro or a level 4 PCI.

The level 5 SVC is created by an EXIT instruction. The EXIT instruction and two-byte SVC code immediately following are generated by a level 5 macro which is coded with an operand of SUPV=NO. In this case, the flow is through the level 4 interrupt handler, which uses the SVC code supplied by the level 5 macro expansion to index into the SVC vector table. This table contains pointers to the various supervisor macro routines. The SVC code is the first seven bits of the sixteen-bit field. The remaining nine bits are qualifiers of the SVC.

A level 4 PCI interrupt also causes the level 4 interrupt handler to get control. In this case, the level 4 interrupt passes control to one of three routines via a branch table.

Normally the first entry of the branch table points to the second entry and the second entry points to the third. The third entry always points to the dispatcher. A level 4 PCI interrupt normally causes the dispatcher to get control.

When the free buffer threshold is reached, the second entry is replaced with the address of the routine to generate a slowdown message. Each time the LEASE buffer routine is executed by a branch from level 3 or SVC from level 5, the count of remaining buffers is checked against the threshold value. If slowdown mode is required, the address of the slowdown message routine is placed in the branch table and slowdown bits are set in the direct addressable area.

If an unconditional buffer request is made and no buffers are available, levels 4 and 5 can be disabled. Level 5 is disabled by masking off level 5, and the address of the buffer allocation routine is placed in the first entry of the dispatcher branch table.

The entry code at X'180' is entered for SVC and PCI interrupts. An IN X'7F' provides a bit to define whether a PCI or SVC caused the interrupt. The result causes the supervisor to go either to the SVC interrupt handler or to the PCI branch table.

Task Management

A task in the network control program (NCP) is defined as a portion of code and a queue of data upon which the code operates. In the NCP, tasks are executed in level 5 only. If one portion of code operates upon two or more separate queues of data, the task dispatcher handles this portion of code as two or more separate tasks. The background level (level 5) of the NCP is made up of several tasks that work together to schedule lines and process messages.

A task is defined at NCP generation when a queue control block (QCB) is assembled and linked to a unit of code. As queues become activated, their associated tasks are scheduled and initiated by the task dispatcher. Input queues (input to a task) are activated by the enqueuing of data to the queue. Enqueuing is provided by level 3 when a PIU is received over the communication lines or over the channel, or when the enqueuing is provided by one task passing control to another task. Pseudo-input queues (recording a stimulus for the task, but providing no data as input to the task) are activated by triggering the task upon the occurrence of some stimulus, such as a panel display request.

There are several control blocks used by the dispatcher. Before we cover the method used by the supervisor, the topics that follow will acquaint you with some of the control blocks.

The IBM 3704 and 3705 Program Reference Handbook (GY30-3012), can be used as a reference.

Direct Addressables (XDB, XDH, XDA) There are three fixed areas of special pointers or special fixed data. These areas are:

Byte direct addressables (XDB)

`X'680' to X'6FF'`

Halfword direct addressables (XDH)

`X'700' to X'77F'`

Word direct addressables (XDA)

`X'780' to X'7FF'`

A special form of instruction with a base register of zero allows an implied base to refer to these fields, with the displacement providing the offset from the beginning of the area. The instructions are:

Insert Character

```
IC  5(0),16(0)
```

The 'insert character' instruction inserts the value at base location X'680' plus decimal 16 (X'10') into register 5 byte 0, for an effective address of X'690'. The true buffer size for this system, including the four-byte prefix, is at X'690'.

Store Character

```
STC 5(0),16(0)
```

This instruction stores the value in register 5 byte 0 at location X'690' (X'680' plus X'10').

Load Halfword

```
LH  6,84(0)
```

The 'load halfword' instruction places the current free buffer count from X'700' plus decimal 84 (X'54') into register 6, creating an effective address of X'754'.

Store Halfword

```
STH 6,96(0)
```

The 'store halfword' instruction uses the value in register 6 to set the value of the system abend code at X'760' (X'700' plus decimal 96). The NCP sets a value at X'760' to indicate the reason the failure occurred.

Load

```
L  6,96(0)
```

The 'load' instruction moves the address of the last byte of storage from X'7E0' to register 6.

Store

```
ST  6,68(0)
```

The 'store' instruction records a pointer to the first free buffer at location X'7C4'.

The direct addressables provide key status indicators and pointers to the system control blocks. As the various NCP routines are covered, related direct addressables fields which provide status indicators as an aid in debugging are referenced. These are some of the initial fields which may be of special interest:

Byte direct addressables (XDB) X'680' to X'6FF'

X'685'	Control byte for dispatcher flags
X'687'	BUILD macro buffer size
X'689'	Buffer pool and network status
X'68A'	General communications byte
X'68B'	Identifies program as NCP, EP, or PEP
X'692'	General communication byte
X'693'	SDLC subarea mask
X'694'	SDLC element mask

Halfword direct addressables (XDH) X'700' to X'77F'

X'710'	to X'72B' PEP emulation queue pointers
X'744'	to X'752' NCP level 4 task queue pointers
X'754'	Current free buffer count
X'756'	Free buffer threshold count plus one
X'758'	Number of communications lines
X'75A'	Level 5 system active queue control block
X'760'	System abend code
X'770'	Maximum byte count to host per host start I/O
X'772'	Pointer to the channel control block (CHB or COB)

Word direct addressables (XDA) X'780' to X'7FF'

X'7BC'	Lagging address register (LAR)
X'7C4'	Pointer to first free buffer
X'7D0'	Remembrance of the last buffer in the buffer pool
X'7D4'	Remembrance of the first buffer in the buffer pool
X'7D8'	Pointer to extended halfword direct addressables (HWE)
X'7E0'	Address of last byte of storage
X'7E8'	Pointer to the resource vector table (RVT)
X'7F0'	Pointer to the logical end of system free buffer pool

Queue Control Blocks (QCB) The queue concept is basic to an understanding of the data flow within the NCP. A queue is a group of either data blocks (PIU or BCU) or queue control blocks (QCBs) connected first through last by address pointers. First in, first out (FIFO) is the basic mode of queue manipulation; however, last in, first out (LIFO) mode is also used.

A queue control block (QCB) has two queue pointers. One points to the first element in the queue. The first element points to the second, the second points to the third, etc. The second queue pointer points to the last element on the queue. If both addresses are zero, there are no elements in the queue.

There are three types of queues: input, pseudo-input, and work. Each type of queue provides different program support.

Input queues

An input queue contains elements to be processed by the task identified by the QCB. Some of the fields are:

X'00'	Shifted address of first element queued
X'02'	Shifted address of last element queued
X'04'	Task state
X'05'	1010 1xxx indicates this is an input QCB
X'06'	Shifted address of next QCB on this queue

X'08'	Major control block displacement, provides the displacement from the beginning of the control block which contains this QCB to the first byte of the QCB.
X'09'	Task dispatching priority
X'08'	Full address of task entry point

Placing an element in a queue with ENQUE ACTV=YES puts a task in the pending state. If no task is active, the pending task becomes the active task.

Pseudo-input Queue

A pseudo-input queue contains no elements. It has the same format as the input queue, but the task is triggered by a stimulus rather than by the enqueuing of an element. An example of a pseudo-input queue is the panel queue. When the interrupt key is pressed on the 3704 or 3705 panel, a level 3 panel interrupt occurs. When level 3 determines that the interrupt was from the panel, level 3 branches to the level 4 supervisor routine which places the panel QCB on a dispatching queue.

The format of the pseudo-input queue is the same as the standard input queue. The only difference between an input queue and a pseudo-input queue is the means of dispatching the pseudo-input queue without data.

Work queue

A work queue does not have a task entry point. It is used as a queue to hold elements. The work queue is only eight bytes in length. The fields are as follows:

X'00'	Shifted address of first element queued
X'02'	Shifted address of last element queued
X'04'	Reserved
X'05'	1010 0xxx indicates that this queue is a work QCB
X'06'	Shifted address of next QCB on this queue

Path Information Unit (PIU) The element placed in a queue is either a queue control block (QCB), a block control unit (BCU) used in the BSC/SS code, or a path information unit (PIU). The placing of a PIU on a QCB normally triggers scheduling. The flow of the network control program is initiated by receiving a PIU from the channel or line and passing the address from one queue to the next for processing.

The PIU is received in one or more NCP buffers. The PIU is made up of a transmission header (TH), request/response header (RH), and request/response unit (RU). The PIU is that portion received from the host or from the lines.

In addition to the area specified on the BUILD macro BFRS operand, each NCP buffer requires a four-byte prefix for control purposes. The size of each buffer specified for the user is given in XDB at X'687'. The true buffer size is in XDB at X'690'. The buffer prefix field on each buffer is specified as follows:

X'00' Buffer prefix chain field, shifted address of the next buffer in the chain, or zero if the last in a chain.

X'02' Buffer prefix data offset field. This field provides the offset from the buffer prefix to the first byte of PIU text.

X'03' Buffer prefix data count field. This field specifies the quantity of data from the offset that is valid in the buffer.

In the first buffer of a PIU is an event control block (ECB). The ten-byte ECB immediately follows the buffer prefix. The first buffer prefix offset of X'0A' provides the offset past the ECB to the first byte of FID1 PIU. The PIU actually starts in the fifteenth byte of the buffer, including prefix.

Including the offset from the beginning of the buffer, the ECB fields are as follows:

X'04' Block status flags. Specifies if the PIU is in a queue.

X'05' Event status flags. Specifies if the event is satisfied and if the task is to be dispatched when this PIU is first in the queue.

X'06' ECB chain pointer. If multiple PIUs are queued on one QCB, this field is a shifted address of the next PIU on the queue chain. The queue manipulation macros use an offset of X'06' for chain addresses in QCBs and in the first buffer of a block.

X'08' PIU text count or set time interval

X'0A' Address of QCB for waiting task or hold area for blocks

X'0C' UIB type field. This field identifies the destination resource type. The values are as follows:

```
0000 0000  Communications
           controller
100x xxxx  Line
010x xxxx  Device
xxx1 xxxx  Input
xxxx 1xxx  Output
```

X'0D' UIB status. If nonzero this field indicates various errors.

If the type is FID0 or FID1, the next byte after the buffer prefix and unit information block is the first byte of the PIU. The FID2 buffer prefix offset specifies an offset of X'0E' and these four bytes (X'0E' through X'11') are not used. The FID3 buffer prefix offset is eight bytes (X'0E' through X'15') and the eight bytes are not used. The FID0 format is used only for text transfer between the host system and the BSC/SS router. FID1 is identified by a bit pattern of xx00 xxxx at X'0E'.

FID0

The type 0 PIU is a field identification type 0 (FID0). This format is used for all text transfers between a host application and a BSC/SS terminal. The FID0 is received from the host and sent to the BSC/SS converter. The FID0 is converted to a block control unit (BCU) for the BSC/SS processor. Text from a BSC/SS terminal is received in a BCU format buffer, sent to the BSC/SS converter, and converted to a FID0 before being sent to the host.

Including offsets from the beginning of the buffer, the format of the FID0 is as follows:

Transmission header (TH)

X'0E'	Transmission header. This field identifies the PIU as type 0 by xx00 xxxx in this byte.
X'0F'	Reserved
X'10'	Destination network address
X'12'	Origin network address
X'14'	Sequence number
X'16'	Text count of the RH plus RU (excludes TH)

Request/response header (RH)

X'18' - X'1A'	These fields are ignored in a FID0 PIU.
X'1B'	Request/response byte 3. This field is a pad byte to align the RU on a halfword boundary.

Request/response unit (RU)

X'1C'	RU0 byte 0. BTU command field. This field is covered in *IBM 3704 and 3705 Program Reference Handbook* (GY30-3012), Section 3: BTU Command and Modifiers.
X'1D'	RU0 byte 1. BTU command modifier
X'1E'	and X'1F' RU0 bytes 2 and 3. BTU flags
X'20'	RU0 byte 5. BTU system response. This field is covered in *IBM 3704 and 3705 Program Reference Handbook* (GY30-3012), Section 7: BTU Responses.
X'21'	RU0 byte 6. BTU extended response.

FID1

The type 1 PIU is a field identification type 1 (FID1). This format is used for all control commands, and all text transfers between the host and boundary network node (BNN). If the PIU is transferring to a remote NCP, the FID1 is sent unchanged to the remote.

Including offsets from the beginning of the buffer, the format of the FID1 is as follows:

Transmission header (TH)

X'0E' Transmission header. This field identifies the PIU as type 1 by xx01 xxxx in this byte. This byte also specifies whether this PIU is the first middle, last, or only PIU segment. PIU segmenting occurs when a PIU from the host has a length greater than that defined by the MAXDATA operand of a PU macro defines.

X'0F' Reserved

X'10' Destination network address

X'12' Origin network address

X'14' Sequence number

X'16' Text count of the RH plus RU (excludes TH)

Request/response header (RH)

X'18' Request/response byte 0. This byte specifies whether the PIU is a request or response, control or data, system control or function management, against flow or with flow, formatted or unformatted. PIU chaining by an application program is defined in this field, which specifies whether this is the first, middle, last, or only PIU element.

X'19' Request/response byte 1. This field specifies that an FME is requested/sent, an RRN is requested/sent, and an exception response is requested/sent. VPACING and PACING use the pace bit in this field.

X'1A' Request/response byte 2. This field specifies bracket protocol, EBCDIC or ASCII code, and change direction (HDX only).

Request/response unit (RU) - Network commands only.

X'1B' RU1 byte 0. This field is covered in *IBM 3704 and 3705 Program Reference Handbook* (GY30-3012), Section 4: NCP Network Commands. The value of this field varies, based on the value of the RH byte 0.

X'1C' RU1 byte 1. Used for function management requests.

X'1D' RU1 byte 2. Request code for function management.

X'1E' Network address for SCP function management requests. A command to activate a link or contact a device is addressed to NCP physical services in the DAF; the device to be controlled by the command is addressed by this field.

X'20' The data beginning at this address varies, based on the type of command. For additional information, refer to *IBM*

3704 and 3705 Communications Controllers, Network Control Program/VS Program Logic Manual (SY30-3013), Appendix A: Network Commands.

Data PIU formats have user data starting at X'1B' immediately following the TH/RH.

FID2

The type 2 PIU is field identification type 2 (FID2). This format is used for all control commands and all text transfers between the boundary network node (BNN) routine and support of type 2 physical units (3770, 3600, 3650, 3660, 3790). The FID1 is received from the host and converted to a FID2 before being sent to the type 2 physical unit. A FID2 from a type 2 physical unit is converted to a FID1 by the BNN code before being sent to the host.

The FID2 is created from a FID1 by converting the two-byte OAF and DAF fields to one-byte fields and deleting the two-byte transmission header (TH) count field. This conversion provides a total of four bytes deleted from the FID1 requirements. Shifting the fields to the right places the following fields in the original FID1 buffer:

Transmission Header (TH)

X'0E'	Reserved four-byte area
X'12'	Transmission header. xx10 xxxx in this byte identifies the PIU as type 2.
X'13'	Reserved
X'14'	Destination
X'15'	Origin
X'16'	Sequence number

Request/response header (RH). Same as FID1

Request/response unit (RU). Same as FID1

FID3

The type 3 PIU is a field identification type 3 (FID3). This format is used for some control commands and all text transfers between boundary network node (BNN) code for support of type 1 physical units (3767, SDLC 3270). The FID1 is received from the host and converted to a FID2 with the normal FID2 processing. The FID2 is converted to a FID3 before being sent to the type 1 physical unit. The FID3 commands directed to a 3270 are processed by the NCP and are not sent to the SDLC 3270.

The FID3 is created from the FID2 by converting the six-byte transmission header (TH) of the FID2 to a two-byte TH of the FID3. The FID2 destination of one byte is converted to the low-order six bits of the last byte of the TH. The two leftmost bits specify the following:

Bit 0 - 1=to/from application, 0=to/from SSCP

Bit 1 - 1=to/from logical unit, 0=to/from physical unit

The first byte of the FID3 TH identifies the type of PIU. Deleting the four bytes of the TH from the FID2 makes four more alignment bytes available. Shifting the fields to the right provides the following fields in the original FID1 buffer:

Transmission header (TH)

X'0E' Reserved eight-byte area

X'16' Transmission header. This field identifies the PIU as a type 3 by xx11 xxxx in this byte.

X'17' Application or SSCP indicator and local address

Request/response header (RH). Same as FID1

Request/response unit (RU). Same as FID1

Task States

At any given point in time, a task can be in any one of four logical states. The four states, under program control, are: active, pending, ready, or disconnected. Initially all tasks are in the 'ready' state. The state is specified in the QCB at an offset of X'04' for all conditions. A 'ready' task is available for execution, but there is no element in its queue or no stimulus to initiate is; therefore it is not in a dispatching queue.

When an element is placed in a queue by an ENQUE ACTV=YES or when a TRIGGER macro is executed, the task is changed from 'ready' to 'pending and disconnected', and is placed on the one of the dispatching queues. The 'pending' status makes it available for execution. The 'disconnect' status identifies the QCB as having been triggered; therefore, it will not be triggered again until the 'pending' status completes (a task should not be placed in the dispatching queue when it is already in the dispatching queue). Subsequent elements placed on a triggered QCB can specify an automatic trigger when the PIU is first on the queue, providing that the UIB field at an offset of X'05' has a value of x1xx xxxx. When the level 4 supervisor looks for a task to make 'active', it takes the first pending QCB off the highest priority dispatching queue and schedules the task routine specified in the QCB field.

Only one task can be 'active'. The active task may issue SVC requests to level 4 for services, but remains the active level 5 task until it completes. If the active task is waiting for supervisor services (SVC), the second bit in byte 4 of the QCB is a 1 (task in wait state). A task completes by issuing a SYSX-IT macro. When the task ends, the 'active' state must be ended, and the task changed from 'disconnect' to 'ready' by a QPOST macro. If the first element on the QCB specifies the task is to be dispatched (offset X'05' ECB status byte of the queued PIU), the QCB is triggered to the end of the dispatching queue and made 'pending'.

When a task is active, the byte direct addressable (XDB) at X'0685' has a value of x1xx xxxx. Figure 3.1 illustrates task state migration. In figure 3.1, all tasks going to 'pending' or 'active' also are 'disconnected'.

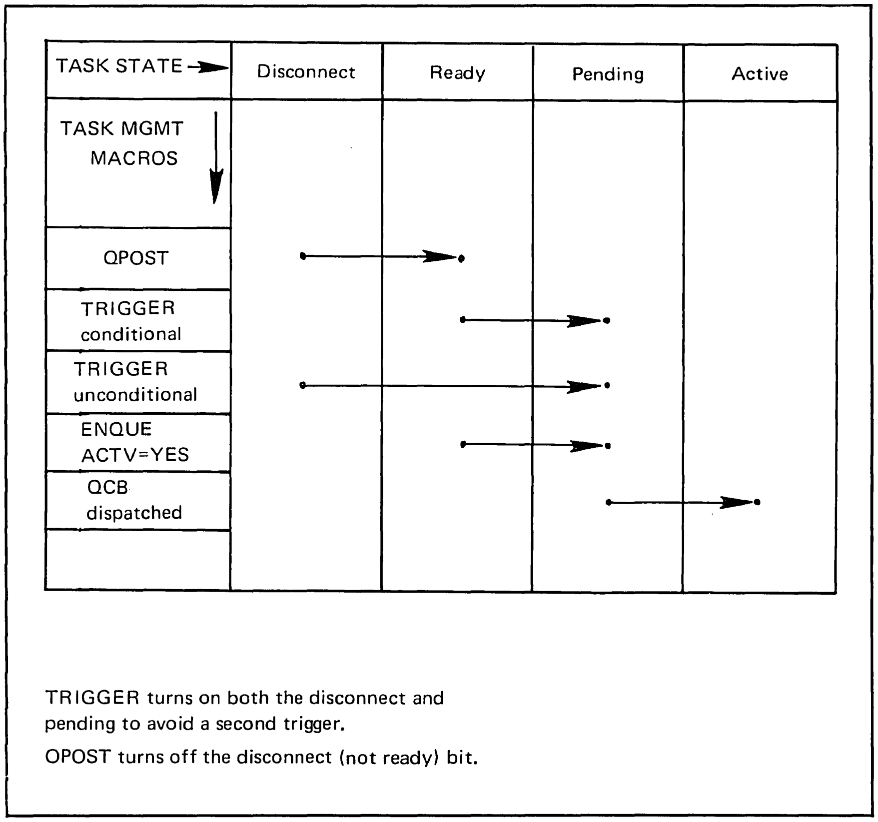

Figure 3.1. Task States

The following are the bit settings of the QCB in byte four, which indicates the status:

```
0xx0 xxxx   Ready and not disconnected
1xx1 xxxx   Pending and disconnected
0xx1 xxxx   Active and disconnected
1xx0 xxxx   Not valid
```

Task Dispatching Priorities Tasks in the network control program have one of four task-scheduling priorities: appendage, immediate, productive, and nonproductive. All tasks having the same priority are queued together.

Appendage tasks have the highest priority in the system. When the current active task relinquishes control, appendage tasks are dispatched from the appendage queue on a first-in, first-out (FIFO) basis. Appendage tasks are generally initiated by character service at the end of a line input or output operation. However, they can also be initiated by the supervisor or by level 5 tasks.

Immediate tasks have the second highest priority. Once processing for a line has started, all tasks necessary to initiate the input or output on the line are given the immediate priority.

Productive tasks have the third highest priority. A task is classified as productive if the end result of its execution is the initiation of output on either the channel or the communication line.

Nonproductive tasks have the lowest priority in the system. A task is classified as nonproductive if it is not capable of starting input or output operations. Nonproductive tasks are not dispatched when the system is in slowdown mode.

There are definite reasons for having task scheduling priorities:

(1) appendage tasks are used to handle an exceptional condition as soon as possible.

(2) Immediate priority improves performance. Once a task associated with a line in the idle state receives control, the performance is better if all the tasks necessary to initiate the transfer on this line are dispatched in succession before dispatching tasks associated with any other lines. The immediate priority accommodates such tasks.

(3) Productive tasks have a high potential for freeing buffers and a low potential for allocating buffers.

(4) Nonproductive tasks have a low potential for freeing buffers and a high priority for allocating buffers. Hence, productive tasks should be executed before nonproductive tasks.

The priority of a task can be changed dynamically by the CHAP macro.

The task dispatching queues are in the halfword direct addressables (XDH) at the addresses given below. The left address points to the first QCB queued and the right address points to the last QCB queued.

```
Appendage queue      X'74E' X'74C'
Immediate queue      X'746' X'744'
Productive queue     X'74A' X'748'
Nonproductive queue  X'750' X'752'
```

The QCB identifies which task dispatching queue is to be used. At QCB plus an offset of 9, the indicator to the TRIGGER macro is specified as follows:

```
10xx xxxx   Productive
010x xxxx   Immediate
001x xxxx   Appendage
000x xxxx   Nonproductive
```

Dispatching Tasks

When level 4 is entered by PCI or by SVC, the supervisor at CXABTST checks for PCI or SVC. An SVC goes to CXASUPV to decode the macro using the SVC decode table. A PCI uses the three branch-table entries for processing. If levels 4 and 5 are disabled for buffer allocation, the first entry is primed with CXALEAS, the buffer allocation routine. Normally, the first entry contains the address of the second entry. If the system is in slowdown, the address of the routine to generate the slowdown entry message is in the second entry (CXAEXSS). Normally, the second entry contains the address of the the third entry. The third entry contains the address of the task dispatcher (CXADISP). Figure 3.2 illustrates the supervisor processing.

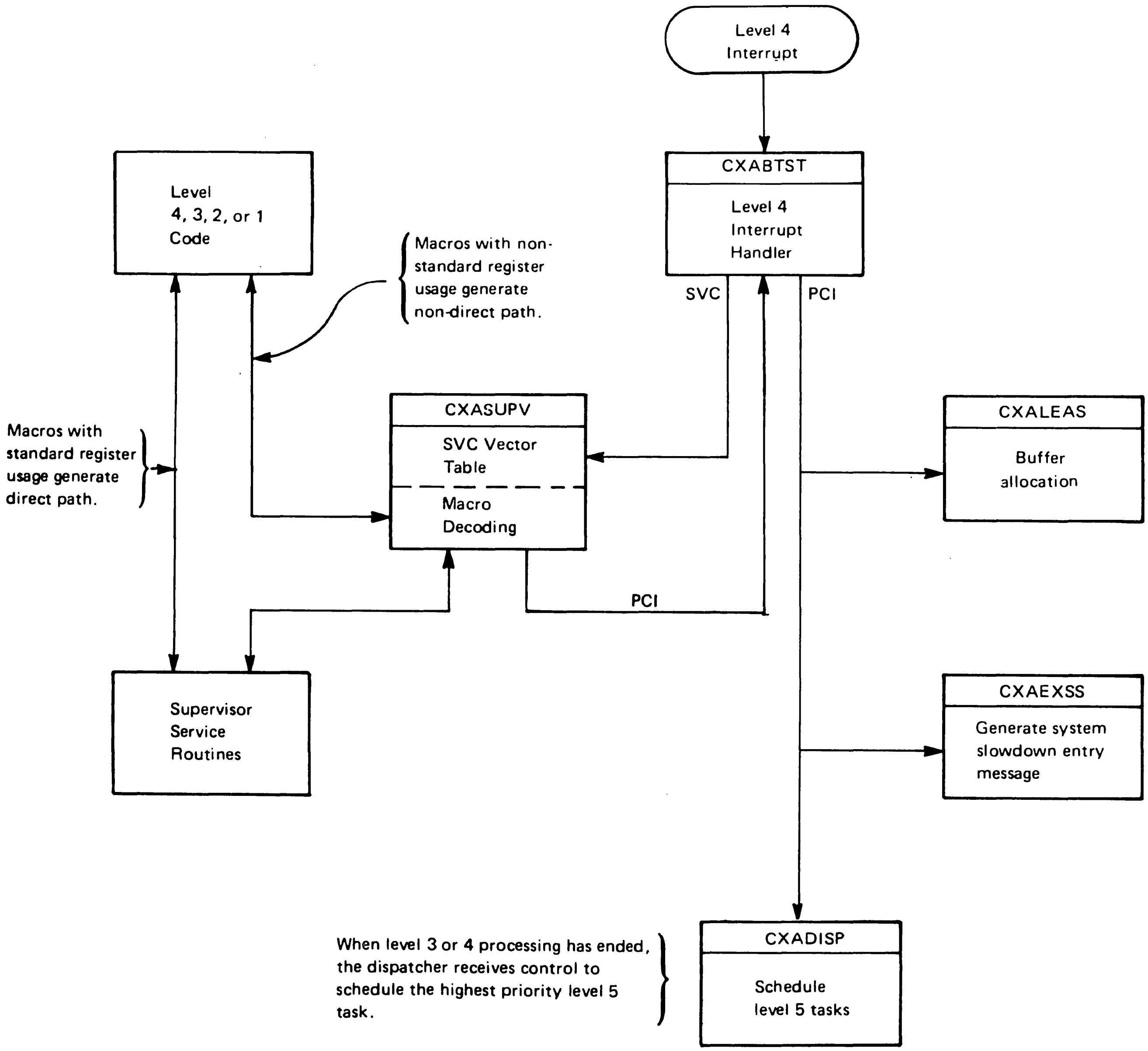

Figure 3.2. Dispatcher Entry Points

The CXADISP task dispatcher checks whether level 5 is enabled by testing the byte direct addressable (X'685') to see if dispatcher service is required. If service is not required the supervisor checks for an active task in byte X'685'. If this bit is on, an EXIT from level 4 returns control to the current active level 5 task. If there is no active task, the supervisor searches the dispatching queues.

The queues are scanned in a sequence of appendage, immediate, and productive. The first entry found is dequeued, the QCB address is placed in the level 5 register 2, the task entry point is placed in level 5 register 0, and the level 4 supervisor executes an EXIT to allow level 5 to begin execution.

If no queue entry is found through the productive queue, the supervisor checks for slowdown. If the slowdown is indicated from an earlier LEASE macro condition, level 5 is disabled (OUT X'7E'). The supervisor executes an EXIT. If the system is not in slowdown, the supervisor checks the nonproductive queue and dispatches an entry if one is found. If no entry is found, level 5 is disabled and an EXIT at level 4 places the controller in the wait state.

Figure 3.3 illustrates the dispatching sequence.

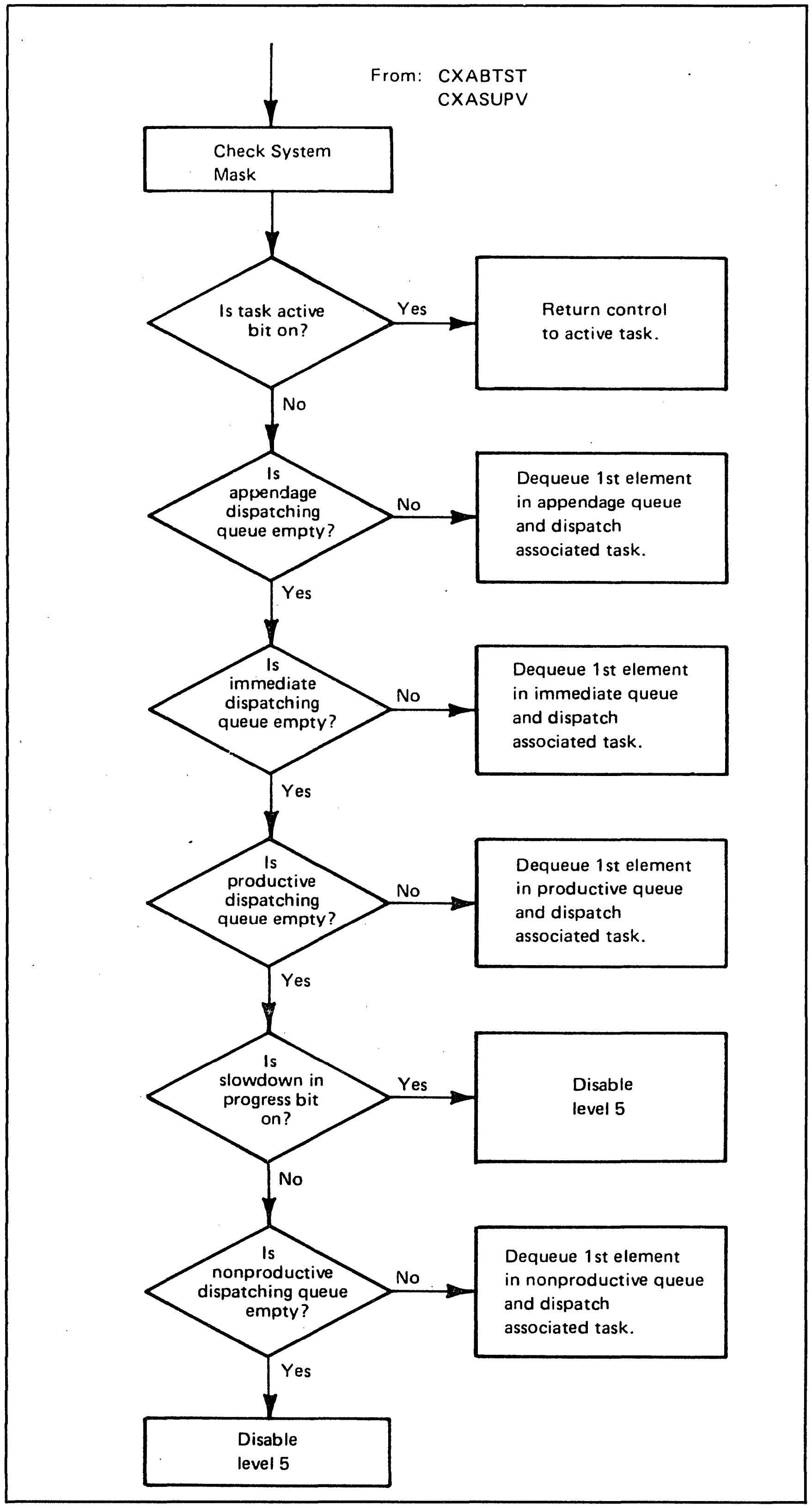

Figure 3.3. Dispatcher Execution Sequence

Supervisor SVC Services

In addition to the task management routines, the supervisor provides queue management, buffer management, and supervisory services. All of these facilities are provided by macros. Macros at level 5 provide an SVC interrupt by an operand of SUPV=NO. Levels 1, 3, and 4 branch directly to the appropriate routine by using a macro coded with an operand of SUPV=YES. The SVC is an EXIT instruction in level 5 with a 16-bit EXIT qualifier, seven-bit SVC identifier, and nine-bit SVC qualifier.

All of these services are covered in the *3704/3705 Assembler Language and Macro Instructions Student Text* (SR20-4512).

Supervisor Summary

The supervisor provides service facilities to level 1 and 3 routines by direct branch. The supervisor provides level 5 services facilities by SVC interrupts to level 4. Entry to level 4 by PCI normally causes the supervisor to search the dispatching queues for queued work to be dispatched in level 5.

If a partitioned emulation program (PEP) is defined by the BUILD macro operand of TYPGEN=PEP or TYPGEN=PEP-LR, a concurrent emulation and NCP program is generated. The NCP performance may be degraded by heavy emulation usage. All emulator code executes at levels 1, 2, and 3. Therefore, the emulation code has priority over the NCP dispatcher and level 5 dispatched routines.

When register 0 (instruction address register) addresses an EXIT instruction (X'B840'), the program level terminates. If the EXIT is in level 5, there is an additional 16-bit SVC qualifier.

Network Control Program Supervisor Quiz Using the dump provided in Appendix C, answer the following questions. This is a self-evaluation quiz, so please finish the quiz before referring to the answers in Appendix B.

1. Which program levels, if any, are active?
2. For each inactive level, if any, identify how you determined that the code was not active.

Criterion

If you could not answer both questions, you should review this section.

Channel Adapter IOS

Objective

Upon completion this topic, the student should be able to identify the types of channel control blocks and program support for each type of channel adapter, and name the user specifications which affect performance at the channel.

Channel Adapter Definition

To transfer data across the channel interface, we must give the NCP definitions of the channel adapter type and the host buffers.

The CHANTYP operand in the BUILD macro defines which type of channel adapter is installed in the 3704 or 3705. This operand also selects the appropriate control block and IOS module to be included in the generation. If CHANTYP=TYPE1 or CHANTYP=TYPE4, the generation selects the channel operation block (COB) and the COB IOS module. If CHANTYP=TYPE2 or CHANTYP=TYPE3, the generation selects the channel control block (CHB) and the CHB IOS module. If both type 1 or 4 and type 2 or 3 channel adapters are installed for a partitioned emulation program (PEP), the operand is coded with the high-performance channel adapter (type 2 or type 3) as the first operand and the low-performance channel adapter (type 1 or type 4) as the second operand. This channel combination allows a high-performance channel adapter for NCP mode with the emulation program code using the type 1 or type 4 channel adapter.

Note: The type 4 CA cycle-steal support is added in ACF/NCP, and is not available in NCP release 5.

The HOST macro provides the correct values to be placed in the selected control block for proper channel operation. The MAXBFRU and UNITSZ operands define for the NCP the input area that the host allocates on any channel read operation. The maximum amount of data in one PIU that the NCP may transfer to the host in a single channel transfer equals (MAXBFRU x UNITSZ) - BFRPAD. This calculation uses all allocated host buffers to contain one PIU.

The maximum number of PIUs which may be sent as a single channel transfer depends upon the size of the PIUs. In the previous paragraph, the example illustrated how one PIU may use all buffers. If all PIUs sent to the host are small enough so that each PIU and the buffer pads fit in a single host buffer, as many PIUs may be sent in a single channel transfer as there are host buffers available (MAXBFRU quantity).

Normally the PIUs do not all fit in a single host buffer nor will all the host buffers be required for one PIU. A combination of PIU lengths occurs where some PIUs require one host buffer while others require multiple host buffers.

The INBFRS operand determines the number of buffers the NCP should LEASE for a host 'write' operation to the 3704 or 3705. When the number of INBFRS is totally depleted, the INBFRS quantity is LEASED to continue the 'read' from the host. Once NCP buffers are allocated for a host 'write' they are allocated until used by this or a future host 'write'. At the end of a host 'write' the unused INBFRS are not returned to the available buffer pool.

Host Writes to the NCP

The host channel program must always start with a control command. A 'write' operation from the host must start with a 'write start zero' (WS0) or a 'write start one' (WS1). The first 'write' must be a WS0. After the first 'write', the 'write start' commands alternate between WS0 and WS1 with the successful completion of each write channel program. The 'write start' commands are X'31' for WS0 and X'51' for WS1.

When the channel adapter receives the control command, the CA generates a level 3 interrupt into IOS. When IOS receives the 'write start' (WS) control command, the command determines that the host wants to write to the 3704 or 3705. The WS control command is compared to the expected WS command in the channel adapter control block (COB or CHB at offset X'0F'). If the two commands are equal, the expected WS command is flipped and the enqueue count and skip count are reset to zero. Data is transmitted until a complete PIU is received or until an unexpected control command signals an error condition on the channel interface. When a PIU is completely received, the PIU is passed to 'path control out', and the enqueue count is incremented by 1. If an unexpected control command is received, the enqueue count is added to the skip count. As each PIU is received a second time, rather than pass the PIU to 'path control out' again, the skip count is decremented until the count is zero.

The enqueue count and skip count fields are reset to zero by IOS when IOS receives the next WS control command which is equal to the expected WS command in the channel control block.

The host can send multiple PIUs to the NCP with one host write. PIUs are separated logically by using a CCW with command chaining between PIUs.

Host Reads from the NCP

The host 'read channel program' must start with a control command. The control command is either a 'read start zero' (RS0) or a 'read start one' (RS1). At the completion of the read channel program in the host, the RS0 command which must be sent first is changed to a RS1. The RS0 and RS1 commands alternate with the successful completion of each read channel program. The RS control commands are X'32' for RS0 and X'52' for RS1.

The host does not execute the read channel program without first receiving an attention interrupt from the 3704 or 3705 controller. The attention interrupt is the means by which IOS lets the host know that it has data to send across the channel.

Before the data is put on the channel intermediate queue, the data length is checked to ensure that the PIU fits in the host buffers. IOS sets up the channel adapter to present the attention interrupt to the host. The attention interrupt causes the host to execute its read channel program starting with an RS control command.

On receiving the RS control command, IOS compares the received RS command with the expected RS command in the channel control block at a displacement of X'0E'. If the RS command received is the expected command, IOS flips the expected RS command and purges any PIUs from the hold queue. IOS moves as much data as fits in the host buffers from the intermediate queue to the hold queue.

Before each PIU is sent to the host, a number of pad characters is sent to the host as a reserved area for host internal control. The count of pads is coded on the HOST macro BFRPAD operand. Following the pad, if the pad and PIU are less than or equal to the length of one host buffer, the IOS sends a complete PIU (UNITSZ value). IOS never lets the host CCW channel stop, but forces chaining to avoid a channel stop by the channel. If the end of a PIU forces chaining, the second PIU begins in the next host buffer, with leading pads sent before the PIU. If the original PIU had additional data beyond a single host buffer, the data continues into the subsequent host buffer.

When all PIUs in the hold queue have been sent, IOS presents ending status to the host. If more PIUs are available for the host, IOS adds an 'attention' to the status being sent back to the host. This 'attention' status indicates to the host that a new 'read' is needed for the 3704 or 3705 controller. The host responds with a new 'read channel program'.

A second method by which the channel IOS indicates to the host that it has PIUs for the host is to send a status modifier (SM) at the end of the 'write' portion of a write/read combination channel program. The SM tells the host to skip over a NOP that follows the 'write' CCWs and continue with the 'read' CCWs. These methods eliminate the need for excess asynchronous interrupts on the channel. At the end of the read CCWs IOS presents final status of channel end, device end, and unit exception. This facility is specified on the HOST operand of STATMOD=YES.

The following channel programs illustrate the host channel program for a 'read', 'write', and the 'write/read' sequence.

Read Channel Program

```
CCW 32 or 52,*,X'60',1
CCW 02,BUF1,X'60',L'BUF1
  --
  --     Read Commands
  --
CCW 02,BUFn,X'60',L'BUFn
CCW 03,*,0,1       NO-OP
```

Write/Write Break Channel Program

```
CCW 31 or 51,*,C'60',1
CCW 01, BUF1,X'60',L'BUF1
  --
  --     Write and/or
  --     Write break commands
  --
CCW 09,BUFm,X'60',L'BUFm'
CCW 03,*,0,1       NO-OP
```

Write/Write Break and Read Combination Channel Program

```
CCW 31 or 51,*,X'60',1
CCW 01,BUF1,X'60',L'BUF1
  --
  --     Write and/or
  --     Write break commands
  --
CCW 09,BUFn,X'60',L'BUFn
```

```
CCW 03,*,0,1             (NOTE 1)
CCW 32 or 52,*,X'60'1
CCW 02,BUFn,X'60',L'BUF1
  --
  --     Read commands
  --
CCW 02,BUFn,X'60',L'BUFn
CCW 03,*,0,1     NO-OP
```

NOTE 1: This NO-OP is not essential for correct operation, although it may be desirable for compatibility when the status modifier option is selected. If the status modifier option is not selected, the 'write break CCW' may be command-chained to the 'read start CCW'. If status modifier is selected, the NO-OP should be included and should not be command-chained to the 'read start CCW'. If compatibility is desired, include the NO-OP in the channel program and turn the command chain flag on and off as needed.

Type 1 and 4 Channel Adapter

The type 1 or 4 channel adapter support requires an interrupt at level 3 for each four bytes transferred. As the number of INBFRS is depleted, the level 3 code branches into the level 4 supervisor routine to obtain a new supply of buffers equal to the INBFRS number. Then the 'read' (host 'write') operation continues to the completion of the host 'write' or another allocation of buffers. Buffers allocated to the channel and not used by the current NCP 'read' are held for a later 'read' operation.

Channel Operation Block (COB) The control block for a type 1 and type 4 channel adapter is the channel operation block (COB). The address pointer to the COB is in the halfword direct addressables (XDH) at X'772'. The control block has a negative displacement to minus X'30'. Some of the key addresses are identified as follows:

-X'20'	Channel intermediate QCB
-X'18'	Channel hold QCB
-X'08'	Constant of XXCXTCOB
X'00'	Channel condition flags
X'0E'	Next expected read start
X'0F'	Next expected write start
X'10'	to X'23' External register input areas
X'28'	Address of first inbound buffer
X'30'	Pointer to current buffer
X'34'	Current inbound data address
X'38'	Address of first buffer of completed inbound PIU
X'3C'	Address of last buffer of completed inbound PIU
X'40'	Count of PIUs passed to path control
X'42'	Number of PIUs to skip on a retry
X'44'	Maximum data count for current inbound buffer
X'46'	Generation buffer lease count (HOST INBFRS=value)

X'4C'	Address of last PIU given to CSCAOUT for the host
X'58'	Address of outbound PIU
X'5C'	Address of outbound buffer
X'60'	Address of outbound data
X'64'	Number of host CCWs (HOST MAXBFRU=value)
X'66'	Byte count of host CCWs (HOST UNITSZ=value)
X'76'	Attention delay interval (HOST DELAY=value)
X'7C'	Buffer pad size (HOST BFRPAD=value)

Type 2 or Type 3 Channel Adapter

The type 2 or type 3 channel adapter uses cycle steal for data transfer operations. The facility requires IN or OUT control words (CW) which are similar to CCWs in the host.

Host Writes When the first 'write start zero' is received, IOS leases buffers, builds 'IN' control words (CWs) and sets up the channel adapter to accept data from the channel. The 'IN' control words are executed one at a time, causing the channel adapter to cycle steal the PIUs into the buffers. During the execution of the control words, no program intervention required.

The next level 3 interrupt into IOS is from one of three conditions; a channel stop, zero count override, or an unexpected 'write start' command.

The channel stop condition occurs when the channel adapter receives 'command out' to a 'service in' request. The channel stop condition signals the end of a PIU and causes a level 3 interrupt into IOS. IOS increments the enqueue count, passes the PIU to 'path control out', and sets up the channel adapter to continue receiving data.

A zero count override condition exists when all the control words (CWs) on the channel-in chain (CIC) have been executed and the host still has more data to transfer. At the completion of the last control word in the CIC, the channel adapter causes a level 3 interrupt into IOS. Since the data transfer has not completed for this PIU, IOS must rebuild the CWs in the CIC. IOS leases new buffers, chains them to the previous buffers and rebuilds the CWs. When the Cws are rebuilt, IOS sets up the channel adapter to continue transferring data, using the address of the first CW in the new CIC. This sequence occurs each time a zero count override is reached.

Receiving an unexpected control command is common to all adapter types and was covered earlier.

Host Reads When the 'read start' is received, it is compared against the expected 'read start' control command. If the 'read start' is as expected, IOS flips the expected RS command and purges any PIUs in the hold queue (the previous PIUs to the host). IOS builds the 'OUT' control words (CWs) necessary to send each PIU to the host. After building the 'OUT' control words for a PIU, including a buffer pad (HOST BFRPAD=value), IOS moves the PIU to the channel hold queue. When all of the data (or enough of the data to fill the host buffers) has been moved to the hold queue, the CWs on the channel-out chain (COC) are executed and the PIUs are sent to the host.

When all of the CWs on the channel-out chain (COC) have been executed, the channel adapter generates a level 3 interrupt into IOS. IOS presents ending status to the channel adapter for the host. If more PIUs are available for the host, IOS adds 'attention' to the status for the host. This 'attention' status indicates that a new start I/O is needed from the host.

Channel Control Block (CHB) The control block for a type 2 or type 3 channel adapter is the channel control block (CHB). The address pointer to the CHB is in the halfword direct addressables (XDH) at X'772'. The control block has a negative displacement to minus X'30'. Some of the key addresses are identified as follows:

-X'30'	PIU exception QCB
-X'20'	Channel intermediate pointers
-X'18'	Channel hold pointers
-X'08'	Constant of XXCXTCHB
X'00'	Channel condition flags
X'02'	Channel adapter select bit (first or second CA)
X'0E'	Next expected 'read start'
X'0F'	Next expected 'write start'
X'10'	to X'25' External register input area
X'34'	Address of first buffer of current PIU
X'38'	Pointer to previous inbound buffer
X'3C'	Address of first buffer on inbound CW chain
X'40'	Address of last buffer on inbound CW chain
X'44'	Address of complete PIU to pass to path control out
X'48'	Address of last buffer of PIU to be enqueued
X'4C'	Address of inbound CW area
X'4E'	Address of first CW on inbound chain
X'50'	Address of last CW on inbound chain
X'52'	Address of last executed CW
X'54'	Data count for last inbound buffer
X'56'	Original data count in last executed CW
X'58'	Inbound buffer lease count (HOST INBFRS=value)
X'59'	Current buffer lease count
X'5A'	Number of PIUs enqueued (enqueue count)
X'5C'	Number of PIUs to skip for retry (retry count)
X'60'	Address of last outbound block
X'68'	Address of first CW on outbound chain
X'6A'	Address of last CW on outbound chain

X'6C'	Host read buffer size (HOST UNITSZ=value)
X'70'	Host read CCW count (HOST MAXBFRU=count)
X'74'	Buffer pad size (HOST BFRPAD=value)
X'76'	Attention delay interval (HOST DELAY=value)
X'78'	Channel timeout (HOST TIMEOUT=value)

Channel Words (CW) Channel words are coded in a four field format. The four fields in sequence specify:

1. CW type (IN, OUT, or OUT STOP)
2. Chaining or no chaining.
3. Quantity of data to be read or written
4. Address of data area

When IN CWs are built, all of the CWs are coded IN with the chaining bit 'on' in all CWs except the last. When the last CW completes without chaining, (1) a level 3 interrupt occurs to lease more buffers, (2) the last CW is chained to the new buffer chain, and (3) the CWs are rebuilt to point to the new buffers. The first CW points X'0E' offset into the buffer to reserve space for the event control block (ECB) and buffer prefix. All subsequent buffers are generated with an offset address of X'04' into the buffer to bypass the buffer prefix. The length field specifies the true buffer size less X'04'.

When a PIU is received, the host forces 'channel end', 'device end', 'without unit exception' by using a CCW with command chaining. This channel status stops channel transfer and generates a level 3 interrupt. The PIU is passed to 'path control out'. The next available CW is modified for an offset address of X'0E' into the buffer, the count is modified to the remaining buffer length, and the channel is restarted. All of the delay is transparent to the host.

OUT channel command words are used with chaining until the last CW of a PIU is transmitted or until a host CCW is filled. The next data byte sent to the last-plus-1 position of a host CCW causes the channel to halt transfer on a zero count override to access the next CCW. This channel halt is avoided by forcing the next CCW access without letting the zero count be recognized. If the end of a PIU is reached, the next PIU must start, with pads, in a new host buffer. Both of these conditions use the OUT STOP command to send channel end, device end, without unit exception. Chaining is used for both OUT and OUT STOP until the last OUT STOP CW.

The first CW of each PIU sends pad characters. The second CW addresses the PIU at an offset of X'0E', following the event control block (ECB).

Figure 4.1 illustrates the NCP-to-host transfer using OUT and OUT STOP CWs. The NCP buffer size is 48 bytes (without the buffer prefix) and the host buffer size is 124 bytes. The first PIU is 154 bytes, the second PIU 63 bytes. In each PIU the pad is sent to the host for BFRPAD length (15 bytes in the example). The first NCP buffer of each PIU has a 10-byte ECB which is not sent to the host; only 38 bytes are transmitted from a first NCP buffer.

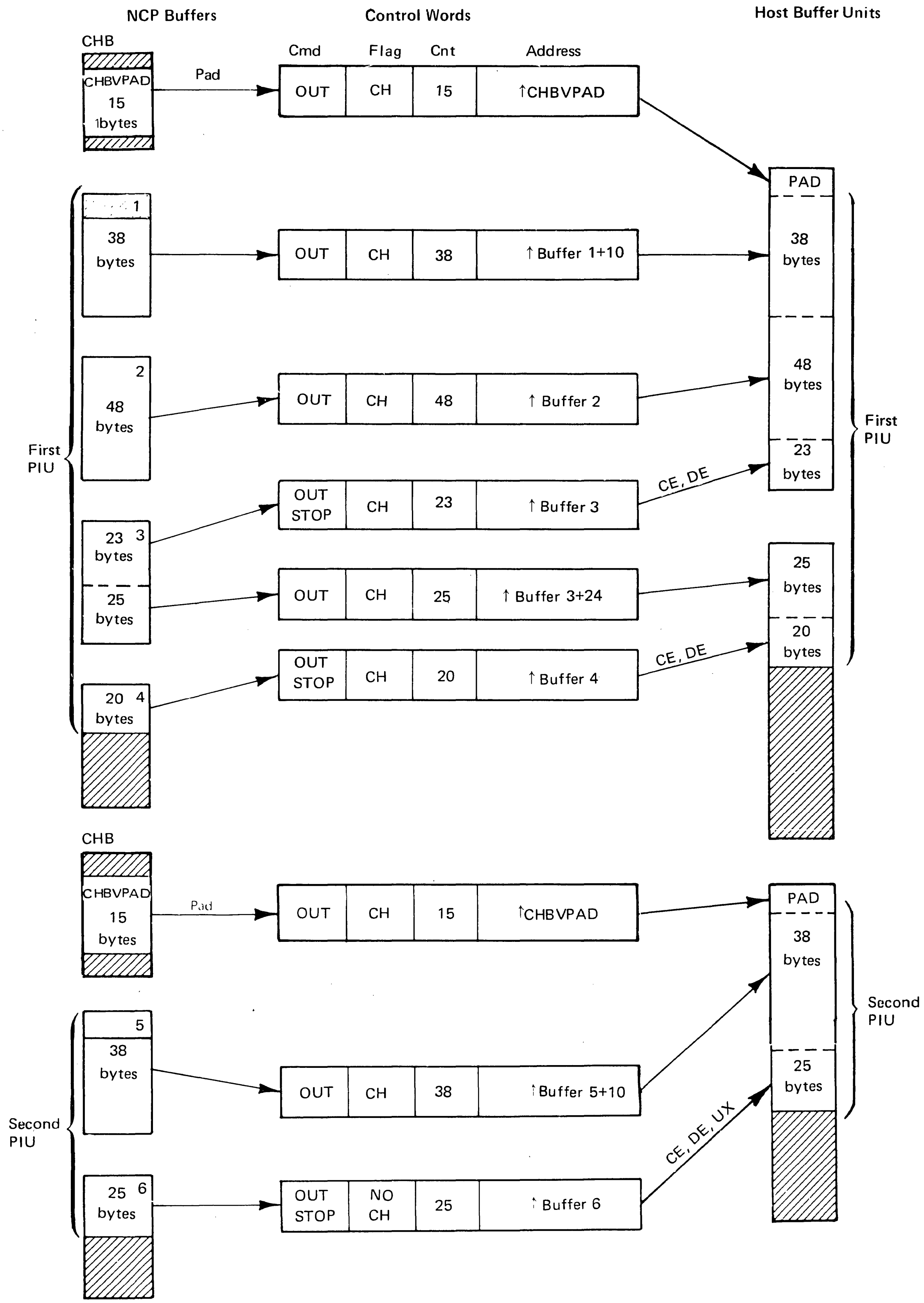

Figure 4.1. Data Transfer from NCP to Host Buffer Units

Channel Adapter IOS Performance

Type 1 or 4 Versus Type 2 or 3 Channel Adapter

There are many factors which affect channel performance, one factor being the type of channel adapter. The type 1 or type 4 channel adapter requires many additional communications controller cycles to execute the level 3 code after every four bytes of transfer. More commands are also processed in the channel, tying up the channel for greater periods of time than is the case with the type 2 or 3 channel adapter. If the controller is not heavily loaded, machine cycles are available for servicing the type 1 or 4 adapter, rather than having the controller in the wait state.

Host and NCP Buffer Sizes Host and NCP buffer sizes should not need be identical. For one thing, the NCP buffer has a 10-byte event control block (ECB) for control fields in the first buffer of a PIU, and this size does not match the host prefix requirements. OS VTAM requires a HOST macro BFRPAD of 28; DOS VTAM requires 15. The size of buffers should be related to the average size of the PIU in order to avoid unused space in large buffers for small PIUs and avoid excessive buffer chaining and unchaining of small buffers for large PIUs. Remember that CICS, IMS, TCAM, control commands, and probably many user applications have a response of

13 bytes, and even control commands are short. The minimum NCP buffer size of 44 (BUILD BFRS operand) should be sufficient for responses. The maximum size of 248 for NCP buffers or the default of 60 may be excessive if data requests are short. The host size should be determined as the same size as NCP, plus the difference between the NCP control requirement (ECB ten bytes) and the host buffer pad requirements as specified on the BFRPAD operand.

In addition to the size of PIUs as a factor in NCP buffer size, there is a critical factor of SDLC terminal buffer size specification. An operand of MAXDATA on the PU macro specifies the maximum PIU which can be sent to the device. There is an absolute requirement that the NCP buffer size must be at least TH less than the smallest MAXDATA value. This NCP buffer size should never be a problem unless the MAXDATA is coded in error. Type 1 physical units have a 261-byte physical buffer (five-byte FID3 TH/RH plus 256 bytes of text), and type 2 physical units have a 265-byte physical buffer for receiving PIUs (nine-byte FID2 TH/RH plus 256 bytes of text). The largest NCP buffer size is 248, six bytes less than the requirement for MAXDATA.

If PIUs are larger than the MAXDATA operand, PIUs are segmented. A segment is a TH-plus-1 or a multiple of full NCP buffers. Segmenting affects the NCP buffer size. Segmenting is covered later under the topic boundary network node.

VS1 VTAM requires the host buffer size to be an odd multiple of words. The HOST macro UNITSZ operand should not be divisible by 8 for VS1 VTAM.

Host Buffer Allocation The NCP defines the number of host buffers on the HOST macro operand of MAXBFRU. The number multiplied by the host buffer size minus buffer pads (MAXBFRU x UNITSZ - BFRPAD) restricts the size of the largest PIU which can be sent to the host. There is no restriction on the size of a PIU from the host to NCP. If channel IOS determines that a PIU exceeds the length of the host capacity, IOS sets an error response in the PIU and returns the PIU to the source.

Another consideration is the number of PIUs sent to the host by a single host read. If DELAY is coded as nonzero on the HOST macro, a timer is set when the first PIU is enqueued to the intermediate queue. 'Attention' is not sent until the timer expires, allowing additional PIUs to be enqueued, or until the number of PIUs fills the number of host buffers, whichever condition occurs first. If the host completes a write to the NCP and STATMOD=YES is coded on the HOST macro, any PIUs in the intermediate queue are sent before the timer event.

The delay technique has two benefits: (1) improvement in the host performance by reducing the number of 'attentions' and host buffer allocations; (2) improvement in NCP performance by reducing the number of channel initializations and termination processing of the intermediate queue to hold queue. When traffic is light, the PIU is delayed at the channel. When traffic is heavy, the delay is not used because the amount of data queued fills the host buffer allocation.

NCP Buffer Allocation The INBFRS operand defines the number of buffers to be allocated for host-to-NCP transfers. When the last allocated buffer is filled, the NCP obtains more buffers as required. If a large number of NCP buffers is allocated to the channel and not used promptly, it deprives other users of free buffers and may result in slowdown. If few NCP buffers are allocated, the NCP must lease buffers more frequently, taking required controller cycles.

Delay See Host Buffer Allocation.

Status Modifier The STATMOD=YES operand of the HOST macro allows the NCP to send PIUs to the host at the completion of a host 'write'. When a host 'write' completes, rather than send the 'attention' separately or as a part of the write status and waiting for a host 'read', the PIUs can be sent as a continuation of the host 'write CCW' chain. If the NCP has traffic for the host, the status modifier causes the host 'write CCWs' to chain to 'read CCWs'.

Channel Timeout If the HOST macro operand is coded TIMEOUT=NONE, the NCP sends 'attention' and waits indefinitely for the host to reply. If auto network shutdown support is included (BUILD ANS=YES), the operator can initiate auto network shutdown from the panel of the communications controller.

If the host does not reply to the 'attention', a timeout value provides automatic entry to auto network shutdown. All current pending line operations complete, resources are deactivated, and a 'network shutdown complete' message is placed on the channel queue.

Channel Adapter Summary

There are four types of channel adapters. Types 1 and 4 require heavy program support, but are required for emulation programming. Types 1 and 4 have common code. Types 2 and 3 also have common code. Type 2 is used for single processors; type 3 allows a dual interface to tightly coupled multiprocessors. Types 2 and 3 are high-performance, cycle-steal channel adapters. User definition of host and NCP buffer parameters and other channel-related operands on the HOST macro can have significant effect on performance.

Channel Adapter IOS Quiz

Use appendix C to answer the following questions. Do not refer to the answers in Appendix B until you have completed all the questions.

1. What is the address of the channel control block?
2. Is the channel control block a COB or CHB?
3. Are any buffers on the channel queues?
4. How many buffers (INBFRS) are allocated for data from the host?
5. How many buffers (MAXBFRU) are allocated for data going to the host?
6. What is the pad size (BFRPAD) on PIUs going to the host?
7. What is the size (UNITSZ) of a host buffer?

Criterion

If you missed more than one question, you should review this material.

Path Control

Objective

Upon completion of this topic, the student should be able to identify the control blocks used by 'path control out', 'path control out delayed', 'path control in immediate', 'path control in delayed', and describe the flow of data in the modules.

Path Control Out

'Path control out' directs the flow of path information units (PIUs) from the channel adapter IOS to the proper destination. 'Path control out' uses the destination address field (DAF) from the PIU to access entries in the subarea index table (SIT), subarea vector table (SVT), and the resource vector table (RVT). The 'path control out' routine locates the appropriate path for the PIU and places the PIU on a queue control block (QCB) for processing by NCP physical services, boundary network node (CUB or LUB), link scheduler (SCB), or the BSC/SS processor. The 'path control out' module operates in program level 3 via a branch from the channel IOS. When a complete PIU is received from the host, the channel code branches to 'path control out'. 'Path control out' determines where the PIU is to be queued.

When the PIU destination is a type 4 physical unit, 'path control out' enqueues the PIU directly on the station control block (SCB) link outbound queue (LOB). From the link outbound queue the PIU is transmitted to the remote by the link scheduler.

When the PIU destination is a type 1 or type 2 physical unit, the PIU is enqueued on the common unit physical block (CUB) or logical unit block (LUB), depending upon the PIU destination.

A PIU that is destined for NCP physical services is placed on the NCP physical services block (PSB) process queue.

If the PIU is destined for a BSC or SS device, the PIU is passed to the BSC/SS router, which converts the PIU to a BTU and enqueues the BTU on a device block (DVB) or a nondevice input queue.

'Path control out' routes PIUs to their proper destination. To accomplish this routing, 'path control out' uses several tables (created during NCP generation) in conjunction with the DAF portion of the PIU. These tables are the subarea index table (SIT), subarea vector table (SVT), and resource vector table (RVT).

Subarea Index Table (SIT) The subarea index table (SIT) consists of one-byte entries that correspond to the network subarea addresses. The content of each one-byte entry is a value used to index into the SVT. The NCP generation builds the SIT according to the MAXSUBA and SUBAREA operands of the BUILD macro and the SUBAREA operand of the type 4 PU macro.

The MAXSUBA operand of the BUILD macro determines the size of the SIT. If MAXSUBA is coded 15, there are MAXSUBA entries-plus-1, or 16 entries. The first entry is always one byte of zero. The remaining entries are filled according to the definitions of the network control program.

If the host is defined as subarea 1, the SIT table offset of 1 provides the one-byte offset into the SVT, which contains the address of the channel control block (COB or CHB). The second subarea index table entry always contains a X'02' to offset to the third entry in the SVT. All other entries are dependent upon the SUBAREA operands on the BUILD and type 4 PU macros.

If the BUILD macro SUBAREA=2 and two type 4 PU macros are coded SUBAREA=4 and SUBAREA=6, the third, the fifth, and seventh SIT entries provide offsets to the SVT table. The BUILD entry always contains X'01' to point to the second SVT entry. Each type 4 PU macro generates consecutive entries in the SVT; therefore, the SIT values for type 4 PU macros are third, fourth, etc., in the relative subarea position. Figure 5.1 illustrates the SIT.

SUB AREA ADDRESS

	1	2	3	4	5	6	7	---	F
00	02	01	00	03	00	04	00		00

```
BUILD MAXSUBA=15, SUBAREA=2
PU    PUTYPE=4, SUBAREA=4
PU    PUTYPE=4, SUBAREA=6
```

Figure 5.1. Subarea Index Table

Subarea Vector Table (SVT) The subarea vector table is made up of four-byte entries. Each entry consists of a type field, which describes the type of subarea this entry represents, and the address of the table or control block representing that subarea. The NCP generation builds the SVT according to the TYPGEN operand of the BUILD macro and the number of type 4 PU macros included in the generation.

The type field identifies the entry as the address of the resource vector table (RVT), channel control block (COB-30 or CHB-30), or a type 4 PU (SCB) of a remote link. The first entry is a value of zero, and all SIT entries with undefined SUBAREAs index to this entry. The second entry is always the address of the resource vector table (RVT). In a channel-attached controller, the third entry is the address of the channel control block (COB or CHB) minus 30. If TYPGEN=NCP or PEP, the next entry is a delimiter entry with X'FF' in the type field. If TYPGEN=NCP-LR or PEP-LR, each type 4 PU (SCB) generates an entry between the channel entry and the delimiter.

Figure 5.2 illustrates the SVT.

SVT

TYPE	0000
	RVT-4
	CHB-30 or COB-30
	SCB
	SCB
FF	

BUILD TYPGEN=NCP-LR or PEP-LR
PU PUTYPE=4,
PU PUTYPE=4,

Figure 5.2. Subarea Vector Table

Resource Vector Table (RVT) The resource vector table (RVT) is made up of four-byte entries. Each entry consists of a type field and the address of the control block represented by this entry. The NCP generation builds the RVT, with an entry for BSC/SS definitions of LINE, CLUSTER, TERMINAL, and COMP macros, and SDLC definitions of LINE, PU, and LU macros. If switched SDLC links are defined, the last entries are addresses of logical units in the logical unit pool. These addresses are generated by the LUPOOL macro.

NET. ADD.	BSC SS ADD.
TYPE	PSB
	LCB
	DVB
	DVB
FF	
	LKB
	CUB
	LUB
	LUB
	LUB
	LKB
	SCB
FF	

Figure 5.3. Resource Vector Table

The RVT is divided into two sections. The first section is for BSC/SS entries, and the second is for SDLC entries. Both sections have a delimiter entry with a type field of X'FF'. At RVT-4 is a two-byte field which contains the highest network element count in the table. The RVT-2 is a two-byte field which contains the highest BSC/SS network element count.

The first entry in the RVT has a type field of X'00' and the address of physical services control block (PSB). If there are BSC/SS devices, they begin in the second position and are delimited by a X'FF'. SDLC devices follow the BSC/SS delimiter entry, or if no BSC/SS devices are included, the SDLC devices follow the PSB entry. The format of the RVT is illustrated on Figure 5.3.

The RVT is located by an address pointer in the word direct addressables (XDA) at X'07E8' which points at the RVT-2. The SVT immediately precedes the RVT and the first entry contains an address of zero. The SIT immediately precedes the SVT. The length of the SIT is determined by the subarea mask at X'693' in the byte direct addressables (XDB).

Path Control Out Flow 'Path control out' receives control from the channel adapter IOS. The DAF of the FID0 or FID1 is used by path control to route the PIU properly. The first byte of the DAF contains the subarea address. The byte is shifted as required to delete any leftmost bytes of element address, leaving the true subarea value. This subarea address is used to vector into the SIT to the entry for that subarea. The one-byte SIT entry contains an index value to be used with the SVT. This value is used by path control to index into the SVT to the corresponding entry. The SVT entry contains flags describing the entry and a pointer to the control block representing that subarea.

The possible subarea entries in the SVT and their associated pointers are as follows:

- Invalid subarea (entry of zeros)
- Local NCP subarea (pointer to the RVT)
- Host subarea (pointer to the CHB or COB)
- Remote subarea (pointer to SCB)

The action taken by 'path control out' differs for the various subareas. If the PIU is destined for a type 4 physical unit, the PIU is enqueued on the station control block (SCB) link outbound queue.

If the PIU is for physical services, the element address is zero and the PIU is routed to physical services.

PIUs for type 1 or type 2 physical units are processed by a connection point manager out (CPM-OUT). The CPM-OUT is invoked by enqueuing the PIU on an appropriate CUB or LUB queue. The CPM-OUT branches to 'path control out delayed' for conversion of PIUs from FID1 to FID2 or FID3, segmenting as required, and enqueuing to a link outbound (LOB) queue.

If the RVT entry is in the BSC/SS section of the RVT, the PIU is routed to the BSC/SS system router via a branch instruction.

Path Control In

'Path control in' is divided into two parts: 'immediate' and 'delayed'. When a PIU is received on a link, 'path control in immediate' is invoked by a branch from the link scheduler. 'Path control in immediate' checks for a PIU source of a remote controller (SCB). If from a remote, the PIU is immediately queued on the channel intermediate queue for the host. If from a type 1 or type 2 physical unit, the PIU is queued on the CUB inbound queue, and 'path control in immediate' exits from level 3.

'Path control in delayed' dequeues the PIU from the CUB inbound queue and determine which connection point manager in (CPM-IN) should process this PIU. 'Path control in delayed' (at level 5) branches to the appropriate CPM-IN.

Path Control Summary

All PIUs from the host are passed from level 3 channel adapter IOS to level 3 'path control out'. The PIU is validated and if the destination address subarea field is for a remote controller (SVT entry), the PIU is immediately placed on the SCB link outbound queue of the remote controller. All PIUs destined for this controller or for devices connected to this controller are checked against the resource vector table to locate the appropriate queue. After the boundary network node code has processed the PIU, it is passed to 'path control out delayed' for FID conversion, segmenting, and enqueuing to a link outbound queue.

All PIUs from the link scheduler are processed by 'path control in immediate'. The PIU is validated. If the source is a remote controller, the PIU is XPORT-ed to the channel intermediate queue. If the source is a type 1 or type 2 physical unit, the PIU is enqueued on the CUB link inbound queue, triggering path control in delayed. 'Path control in delayed' determines the session of the PIU and branches to the appropriate boundary network node connection point manager in (CPM=IN).

Additional information on 'path control in' is given later under physical unit-to-host PIU processing.

Path Control Quiz

Do not refer to the solution in Appendix B until you have finished the quiz. Appendix C provides the storage listing for use in answering the following questions.

1. What is the address of the subarea index table?
2. What is the address of the subarea vector table?
3. What is the address of the resource vector table?
4. How many bits of the 16-bit network address are used to identify the subarea?
5. What is the highest valid element defined in this NCP?
6. What is the subarea address of this NCP?
7. What is the path for a contact command for a type 4 PU?
8. What is the path for an 'activate physical' command for a type 4 PU?

Criterion If you missed more than one question, you should review this section.

Network Control Program Physical Services

Objective Upon completion of this topic, the student should be able to identify the session hierarchy, physical services components, control blocks, and flow of data in physical services modules.

Purpose of NCP Physical Services The NCP physical services component is a collection of routines necessary for the control and/or modification of the communications network. NCP physical services are divided into two functional areas: (1) system control and (2) function management. The required services are selected via request codes in the PIU.

Session Hierarchy The requirement for physical services is based upon the session control of the network and the need to change network status. Before data can be transferred through the communication network, a physical and logical connection must be established between the origin and destination of the data request. This connection is referred to as a session. There are four types of sessions that are controlled by network commands. Figure 6.1 illustrates the four session types.

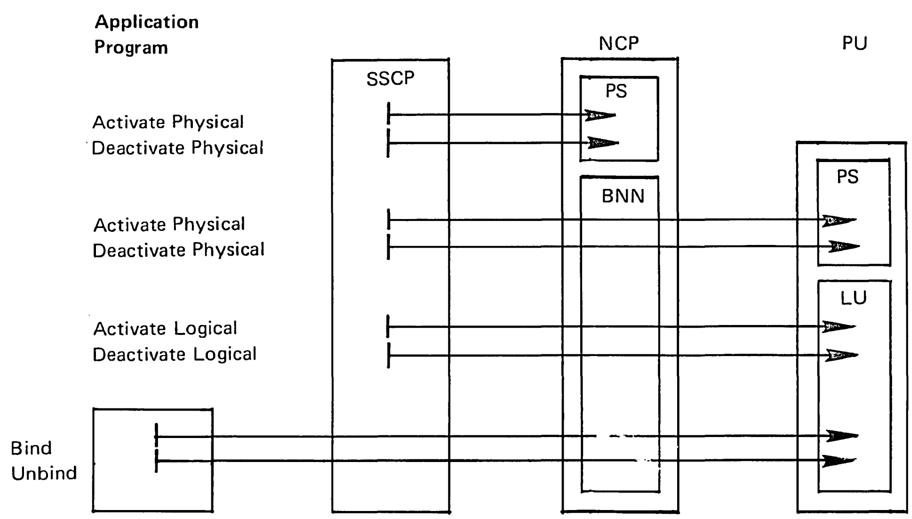

Figure 6.1. Session Hierarchy

SSCP and NCP Physical Services This session is initiated with an 'activate physical' command to NCP physical services from SSCP and is ended with a 'deactivate physical' command. The next command required is 'start data traffic' which enables data flow within a session. Data sent to physical services consists of requests to change the network status. Before any other sessions can be initiated, the links must be activated and physical units contacted.

An 'activate link' session control request is required to activate a link. The 'activate link' request causes the link scheduler to be initiated for this link.

Bit 1 of LKBSTAT (X'12') in the link control block (LKB) is set to 1 to indicate that an 'activate link' is in progress. For nonswitched links only, the modem is enabled. The LKBSTAT bit 0 is set to 1 to indicate an active link.

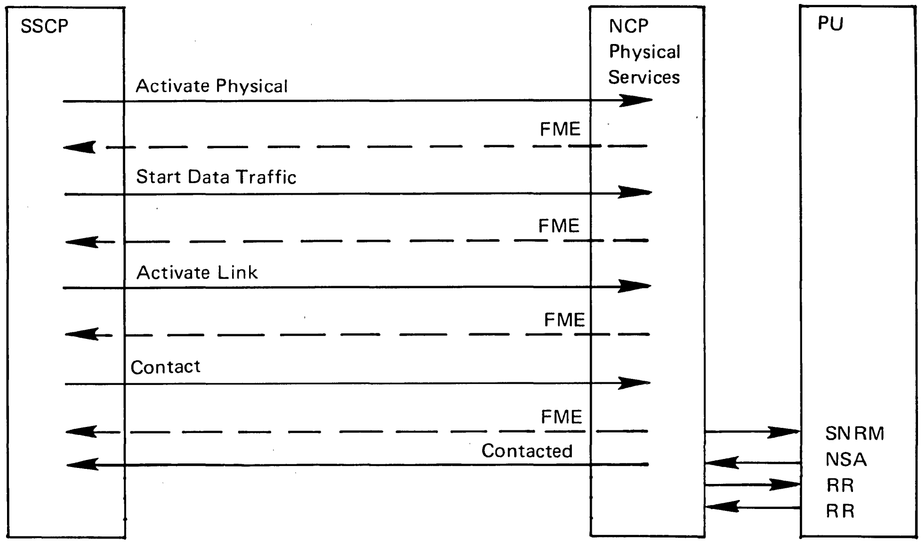

Figure 6.2. SSCP to NCP Physical Services Command Sequence

Switched links require an 'answer' or 'dial' command, and other switched commands which are covered later under switched support. A 'contact' command is required to contact a physical unit. Figure 6.2 illustrates the request sequence of a contact command. The contact request is acknowledged by physical services with a response to SSCP. The contact request also schedules a 'set normal response mode' (SNRM) SDLC command to the physical unit by setting the SNRM bit in the CUB plus X'1F'. On a timeout after an SNRM, the SNRM is retried on a user-specified basis. If a 'nonsequenced acknowledgement' (NSA) response is returned by the physical unit, a 'receive ready' (RR) SDLC command is sent to the physical unit, and a 'contacted' PIU is generated by NCP physical services and sent to SSCP. The link is marked active. The common physical unit block (CUB) CUBSSCF (X'1E') bit 2 (not operational bit) is turned off to indicate that the device is available for sessions to be established. Figure 6.3 illustrates the SSCP-PU and SSCP-LU activation sequence.

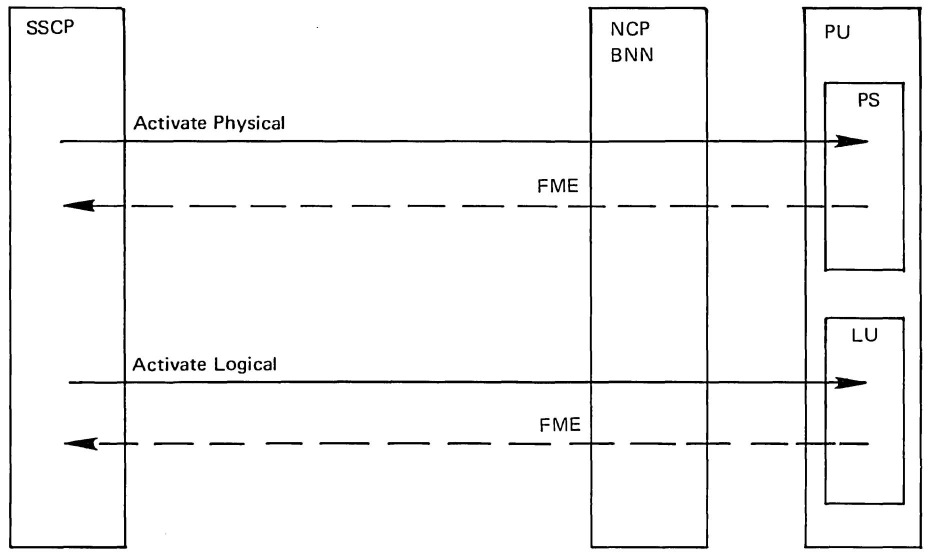

Figure 6.3. Activate Physical and Activate Logical Commands

SSCP and PU Physical Services The SSCP/PU session is established with an 'activate physical' command addressed to the common physical unit block (CUB) or station control block (SCB) defined by a PU macro. The session is ended by a 'deactivate physical' command. The SSCP/PU session must exist before any sessions can be established with logical units. The 'activate link' to the link and 'contact' command to the device must complete successfully before this session can be established. Type 2 and type 4 physical units receive and respond to the 'activate physical' command. The NCP processes this command for type 1 physical units (SDLC 3270 and 3767).

SSCP and LU The SSCP/LU session is initiated with an 'activate logical' command addressed to the logical unit block (LUB) defined by a LU macro. The session is ended by a deactivate logical command. This session must exist before a APPL/LU (host application/logical unit) session can be established. This command is processed by type 1, type 2, and type 4 physical units, except for the SDLC 3270. The NCP performs the processing and issues all responses for all commands addressed to the SDLC 3270.

Host Application and LU The APPL/LU (host application/logical unit) session is initiated with a 'bind' command addressed to the LUB. A 'start data traffic' command is required by some types of logical units before data flow can occur. The session is ended by an 'unbind'. Figure 6.4 illustrates the APPL/LU activation sequence.

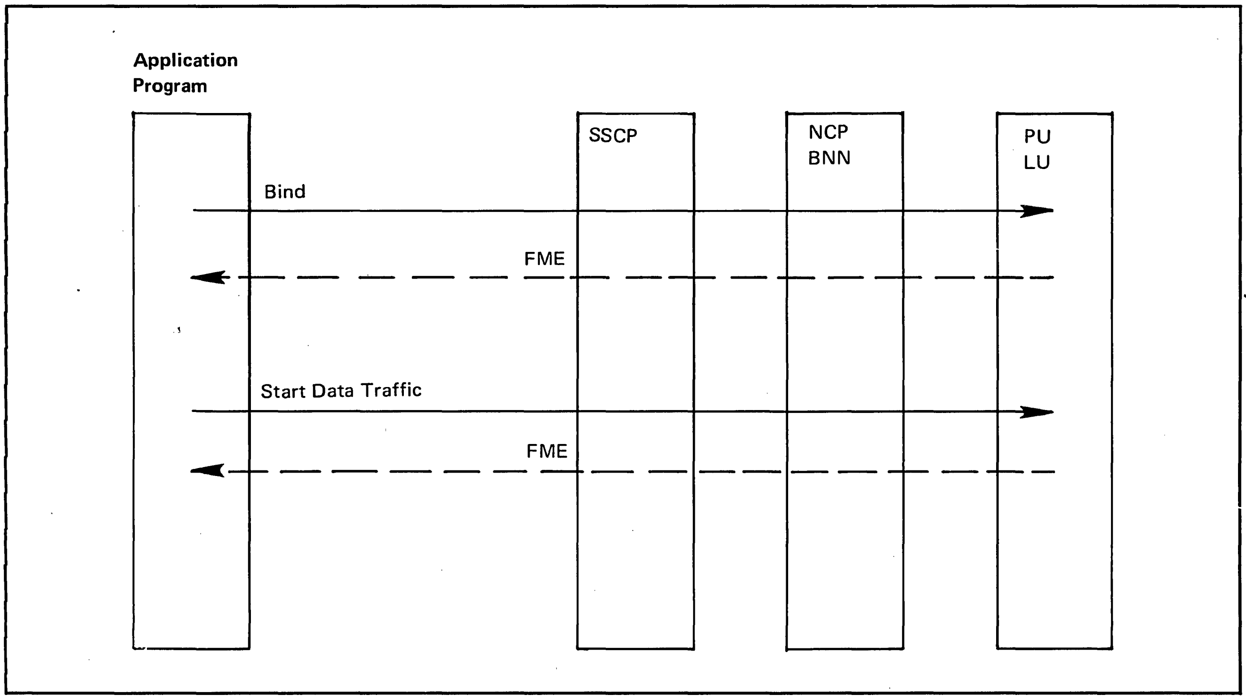

Figure 6.4. Bind and Start Data Traffic Commands

BSC and SS note:
Before data can be transferred, sessions must also be established between the host access and BSC/SS devices. These sessions are initiated and terminated within the NCP support for BSC/SS devices via BTU commands. This session level is covered separately in the BSC/SS Processor topic.

Physical Services Block (PSB)

The physical services block (PSB) contains the process queue control block for NCP physical services. The PSB also contains the network addresses of NCP physical services and the host 'system services control point' (SSCP). Other fields of interest are:

X'00'	NCP physical services process QCB
X'24'	Network address of NCP physical services
X'26'	Network address of SSCP
X'28'	Active link count
X'2A'	NCP physical services status
X'3C'	Auto network shutdown extension

Physical Services Components

The NCP physical services component interfaces with the 'system services control point' (SSCP) in the host to provide control functions for the NCP. Some of the functions provided on the basis of requests addressed to the NCP physical services by the host SSCP are:

- Activating and deactivating NCP physical services
- Activating and deactivating links
- Dial

- Answer
- Loading and dumping remote controllers
- Activating and deactivating nodes attached to this controller

NCP physical services is made up of three sections: connection point manager out (CPM-OUT), connection point manager in (CPM-IN), and function management (FM) router. NCP physical services also calls the system control router when necessary. The system control router is common to NCP physical services and NCP boundary network node physical services.

Physical Services Connection Point Manager Out (CPM-OUT) Physical Services CPM-OUT receives a PIU addressed to NCP physical services. The PIU is validated and, according to the contents of the request/response header (RH) byte 0, CPM-OUT calls either the system control router or the function management router.

Physical Services Connection Point Manager In (CPM-IN) CPM-IN validates a PIU and XPORTs it to the channel adapter IOS for the host SSCP. All physical services requests and responses are directed to the host SSCP, bypassing path control. When link commands (dial, answer, contact, etc.) complete, NCP CPM-IN is triggered to change status fields and build a PIU to inform the host.

System Control Router The system control router receives control for a system control category PIU (from either NCP physical services CPM-OUT or boundary network node physical services). The PIU request unit (RU) request code is resolved and through a table lookup routine, the appropriate processor for that request code is given control. The values of bits in the RH and RU determine whether session control or function management gets control. The following identifies the commands and modules for the given RH/RU values:

RH byte 0 x11xxxxx

RU Byte 0

0D Activate logical CSDBSIL

0E Deactivate logical CSDBSTL

11 Activate physical (BNN) CSDBSIP

11 Activate physical (NCP) CSDBAPH

12 Deactivate physical (BNN) CSDBSTP

12 Deactivate physical (NCP) CSDBDPH

31 Bind CSDBSIA

32 Unbind CSDBSTA

A0 Start data traffic CSDBSDF

A1 Clear

A2 Set and test sequence numbers

A3 Request recovery

There are data commands addressed to the system router which have an RH byte 0 value of x01x xxxx. The commands are:

RH byte 0 x01xxxxx

RU byte 0 Command

07 Auto network shutdown complete

50 Initialization complete

51 Switch line to NCP mode (BSC/SS)

52 Switch line to EP mode (BSC/SS)

Function Management (FM) The function management router validates FM requests, selects a table of processors according to the RVT type field and, by using a table lookup routine, selects the appropriate processor according to the PIU RU request code. If the PIU RH byte 0 has a value of x00x xxxx, the function manager is given control. The PIU RU byte 1 value determines which of four FM categories is used. The PIU RU byte 2 contains the request code. Some of the valid codes are as follows:

RH Byte 0 x10xxxxx

RU byte 0 Command

04 Logical unit status

05 Ready to receive

80 Quiesce at end of chain

81 Quiesce complete

82 Release quiesce

83 Cancel

84 Chase

C0 Shutdown

C1 Shutdown complete

C2 Request shutdown

C8 Bid

C9 Signal

RH Byte 0 x00xxxxx, RU Byte 1 X'00'

RU Byte 2 Command

01 Change device transmission limit (BSC/SS)

02 Change line negative poll response (BSC/SS)

03 Change line session limit (BSC/SS)

04 Change line service seeking pause (BSC/SS)

RH Byte 0 x00xxxxx, RU Byte 1 X'02'

01 Contact

02 Discontact

03 Load initial

04 Load data

05 Load final

06 Dump initial

07 Dump data

08 Dump final

09 Remote power off

0A Activate link

0B Deactivate link

0E Dial

0F Abandon connection

11 Set state vector

RU byte 5:

01 Time and date

02 Remote NCP/link association

03 Set control vector/switched PU

04 Set control vector/switched LU

05 Set control vector/channel delay

14 Entering slowdown

15 Exiting slowdown

16 Answer

17 Abandon answer mode

18 Abandon dial

19 Assign network address

1A Free network addresses

80 Contacted

81 Inoperative

84 Off hook

RH Byte 0 x00xxxxx, RU Byte 1 X'03'

01 Execute test

02 Activate line trace

03 Deactivate line trace

81 Record maintenance statistics

82 Record test data

83 Record trace data

RH Byte 0 x00xxxxx, RU Byte 1 X'06'

04 Nonsequenced procedure error

81 Initiate self

83 Terminate self

Network Control Program Physical Services Flow

Physical services CPM-OUT receives control via an enqueue macro with the ACTV=YES operand. This macro is issued by 'path control out'. This queueing occurs when 'path control out' receives a PIU with a DAF destined for NCP physical services. The PIU is enqueued on the physical services outbound queue in the physical services block (PSB). The task entry pointer for the PSB QCB points to the NCP physical services CPM-OUT.

CPM-OUT gets the contents of the PIU RU byte 0. If not a X'11' request code ('activate physical'), CPM-OUT verifies the PIU OAF by comparing it to the network address in the PSB at offset X'26'.

Physical services CPM-OUT uses bits 1 and 2 of the PIU RH byte 0 to determine the type of request. Both bits 'off' signifies a function management request. If the PIU is a system control request, the system control router is called.

Function management performs more verification on a request by checking the sequence number of the PIU against the PSB offset of X'20'. CPM-OUT assumes that the request following the 'activate physical' from the SSCP to physical services must have a sequence number of 1 in its transmission header. Each subsequent function management request is expected to have a sequence number one greater than the previous request. The PSB is checked for 'session established' and 'data flow enabled' at PSB offset X'2A', testing for a value of 11xx xxxx. If all of the above tests are met, the function management router is called.

The system control router and the function management router both use a table lookup routine in conjunction with the PIU request code to select a processor. There are significant differences between the two routers.

The system control router first uses the DAF from the TH and the UIB1TYPE byte of the PIU to set an indicator showing the destination type for this PIU. The indicators are as follows:

X'80'	Request is for NCP physical services
X'00'	Request is for BNN physical services
X'40'	Request is for a BNN logical unit

The indicator is used as the second byte of a two-byte table search argument. The request code from the RU1RCO byte of the PIU is used as the first byte of the search argument.

The search argument is compared to the first two bytes of each entry of the system control router table (SCRT). When a match is found, the routine pointed to in that entry is given control. X'FFFC' indicates the end of the SCRT.

The function management router activates links, contacts physical units, and performs similar services.

Function management requests are divided into four subcategories. The type of subcategory is determined by the contents or the RU1BT1 byte of the PIU as follows:

- X'00' BSC/SS service request
- X'02' Physical configuration services request
- X'03' Physical maintenance request
- X'06' Session services request

Once the function management router determines which subcategory the requests are for, the RVTTYPE bytes within the RVT are used to select the proper table within that subcategory. An example of this table selection is the physical configuration subcategory which contains three tables:

1. Link configuration table
2. NCP configuration table
3. Station configuration table

Finally, the function management router uses the request code in the RU1RC2 byte of the PIU as a search argument for the selected table. When a match is found, the routine pointed to in that entry is given control. The function management router tables are delimited by a X'80'.

Network Control Program Physical Services Control Block (PSB)

The physical services control block (PSB) can be located by the first entry in the resource vector table (RVT). The RVT-minus-2 address can be found at X'7E8' in the word direct addressables (XDA). The following PSB fields are of special interest:

X'00'	Shifted address of first element queued
X'02'	Shifted address of last element queued
X'04'	Task and queue status
X'08'	CPM-OUT task address
X'10'	Shifted address of first element queued
X'12'	Shifted address of last element queued
X'14'	Task and queue status
X'18'	CPM-IN task address
X'20'	Inbound sequence number
X'22'	Outbound sequence number
X'24'	Network address of NCP physical services

X'26'	Network address of SSCP
X'28'	Count of active links
X'2A'	Physical services status
X'2C'	NCP ID

Network Control Program Physical Services Summary

Physical services provides services for system control requests and function management requests. The initialization of NCP, activation of lines, initial contact of devices, etc., all are performed by physical services. Host control requests are sent to physical services in the PIU RU with the command type, command, and resource address of the element to be affected by the command.

Network Control Program Physical Services Quiz

Use the storage dump listing in Appendix C to answer the following problems.

Do not refer to the answers in Appendix B until you have answered all questions.

1. What is the address of the PSB?
2. What is the NCP load module name?
3. Has an 'activate physical' command been processed?
4. Has a 'start data traffic' command been processed?
5. How many links are active?
6. What is the next sequence number PIU expected from SSCP to physical services?
7. Are any PIUs queued for processing by physical services?
8. The buffer pool is formatted in Appendix C. Analyse the following buffers to determine PIU origin, destination, command, and element affected by the command:

   X'19CA8' through X'19E24'

   X'1A628' through X'1A7A4'

   X'1A8D4'
9. The buffer pool is formatted in appendix C. Analyse the following buffers to determine PIU origin, destination, command, and element affected by the command:

   X'1A038' and X'1A168'

Criterion

If you miss more than two questions, you should review this material.

Boundary Network Node (BNN)

Objective

Upon completion of this topic, the student should be able to identify the boundary network node components, control blocks, and flow of data in physical services modules.

Function of the Boundary Network Node

The NCP boundary network node (BNN) is the interface between the host SSCP and the link scheduler. The BNN processes PIUs containing control requests and data associated with sessions between:

- SSCP and the physical units (SSCP/PU)
- SSCP and the logical unit (SSCP/LU)
- Host application and the logical unit (APPL/LU).

The two major elements of BNN are 'connection point manager' (CPM) and 'path control in'.

The boundary network node (BNN) of NCP can be divided into two sections. The first section consists of PIUs travelling to physical unit (PU) or logical unit (LU) on an SDLC link. The second section are PIUs travelling from a physical unit (PU) or logical unit (LU).

There are three distinct paths through the BNN for PIUs travelling in either direction. These paths relate to the session which can be established with PUs or LUs. The possible sessions are: SSCP/PU, SSCP/LU, and APPL/LU.

BNN Control Blocks

The BNN processes FID1, FID2, and FID3 PIUs. The formats of the PIU were covered in the Network Control Program Supervisor section. References are made to NCP physical services control block (PSB) (covered in the previous section on physical services) and the link control block (LKB), which is checked for link status (covered in detail in the link scheduler section). The two new control blocks used primarily by the BNN code are the common physical unit block (CUB) and the logical unit block (LUB).

Common Physical Unit Block (CUB) The common physical unit block (CUB) is generated by a PU macro. The CUB represents the physical device for SDLC control and queuing of inbound and outbound PIUs for this physical and logical unit group. The CUB provides a link inbound queue control block at CUB offset X'00' to X'0F' for queuing of all inbound PIUs from the device *and* dispatching of 'path control in delayed'. PIUs addressed to the CUB are queued on the QCB at CUB offset X'3C' to X'4B' for processing by SSCP/PU connection point manager out. After processing is complete and the PIUs for the physical or logical units are ready to be sent to the device, the PIUs are placed on the link outbound queue at CUB offset X'10' to X'13'. The key fields of the CUB are:

X'00' Shifted address of first element on the link inbound queue (all FID1 and FID2 PIUs from the device, including logical units)

X'02' Shifted address of last element on the link inbound queue

X'08' Address of task 'path control in delayed'

X'10' Shifted address of first element on link outbound queue (all FID1 and FID2 PIUs to the device, including logical units)

X'12' Shifted address of last element on link outbound queue

X'14' Shifted address of first element on link outstanding queue (a maximum of seven PIUs sent on link but not acknowledged)

X'16' Shifted address of last element on link outstanding queue

X'18' Address of link control block (LKB)

X'1C' Network address of CUB

X'1E' Service-seeking and contact poll status

X'22' Transmission counter

X'24' Specification of CUB

X'24' Address of physical services

X'3C' Shifted address of first element on SSCP/PU queue

X'3E' Shifted address of last element on SSCP/PU queue

X'44' SSCP/PU CPM-OUT task address

X'4C' Device status

X'4E' Segment size in NCP buffers

X'50' Segment size in bytes (maximum)

Switched Extension

X'54' Maximum LUVT entries

X'54' LUVT address (last 18 bits)

Logical Unit Control Block (LUB) The logical unit control block (LUB) is generated by the LU or LUPOOL macros. LU macros must immediately follow the PU macro they are associated with and must be in LOCADDR operand sequence. The network addresses of the logical units are consecutively numbered from the physical unit. This addressing scheme is used in converting PIUs to or from the different FID formats. There are two queues in the LUB, one for SSCP/LU sessions and one for APPL/LU sessions. The SSCP/LU queue is at LU X'00' to X'0F'. The APPL/LU queue is at LU X'10' to X'1F'. The key fields of the LU are:

X'00' Shifted address of first element on the SSCP/LU queue

X'02' Shifted address of last element on the SSCP/LU queue

X'08' SSCP/LU CPM-OUT task address

X'10' Shifted address of first element on the APPL/LU queue

X'12' Shifted address of last element on the APPL/LU queue

X'18' APPL/LU CPM-OUT task address

X'20' Address of common physical unit block (CUB)

X'24' Network address of this LU

X'26'	Transmission counter
X'28'	Logical unit status (SSCP/LU)
X'2A'	Network address of host application in session
X'2C'	Logical unit status (APPL/LU)
X'2E'	Pacing parameters (3 bytes)
X'31'	Local address of logical unit
X'32'	Type 1 PU extension for sequence checking

Host to PU PIU Processing

BNN Queues for PIUs from the Host PIUs travelling from the host to the link scheduler are received by channel adapter IOS, passed to 'path control out', and enqueued to a processing queue. If a PIU is for a PU from SSCP, the PIU is enqueued on the SSCP/PU queue within the common physical unit block (CUB) CPQ1ECB at offset X'3C'. If the PIU is for an LU from SSCP, the PIU is enqueued on the SSCP/LU queue of the logical unit control block (LUB) LUL1ECB at offset X'00'. If the PIU is for an LU from an application program, the PIU is enqueued on the APPL/LU queue of the logical unit control block (LUB) LUA1ECB at offset X'10'.

Each of the PIUs for the three types of sessions is enqueued on an input QCB which has a task entry point of a 'connection point manager out' (CPM-OUT). Each type of session has a separate CPM-OUT because the processing is different for each type of session. The task pointer in the SSCP/PU processing QCB for the CUB points to the SSCP/PU CPM-OUT. The task pointer in the APPL/LU processing QCB for the LUB points to the APPL/LU CPM-OUT. The ENQUE macro issued in 'path control out' includes the ACTV=YES operand which causes the associated task to be triggered. When the task is dispatched, the appropriate CPM-OUT has control.

Connection Point Manager Out (CPM-OUT) The three types of CPM-OUT processors perform similar functions but are different enough to be covered individually.

SSCP/PU CPM-OUT

The PIU is validated as a FID1 format. Only a FID1 format is valid for the host-to-BNN routines.

The PIU origin address field (OAF) is compared to the network address of the SSCP, which is stored in the physical services block (PSB) by the 'activate physical' command from SSCP to NCP physical services. Only the SSCP in session with the NCP can create this SSCP/PU session or communicate over this path.

The CUB cannot accept any SSCP/PU commands unless the PU is operational. This operational status occurs by means of a command directed from SSCP to NCP physical services function management of a contact command. The contact command schedules a 'set normal response mode' (SNRM) SDLC command to the device. A 'nonsequenced acknowledgement' (NSA) reply indicates that the command was received by the device. Then a 'receive ready' (RR) SDLC command is sent to the device. A 'receive ready' (RR) response indicates that the physical unit is ready for session initiation. Bit 2 of CUBSSCF at offset X'1E' of the common physical unit block (CUB) is set to zero to indicate that the CUB is operational.

If the PIU is a control request, with an x11x xxxx in byte 0 (RH1BO) of the RH, the system control router is called. This is the same system control router which is used by NCP physical services. If the control command in byte 0 of the RU is X'11' ('activate physical'), CPM-OUT checks for a session established at bit 0 of X'4C' (CUBPSTAT) in the CUB. If a session is already established, the request is rejected and returned to SSCP. If a session is not established, bit 1 of byte X'4C' CUBPSTAT is turned on to indicate that a session initiation request is being processed. CPM-OUT branches to 'path control out delayed' to convert the FID1 to a FID2 and enqueue the PIU for transmission to the CUB link outbound queue at CUB plus X'10' (CUBLOBH). If the physical unit is a type 1, the 'activate physical' command is processed by the NCP and not transmitted to the physical device. The response is created in the NCP for reply to the SSCP.

If the device is an SDLC 3270, all commands are processed by the NCP, and all replies on behalf of the 3270 are created by NCP and sent to the host.

If the PIU is not a control request (RH byte 0 value of x00x xxxx), the CUB is checked at offset X'4C' for bit 0 value of 1 to confirm that a session has been established. If a session has been established, CPM-OUT branches to BNN 'path control out delayed' to convert the FID1 to FID2 (or FID3) and enqueue the PIU for transmission to the CUB link outbound queue at CUB plus X'10' (CUBLOBH).

SSCP/LU CPM-OUT

The SSCP/LU CPM-OUT processing performs the following functions:

The PIU is validated as a FID1 format. Only a FID1 format is valid for the host-to-BNN routines.

The PIU origin address field (OAF) is compared against the network address of the SSCP, which is stored in the physical services block (PSB) by the 'activate physical' command from the SSCP to NCP physical services. Only the SSCP in session with the NCP can create this SSCP/LU session or communicate over this path.

The SSCP/LU session cannot exist unless the SSCP/PU session is established. The CUB is checked for a 1-bit in bit 0 of X'4C' (CUBPSTAT), indicating an active SSCP/PU.

If the PIU is a control request with an x11 xxxx in byte 0 of the RH, the system control router is called. This is the same system control router which is used by NCP physical services. If the control command in byte 0 of the RU is X'0D' ('activate logical'), the LUB is checked for an existing session at LUB plus X'28' (LUBCPSET) indicated by a 1 in bit 0. If no session exists, bit 3 in X'28' (LUBCPSET) is set to 1 to indicate that an 'activate logical' command is being processed. CPM-OUT branches to BNN 'path control out delayed' to convert the FID1 to a FID2 (or to a FID3 if the CUB is a type 1 physical unit) and to enqueue the PIU for transmission to the CUB link outbound queue at CUB plus X'10' (CUBLOBH).

If the PIU is not a control request (RH byte 0 value of x00x xxxx), the LUB is checked at offset X'28' (LUBCPSET) for a bit 0 value of 1 to confirm that a session has been established. If a session has been established, CPM-OUT branches to BNN 'path control out delayed' to convert the FID1 to a FID2 (or to a FID3) and enqueue the PIU for transmission to the CUB link outbound queue at CUB plus X'10' (CUBLOBH).

APPl/LU CPM-OUT

The APPL/LU CPM-OUT processing performs the following functions:

The PIU is validated as a FID1 format. Only a FID1 format is valid for the host-to-BNN routines.

The APPL/LU CPM-OUT processor checks to verify that an 'activate logical' command established an SSCP/LU session by testing at LU plus X'28' (LUBCPSET) bit 0 for a value of 1.

If the PIU is a control request with an x11x xxxx in byte 0 of the RH, the system control router is called. This is the same system control router which is used by the NCP physical services. If the control command in byte 0 of the RU is X'31' ('bind') the LUB is checked for an active session bit 0 value of 1 in LUB plus X'2C' (LUBAPSET). If no 'bind' command has established a session, bit 3 of byte X'2C' of the LUB is set to 1 to indicate that a 'bind' is being processed. CPM-OUT branches to 'path control out delayed' to convert the FID1 to a FID2 (or FID3) and to enqueue the PIU for transmission to the CUB link outbound queue at CUB plus X'10' (CUBLOBH).

If the PIU is not a control request (RH byte 0 value of x00x xxxx), the LUB is checked at offset X'2C' (LUBAPSET) for a bit 0 value of 1 to confirm that a session has been established.

Pacing from APPL/LU CPM-OUT to LU

Pacing or the lack of pacing can have a significant effect on the performance of the network. There are two key areas where pacing can be defined for the network: (1) a PIU can be paced between the host and APPL/LU CPM-OUT, and (2) from APPL/LU CPM-OUT and a logical unit. Pacing is always on a APPL/LU basis. The PACING operand provides control of PIU flow between the NCP and the logical unit. VPACING provides control of PIU flow between a VTAM host application and APPL/LU CPM-OUT on a logical unit basis. PACING is covered first because VPACING does not work unless PACING is also used.

If pacing is not defined for each logical unit, the PIUs are processed and placed on the link outbound queue as they are received by the NCP. The link scheduler dequeues and transmits PIUs to the logical units. In a physical unit there is a fixed number of physical buffers per logical unit. If the physical unit buffers are filled, subsequent PIUs transmitted by the link scheduler are rejected for lack of buffers. The link scheduler retransmits until PIUs are accepted or an error threshold is reach. This retransmission not only adds overhead by executing the link scheduler but also uses line capacity , thereby degrading line capacity. The physical unit buffers may be tied up by the PIUs for one logical unit, while the remaining logical units are waiting for PIUs because of a lack of physical unit buffers.

Pacing is defined by two operands of N and M. An operand of PACING=(N,M) specifies that N PIUs are to be sent to the logical unit before waiting for a pacing response. The M value defines which of the N PIUs carries the request for a pacing response.

There are five fields used for pacing control. The PIU has one bit for pacing control. If bit 7 of RH1B1 is 1 in a request between NCP and the logical unit, the request is for a pacing response by the M PIU. The pace bit 1 in a response between the logical unit and the NCP identifies a reply to a request for a pacing response, indicating that the logical unit is available for the next PIU. The other four fields are in the logical unit control block (LUB) in the following fields:

X'2D' LUBASSET bit 1, waiting (1) or not waiting (0) for a pacing response

X'2E' LUBM M pacing parameter

X'2F' LUBN N pacing parameter

X'30' LUBPC pacing count

If the LUBN field has a 0 value, pacing is not defined. If pacing is not defined, CPM-OUT processes PIUs as they arrive and places them on the link outbound queue. If LUBN has a non0 value, the following pacing processing occurs:

1. Pacing between the NCP and logical unit by APPL/LU CPM-OUT first checks LUBASSET for a 'waiting for a pacing response'. If a wait is indicated, the PIU remains in the APPL/LU queue on the LUB and CPM-OUT EXITs. CPM-OUT is triggered again by CPM-IN when a pacing response is received.

2. If step 1 did not suspend processing, the LUBPC pacing counter is incremented by 1 and compared to LUBM. If LUBPC is equal to LUBM, the current PIU carries the pacing request. The RH1B1 bit 7 is set to 1. The PIU is queued to the CUB link outbound queue for transmission.

3. The pacing counter, LUBPC, is compared to LUBN. If the fields are not equal, the next PIU is processed at step 1. If the LUBPC and LUBN fields are equal, the LUBASSET 'waiting for pacing response' bit is set on.

   Processing of PIUs loops through steps 1, 2, and 3 for each PIU until the LUBPC counter equals LUBN limit. An equal condition turns on the 'waiting for pacing response'.

4. When a pacing response is received from the logical unit by CPM-IN, the following processing occurs:

   - The LUBASSET 'waiting for pacing response' is turned off.
   - The pace bit (pace response) in the PIU is turned off.
   - The LUBPC counter is reset to 0. If a pacing response returns before the LUBN limit is reached, the 'waiting for pacing response' bit is not 1, so a new pacing sequence is initiated by resetting the pacing counter. The pacing counter is reset when

PACING=(2,1), only one PIU is available for transmission, and the response arrives before the N limit is reached.

- The PIU is checked for response status. If the PIU which carried the pacing request did not request an FME or RRN response, the PIU was sent to the NCP merely as a pacing response. The buffer is returned to the free buffer pool. If the PIU which carried the pacing request also required a response (FME or RRM), the response to the host continues.
- The APPL/LU CPM-OUT queue is searched for an enqueued PIU. If a PIU is on the queue, CPM-OUT is triggered to begin the next pacing sequence.

Pacing from SSCP to APPL/LU CPM-OUT

The VTAM VPACING parameter can control PIU traffic on a per-logical-unit basis between the host and the NCP. The VPACING operand is required to avoid NCP buffer depletion by an unlimited number of PIUs sent to the NCP from the host. The only alternate to VPACING is for each application program to send a limited number of PIUs before waiting for an FME response. VPACING limits are controlled by SSCP, which eliminates the concern for controls in each host application.

One important consideration for VPACING is the requirement for concurrent PACING. The following VPACING logic should make clear that VPACING has no effect unless PIUs are held on the APPL/LU queue by the PACING scheduling.

VPACING is defined by two operands of N and M, the same as PACING. The VPACING=(N,M) specifies N PIUs are to be sent to the NCP before waiting for a pacing response. The M value specifies which of the N PIUs carries the request for a pacing response.

The M, N, count, and bit indicating 'waiting for VPACING response' from NCP are in the SSCP. Our concern is the manner in which NCP looks for a pacing request from SSCP and how NCP sends a pacing response. VPACING uses the same pacing bit in the RH1B1 of the PIU, which is used for PACING between the NCP and logical unit. VPACING also uses the logical unit control block (LUB) field of LUBASSET (X'2D'). Bit 3 of LUBASSET is used to indicate that a pace response is required by SSCP.

VPACING processing is easily incorporated into the previous processing example for PACING. Only two processing points are added by VPACING.

When a PIU is enqueued on the APPL/LU, the CPM-OUT is triggered as specified in PACING step 1. If the APPL/LU CPM-OUT is waiting for a pacing response from the logical unit, the new PIU is placed on the APPL/LU queue without any processing. If the APPL/LU CPM-OUT is not waiting on a logical unit pacing response, the first PIU on the queue is dequeued for the following processing:

1. If the pace bit in RH1B1 of the PIU is 1, the PIU is checked to determine if a response (FME or RRN) to the host is required by this PIU. If no response is required, a response PIU is created with the pace bit of 1, and the response PIU is XPORTed to the host. If a response is

required, the 'pace required by host' bit is set in LUBASSET for future use by the response. The pace bit in RH1B1 is turned off (0), VPACING outbound processing is complete, and step 1 of PACING can begin.

VPACING inbound processing occurs after step 4 of PACING is complete.

2. The LUBASSET field is checked for 'pace required by host'. If the bit is 1, it is changed to 0 and the pace bit in RH1B1 of the PIU response is set to 1 to be sent to the host.

VPACING logic depends upon a delay on the APPL/LU CPM-OUT queue for PACING. If PACING is not specified, CPM-OUT immediately processes PIUs, sends a pace response to the host, and queues the PIU on the link outbound queue.

The transfer of data in a session requires that a consecutive sequence number be maintained for PIU requests. A PIU from the host application to an LU contains a PIU sequence number field at TH1SNF (X'14'). The type 2 physical unit performs its own sequence checking. Type 1 physical unit number generation inbound and sequence checking outbound is performed by the NCP, using the type 1 LUB extension at LUB plus X'32'.

Control requests are asynchronous and are not sequence-numbered or sequence-checked. Only one asynchronous control command can be outstanding in a session.

BNN Path Control Out Delayed 'Path control out delayed' is common to all BNN session types. 'Path control out delayed' converts the FID1 PIU to FID2 or FID3 PIU. For APPL/LU sessions, the PIU is segmented if the length exceeds the physical unit line-buffer size. Finally, 'path control out delayed' issues an XIO LINK which causes the PIU to be enqueued on the common physical unit block (CUB) link outbound queue.

FID1 to FID2 Conversion

When the PIU is received by 'path control out delayed', the PIU is checked to ensure it is a valid FID1 PIU. Conversion does not change the request/response header (RH), request/response unit(RU) or text. The only change is to the transmission header (TH). The TH1DCF count field at offset X'16' and one byte from the OAF and DAF fields are deleted.

The TH1SNF sequence number field at offset X'14' is moved to X'16'.

Both the destination address field (DAF) and the origin address field (OAF) are two-byte fields in a FID1 PIU. The FID2 format provides only a single byte for each of these fields. The PIU has reached the destination point of the network address by being queued to the specific control block which defines the physical destination point. The full network address is no longer required. The origin and destination addresses need identify only the device local address and determine that the session is an SSCP or application.

If the FID1 origin address field (OAF) is from SSCP, the FID2 OAF field is set to a value of X'00'. If the PIU is from an application program, the field is set to X'01'. The FID2 OAF is at TH2OAF at offset X'15' where the original

FID1 sequence number was located. The destination address field (DAF) is obtained from the LUB plus X'31'.

If a FID1 PIU is queued to an LUB, the network address of the CUB is located in the LUB at LUBCUB at offset X'20'. The CUB network address is at the CUB field of CUBRSE at offset X'1C'. A PIU sent to an LUB may be from SSCP (identified by X'00') or from the application program (identified by X'01') in the FID2 OAF field. A valid combination is one of the following:

- DAF X'00',OAF X'00' SSCP to CUB physical services (type 2 PU); type 1 PU commands are processed by NCP and the logical units start at zero)
- DAF X'nonzero',OAF X'00' SSCP to LU
- DAF X'nonzero',OAF X'01' host application to LU

The next conversion moves the FID1 TH1B1 field from offset X'0F' to X'13' unchanged. The TH1B0 from X'0E' is moved to X'12', with bit 3 set to 0 (FID1 indicator) and bit 2 set to 1 (FID2 indicator).

A four-byte gap has been created from X'0E' through X'11'. The buffer offset is incremented by 4 and the buffer data count field is decremented by 4 to adjust for the change. The PIU FID1-to-FID2 conversion is complete. If the PIU is destined for a type 2 physical unit and the PIU is from SSCP (a command), the PIU is placed on the common physical unit block (CUB) link outbound queue by an XIO LINK. The link outbound queue is in the CUB at CUBLOBH (link outbound header) and CUBLOBT (link outbound trailer) at offsets X'10' and X'12'. During normal execution, the link scheduler locates the PIU. Only an APPL/LU PIU requires additional processing. If the physical device is a type 1, the FID2 must be converted to a FID3 before being placed on the link outbound queue.

FID2 Segmenting

A PIU from an application differs in processing only if the converted PIU length exceeds the physical buffers of the device, as defined by the MAXDATA operand on a PU macro. If the PIU length is greater, the segmentation routine (CXDBSEG) divides the PIU into segments which are equal to or less than the length of the buffers in the physical device. The routine leases a buffer and copies the TH of the original PIU, setting the TH2B0 first segment, middle segment, last segment indicators as required. Segmenting is based upon the NCP buffer size. A segment length is based upon the data length to the size of one or a multiple of the NCP buffers. A middle or last segment always starts with a leased buffer containing the copied TH and continues with the text from the beginning of an NCP host buffer.

A first segment contains the TH, RH, and a portion of the RU, in multiples of full NCP buffers, the total length of which is less than or equal to MAXDATA size. A nonfirst segment is TH (copied from the first segment into a separate buffer) plus one or more full NCP buffers of less than or equal to MAXDATA size. If PIUs of more than MAXDATA length are used, the NCP buffer size should be selected to provide an efficient segment length. If segmenting is not normal, the segment length should not be a consideration in selecting an NCP buffer size.

Figure 7.1 illustrates a PIU which requires segmenting. The PIU from the host contains 553 bytes (540 bytes of RU). The physical unit definition is coded MAXDATA=265. The NCP buffers are defined as 60 bytes (plus a 4-byte pad). Segment size is in full NCP buffers. The segments sizes are:

- First segment, TH=6, RH=3, and RU=217, from the first four NCP buffers. The RU is made up of 37 bytes of the first buffer and 180 bytes of the second, third, and fourth buffers.
- Middle segment, TH=6 and RU=240. The TH is copied from the first buffer into a leased buffer. The RU is from buffers five, six, seven and eight.
- Last segment, TH=6 and RU=83. The TH is copied from the first buffer into a leased buffer. The RU is from buffers nine and ten.

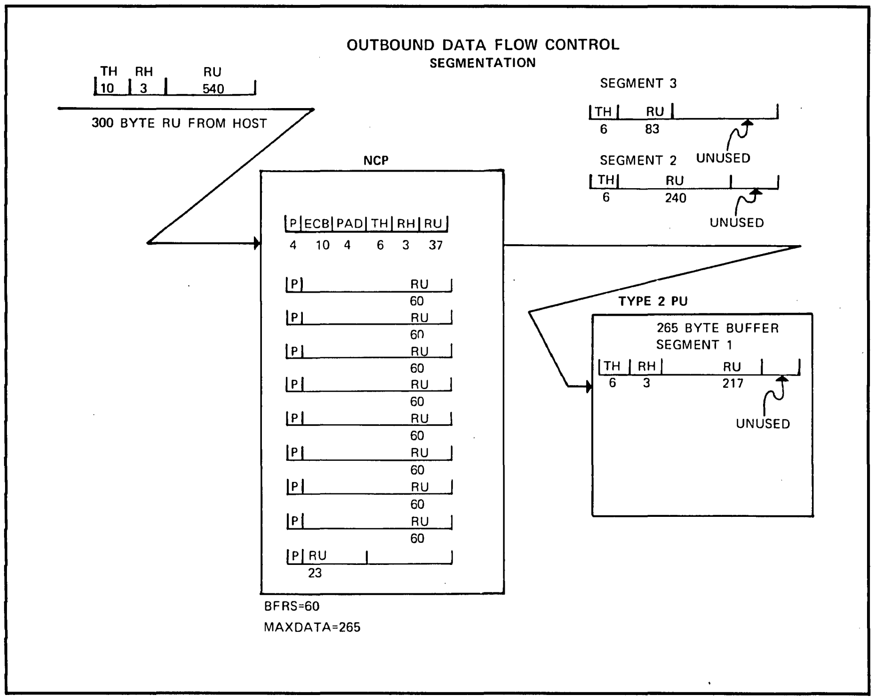

Figure 7.1. Segmentation Example

As each segment is created, it is placed on the link outbound queue of an XIO LINK, just as in the processing of the nonsegmented PIUs. Pacing occurs on complete PIUs, not PIU segments. Keep in mind that the PU physical line buffers may be overrun.

Segmenting may not be supported by a specific terminal type. In addition, you should not confuse *segmenting* (TH indicated) between an NCP and a terminal with *chaining* (RH indicated) between a host application and a terminal.

FID2 to FID3 Conversion

After the normal processing of 'path control out delayed' is completed (except for placing the PIU on the link outbound queue), a last check is made for a type 1 or a type 2 physical unit. If the bit settings in the common physical unit block (CUB) indicate that the physical unit is a type 1, the FID2 must be converted to a FID3.

Conversion of the FID2 to a FID3 format affects only the transmission header (TH) fields. Four more bytes in the original buffer are now reserved fields and only two bytes of TH are used. The first byte of FID3 TH contains the FID3 identifier at buffer offset of X'16'. The offset of X'17' contains two bits of information defining the session as follows:

- Bit 0 - 1=to/from application, 0=to/from SSCP
- Bit 1 - 1=to/from logical unit,0=to/from physical unit

The remaining six bits contain the device local address of the destination of this PIU.

Summary of Host-to-Physical Unit Processing Figure 7.2 illustrates the flow of a PIU through the boundary network node (BNN) for a PIU from the host. There are three paths for BNN outbound processing. A PIU is enqueued to one of three queues for one of three paths through BNN.

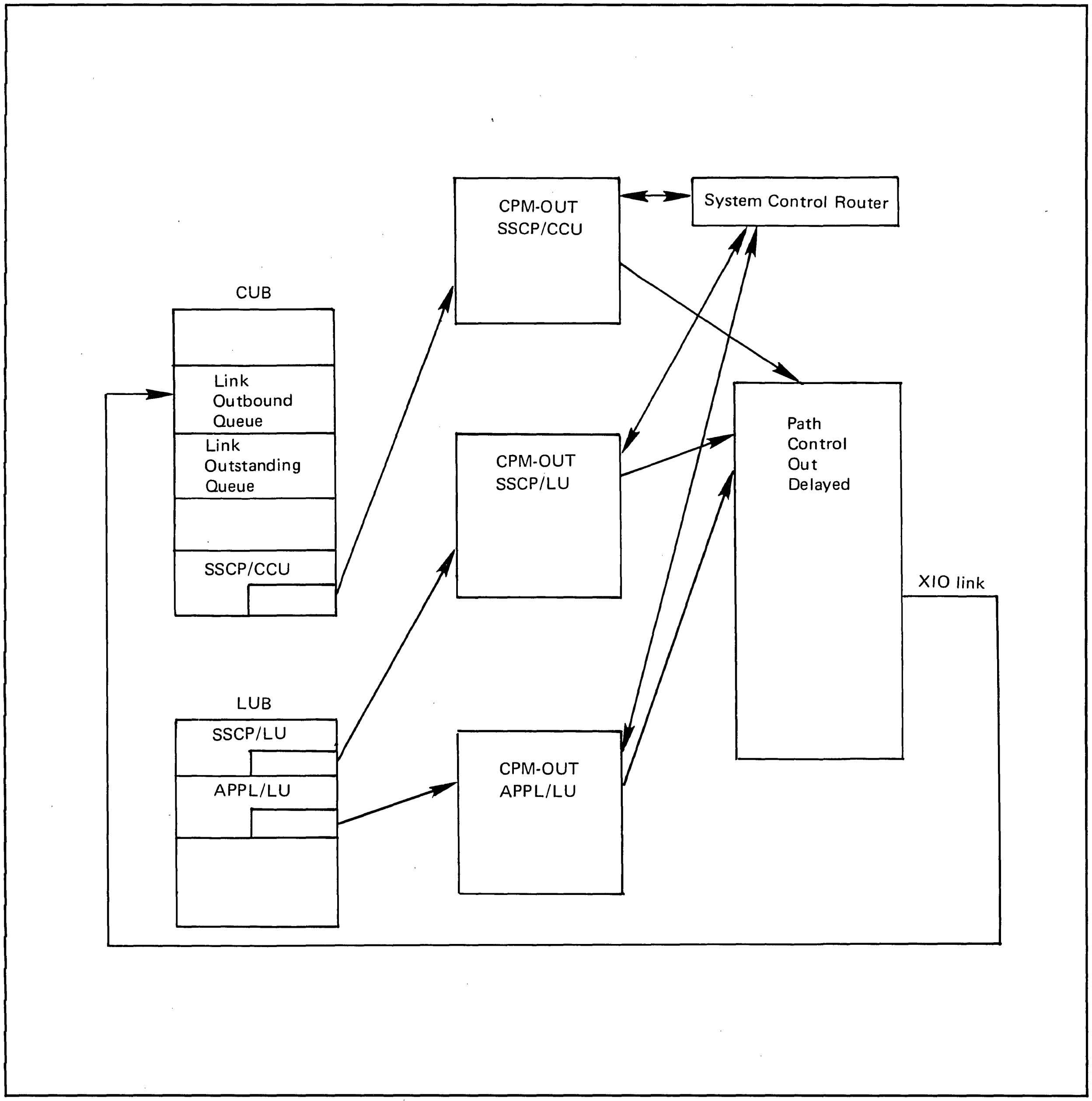

Figure 7.2 Boundary Network Node Path Flow

1. A PIU from SSCP to a physical unit is enqueued on the CUB processing queue at CUB1ECB (X'3C'). This queuing triggers the SSCP/PU connection point manager out (CPM-OUT). If the PIU is a system control command, the PIU is passed to the system control router for processing, then is returned to SSCP/PU CPM-OUT. Type 1 PU commands are processed by NCP, and SSCP/PU CPM-IN is triggered for responses. A type 2 PU PIU is passed to 'path control out delayed' for conversion to a FID2. The PIU is passed to the link scheduler by placing the PIU on the CUB link outbound queue at CUBLOBH (CUB plus X'10').

2. A PIU from SSCP to an LU is enqueued on the LUB session control point (SCP) process queue at LUL1ECB (offset X'00'). The queueing triggers the SSCP/LU connection point manager out (CPM-OUT). The PIU is passed to the system control router for processing and the PIU is returned to SSCP/PU CPM-OUT. Type 1 PU commands are processed by NCP, and SSCP/LU CPM-IN is triggered for responses. A type 2 PU PIU is passed to 'path control out delayed' for conversion to a FID2. The PIU is passed to 'path control out delayed' for conversion to a FID2 format, then to the link scheduler by being placed on the CUB link outbound queue at CUBLOBH (CUB plus X'10').

3. A PIU from an application to a logical unit is enqueued on the LUB application process queue at LUA1ECB (offset X'10'). This queueing triggers the APPL/LU connection manager out (CPM-OUT). If the PIU is a system control command, the PIU is passed to the system control router for processing. Type 1 PU commands are processed by the NCP, and APPL/LU CPM-IN is triggered for the reply. The type 1 physical unit data is sequenced-checked. Type 1 and type 2 physical unit PIUs are processed for host/NCP VPACING and NCP/LU PACING. The PIU is passed to 'path control out delayed' for conversion to a FID2 format and for segmenting, if it is required. Only APPL/LU data PIUs are segmented.

   The CUB is checked for type 1 PU or type 2 PU. If the CUB is a type 1 PU, the PIU is converted to a FID3 format. The PIU is passed to the link scheduler by placing the PIU on the CUB link outbound queue at CUBLOBH (CUB plus X'10').

Physical Unit-to-Host PIU Processing

Boundary Network Node Queues for PIUs from the Physical Unit

PIUs travelling from the link scheduler to the host are processed by 'path control in immediate', which is branched to by the link scheduler. Both routines execute in level 3. 'Path control in immediate' validates the PIU, XPORTS FID0 and FID1 formats from a remote to the channel queue, or enqueues the FID2 or FID3 to the common physical unit block (CUB) link inbound queue at CUB1ECB (offset X'00'). 'Path control in delayed' (at level 5) is triggered by the enqueuing and performs FID2 or FID3 to FID1 conversion. The FID1 is then passed to one of three connection point managers in (CPM-IN), depending upon the type of session. CPM-IN XPORTS the PIU to the channel queue.

Figure 7.3 illustrates the processing path of a PIU going from a type 1 or type 2 physical unit to the host. The type 4 physical unit path from 'path control in immediate' is an XPORT to the channel intermediate queue on the COB or CHB.

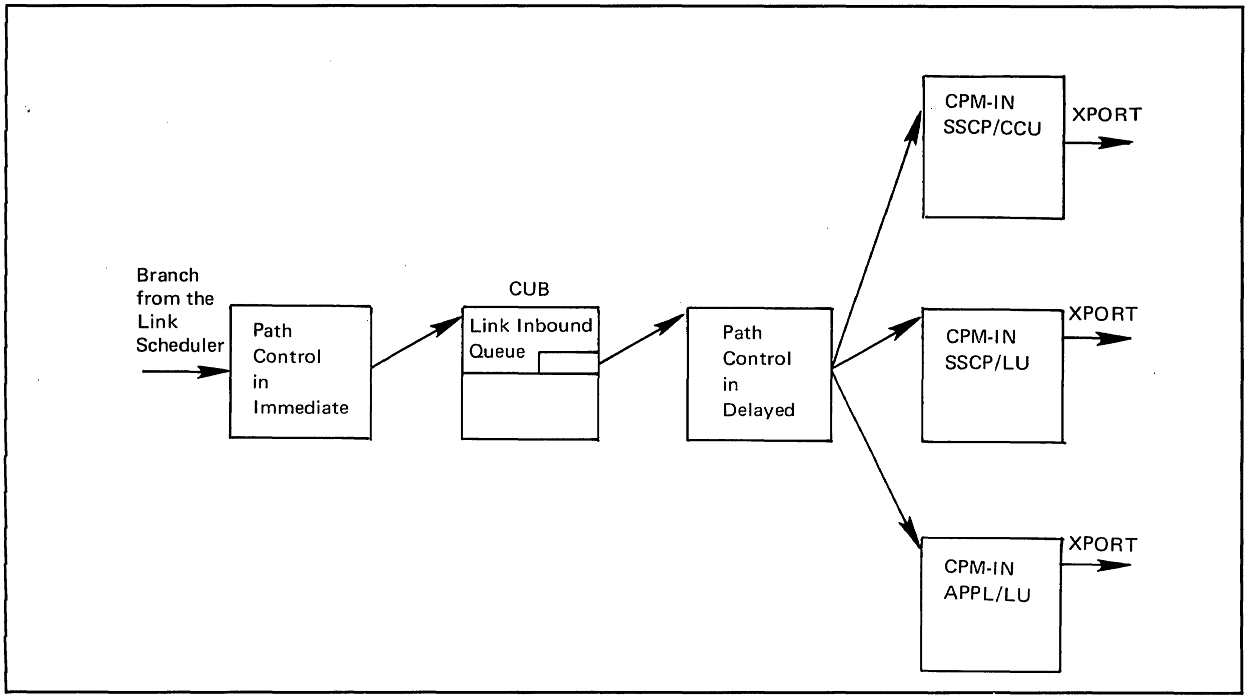

Figure 7.3 Boundary Network Node Inbound Path Flow

Path Control In Immediate When a PIU has been received on a link the link scheduler is initiated in level 3 by a PCI. The link scheduler branches to the level 3 'path control in immediate'. Path control validates the PIU. If received from a remote, the PIU must be a FID0 or FID1, and XPORTed to the channel intermediate queue of the COB or CHB. If received from a type 1 or type 2 PU, the PIU must be a FID2 or FID3 and must be placed on the common physical unit block (CUB) link inbound queue at CUB1ECB (offset X'00'). The ENQUE ACTV=YES triggers 'path control in delayed' in level 5. 'Path control in delayed' is triggered to convert a FID2 or FID3 PIU to FID1 and schedule the correct connection point manager in (CPM-IN).

Path Control In Delayed Conversion from FID2 or FID3 to FID1 format occurs within the first NCP buffer of the PIU. When the response to the poll is received, the communications control interrupt program (CICP) leases a buffer and sets up the appropriate offset for the type of device polled. A remote controller sends a FID0 or FID1 which requires an offset of X'0E'. A type 2 physical unit sends a FID2 which requires an offset of X'12'. A type 1 physical unit sends a FID3, which requires an offset of X'16'.

If the PIU received is a FID3, the conversion is to a FID2 and the FID2 is converted to a FID1. The conversion from a FID3 to a FID2 obtains some of the basic information to rebuild the FID2 from the control blocks, as well as from the FID3. The CUB is known, as the device was selected from the service order table for polling.

The FID2 TH2B0 is moved from X'12' to X'0E'; bit 2 is set to 0 (FID2 indicator) and bit 3 is set to 1 (FID1 indicator). TH2B1 is moved from X'13' to X'0F'.

The origin address field (OAF) at TH2OAF must be converted from a one-byte address to the two-byte network address. The specific origin (local device address) is obtained from the OAF. For nonswitched links, the local address is added to the CUB network address (CUB plus X'1C') to develop the OAF network address. The resulting address is verified using the resource vector table (RVT) to locate the LUB, and to verify the CUB address pointer at LUB plus X'20'.

For switched links, the local address is used as a displacement into the logical unit vector table (LUVT). The pointer to the LUVT is at CUB plus X'54'. The resulting address is verified through the RVT as in the nonswitched physical units.

The destination address field (DAF) at TH2DAF (X'14') is converted from a one-byte address to the two-byte network address. The only values are X'00' and X'01'. If the value is X'00', the FID2 is destined to SSCP. The SSCP address can be obtained from the physical services control block (PSB) at PSBADRPC (X'26'). If the value is X'01', the FID2 is destined to the application in session with the LU. The application network address is in the logical unit control block (LUB) at LUBNAPL (X'2A'). The DAF field is stored at TH1DAF (X'10') of the PIU.

The TH2SNF sequence number is moved to the TH1SNF (X'16' to X'14'). The PIU text count was accumulated as the PIU was received in U2TCNT (X'08'). This value is the total PIU length, from which the FID2 TH length is subtracted to calculate the RH/RU count placed in TH1DCF at X'16'. Once the conversion is complete, 'path control in delayed' calls one of three connection point manager in (CPM-IN) routines.

Connection Point Manager In (CPM-IN) There are three connection point manager in (CPM-IN) routines. 'Path control in delayed' determines which of the three CPM-IN routines to call, depending upon the session type (SSCP/PU, SSCP/LU, or APPL/LU).

SSCP/PU CPM-IN

When the SSCP/PU CPM-IN is called, the physical unit is checked for an established or pending session, and the PIU is checked for a request or response status. If the PIU field RH1B0 at X'18' has a value of 0xxx xxxx, the PIU is a request from the PU and the PIU is XPORTed to the channel intermediate queue on the COB or CHB. If the bit has a value of 1, the PIU is a response and must be checked for response indicators. If the RH1B0 at X'18' of the PIU has a value of x11x xxxx, the RU1B0 at X'1B' contains the request code of 'activate (or deactivate) physical'. The response may be a positive or negative response, based upon RH1B1 bit 3. A response requires that status be set. A positive response to 'activate physical' turns on 'session established' and turns off the 'processing session initiation' bit in the CUB CUBPSTAT byte. A 'deactivate physical' response turns off the 'session established' and 'processing session termination request' bits of the same byte. A negative response requires the bit indicating that a command is in process be set to 0. The response is XPORTed to the channel intermediate queue of the COB or CHB.

SSCP/LU CPM-IN

When the SSCP/LU CPM-IN is called, the logical unit is checked for an established or pending session at LUBCPSET (X'28'), and the PIU is checked for a request or response status. If the PIU field RH1B0 at X'18' has a value of 0xxx xxxx, the PIU is a request from the LU and the PIU is XPORTed to the channel intermediate queue on the COB or CHB. If the bit is a 1, the PIU is a response and must be checked for response indicators. If the RH1B0 at X'18' of the PIU has a value of x11x xxxx, the RU1B0 at X'1B' contains the request code of 'activate' or (deactivate) logical'. A positive response (RH1B1 bit 3 of 0) to an 'activate logical' requires that the 'processing activate' bit turned off and 'session established' bit turned on in LU field LUBCPSET at X'28'. A positive response to a 'deactivate logical' requires that the 'session established' and 'deactivate in progress' bits be turned off in LUBCPSET. A negative response requires the appropriate bit of 'activate (or deactivate) in progress' be turned off. The response is then XPORTed to the channel intermediate queue of the COB or CHB.

APPL/LU CPM-IN

When an APPL/LU CPM-IN is called, the logical unit is checked for an established or pending session at LUBAPSET (X'2C') and the PIU is checked for a request or response status. If the field RH1B0 at X'18' has a value of 0xxx xxxx, the PIU is a request from the LU. The PIU is XPORTed to the channel intermediate queue on the COB or CHB. If the bit is a 1, the PIU is a response and must be checked for response indicators. If the RH1B0 at X'18' of the PIU has a value of x11x xxxx, the RU1B0 at X'1B' contains the request code of 'bind', 'unbind', or 'start data traffic'. A positive response (RH1B1 bit 3 of 0) to a 'bind' requires the 'processing bind' bit turned off and the 'session established' bit turned on in LUBAPSET (X'2C'). A positive response to an 'unbind' requires the 'session established' and 'processing unbind' bits of LUBAPSET turned off. The 'start data traffic' response does not set bits in the LUB but is required by the device to verify that the response to the 'bind' was processed by SSCP.

The PIU is checked at RH1B1 for a 'pace' bit. If the pace bit is 1, the logical unit has responded to a pacing request sent to the logical unit by BNN CPM-OUT. The LUBASSET (X'2D') field of the LUB bit indicating 'awaiting pacing from the LU' is set to 0, the pace bit in the PIU is set to 0, the pacing counter (LUB plus X'30') is reset to 0, and BNN CPM-OUT is triggered to send another PIU to the device. The PIU is checked for FME or RRN response to be sent to the host. If the FME or RRN bits are not 1, the PIU is a 'stand-alone pacing response'; the buffer is returned to the NCP buffer pool, and CPM-IN exits.

If the FME or RRN bits are 1 and the PIU is to be sent to the host, the LUB field of LUBASSET is then checked for a 'pace required by host'. If this bit is 1, the pace bit in the RH1B1 field of the PIU is set to 1 and the LUB 'pace required by host' bit is set to 0.

With all response checking now completed, the response PIU is XPORTed to the channel intermediate queue of the COB or CHB.

Summary of Physical Unit-to-Host Processing Figure 7.3 illustrates the flow of a PIU through the boundary network node (BNN) for a PIU from the physical unit. There are three paths for inbound processing. All three paths are the same until 'path control in delayed' enqueues the PIU to one of three connection point managers in (CPM-IN). The CPM-IN XPORTs the PIU to the channel intermediate queue of the CHB or COB.

The following sequence is followed for PIUs going to the host:

1. A PIU is passed from the link scheduler to 'path control in immediate' at level 3. 'Path control in immediate' checks to see if the PIU is from a type 1, type 2 or type 4 PU. A PIU from a type 4 physical unit is checked for FID0 or FID1 and XPORTed to the channel intermediate queue of the CHB or COB. A PIU from a type 1 or type 2 physical unit is enqueued to the link inbound queue of the CUB, triggering 'path control in delayed'.
2. 'Path control in delayed' is a dispatched level 5 task triggered by the PIU enqueued from 'path control in immediate'. The PIU is converted from FID2 or FID3 to FID1 and passed to one of the three connection point managers in (CPM-IN), depending upon the session type.
3. Connection Point Manager In (CPM-IN)

The three CPM-IN routines called from 'path control in delayed' are based on one of the three following types of session.

SSCP/PU CPM-IN

The SSCP/PU CPM-IN processes control responses to reflects correctly the session status of the SSCP/PU session, and XPORTs the PIU to the channel intermediate queue of the COB or CHB.

SSCP/LU CPM-IN

The SSCP/LU CPM-IN processes control responses to reflect correctly the status of the SSCP/LU session, and XPORTs the PIU to the channel intermediate queue of the COB or CHB.

APPL/LU CPM-IN

The APPL/LU CPM-IN processes control responses to reflect correctly the status of the APPL/LU session. Data PIU requests are sequence-checked. Data PIU responses are checked for pacing responses from the device. If a pacing response is found, the APPL/LU CPM-OUT is triggered for another PIU to be sent to the device. If the LUB bit indicating a host pacing response is required, CPM-IN sets the pacing bit in this response to the host. The PIU is XPORTed to the channel intermediate queue of the COB or CHB.

SDLC Switched Support

The NCP generation of SDLC switched support includes defining a group of lines for dialout, dialin, or dialin/out operations. The macro instructions that define switched SDLC operations are GROUP, LINE, PU, and LUPOOL. The PU macro specifies the number of LUBs required during a connection by the operand of MAXLU. When a connection is made, the required LUBs are obtained as required from the pool of LUs defined by the LUPOOL macro.

The switched SDLC support generates an extension on the CUB at offset X'54' of four bytes. The leftmost byte provides a count of entries in the logical unit vector table (LUVT). The last 18 bits provide an address pointer to the the LUVT table.

The LUVT table contains a four-byte entry for each logical unit defined for this physical unit (PU MAXLU=count). Each entry contains the following:

X'00' Local address of the logical unit

X'01' LUVT flags: 1xxx xxxx last entry in table, x1xx xxxx entry in use

X'00' LUB address pointer (last 18 bits)

This is the only table which is added for switched SDLC support.

The NCP provides three modes of operation for switched SDLC links:

1. Manual dial. The NCP enables the link and allows the operator to dial out.

2. Autodial. The NCP enables the link and performs the dial operation using the dial digits provided with the command.

3. Answer. The NCP enables the link and allows the remote stations to call in. The link remains in answer mode until the SSCP terminates it. If the SSCP issues a dial command to the link, the answer mode is temporarily suspended until the dialed connection is broken.

Logical unit control blocks (LUBs) are dynamically assigned to logical units when a switched connection is made. For this reason, a number of dummy LUBs must be allocated during NCP generation. Using the 'assign network address' command, the SSCP assigns LUBs from a pool to the physical unit which has a connection. When the SSCP breaks the connection, the SSCP issues a 'free network addresses' command to return the LUBs to the pool.

Additional commands from SSCP to NCP physical services provide the control of switched link support. The function management data indicator (x00x xxxx) in RH byte 0 and 02 in RU byte 1 indicate a request to physical configuration services. The commands for the control of switched links include the following:

X'0E' Dial. Causes the NCP to initiate an outbound call on a switched SDLC link. For auto dial, the NCP performs the dial operation with the dial digits provided in the command. For manual dial, the NCP enables the link and the operator performs the dial operation.

X'0F' Abandon connection. Causes the physical unit to terminate a switched connection.

RU, byte 5 = X'04'. Changes dynamic fields in the logical unit control block (LUB) and completes initialization of the logical unit vector table (LUVT).

RU, byte 5 = x'03'. Changes dynamic fields in the common physical unit block (CUB) which are associated with the specified physical unit.

RU, byte 5 = x'02'. Associates a remote NCP's subarea with a particular SDLC link.

X'16' Answer. Causes the NCP to put the specified link in answer mode. Answer mode enables the link to accept incoming calls.

X'17' Abandon answer mode. Causes the NCP to discontinue answer mode on the specified link.

X'18' Abandon dial. Causes the NCP to halt the dialing operation over the specified link.

X'19' Assign network addresses. Assigns a set of network addresses to a specified physical unit (SDLC switched link only).

X'1A' Free network addresses. Causes the NCP to free the network addresses that were assigned to a physical unit (SDLC switched link only).

X'84' Off hook. Informs the SSCP that a physical connection has been established between the NCP and a physical unit. The PIU contains the station ID.

Appendix A provides the command sequence required to create the connections and sessions.

Figure 7.4 illustrates the command sequence and SDLC sequences of a switched connection.

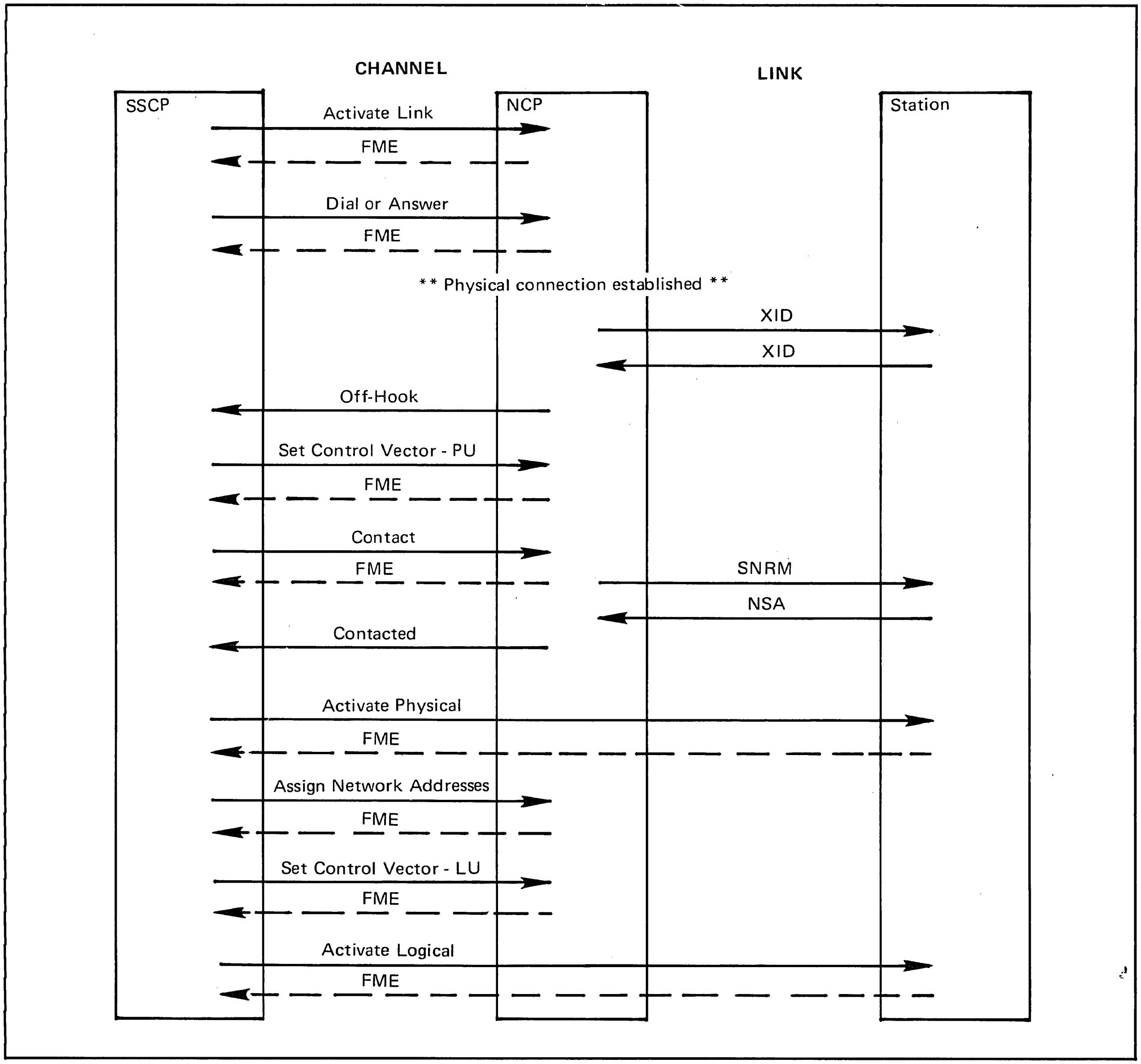

Figure 7.4. SNA and SDLC Switched Command Sequence

The switched SDLC link connection is broken by the following sequence of commands to terminate the connection:

1. The SSCP issues a 'deactivate logical' command for each of the logical units. This command terminates the SSCP/LU session.

2. The SSCP issues a 'free network addresses' command to release the assigned LUBs and return them to the LU pool.

3. A 'deactivate physical' command terminates the session between the SSCP and the physical unit. If the physical unit is a type 1 device, e the NCP does not transmit the command to the device, but responds to the 'deactivate physical' command. Type 2 and type 4 devices receive the command and reply.

4. The 'discontact' command causes the NCP to send a 'set disconnect response mode' (SDRM) SDLC command to the station. The station replies with an NSA and the connection is broken.

5. The 'abandon connection' command causes the NCP to disable the link and return it to 'on hook' status. If the link was previously in answer mode, the NCP reenables the link.

Figure 7.5 illustrates the network commands and SDLC sequences for breaking a switched SDLC connection.

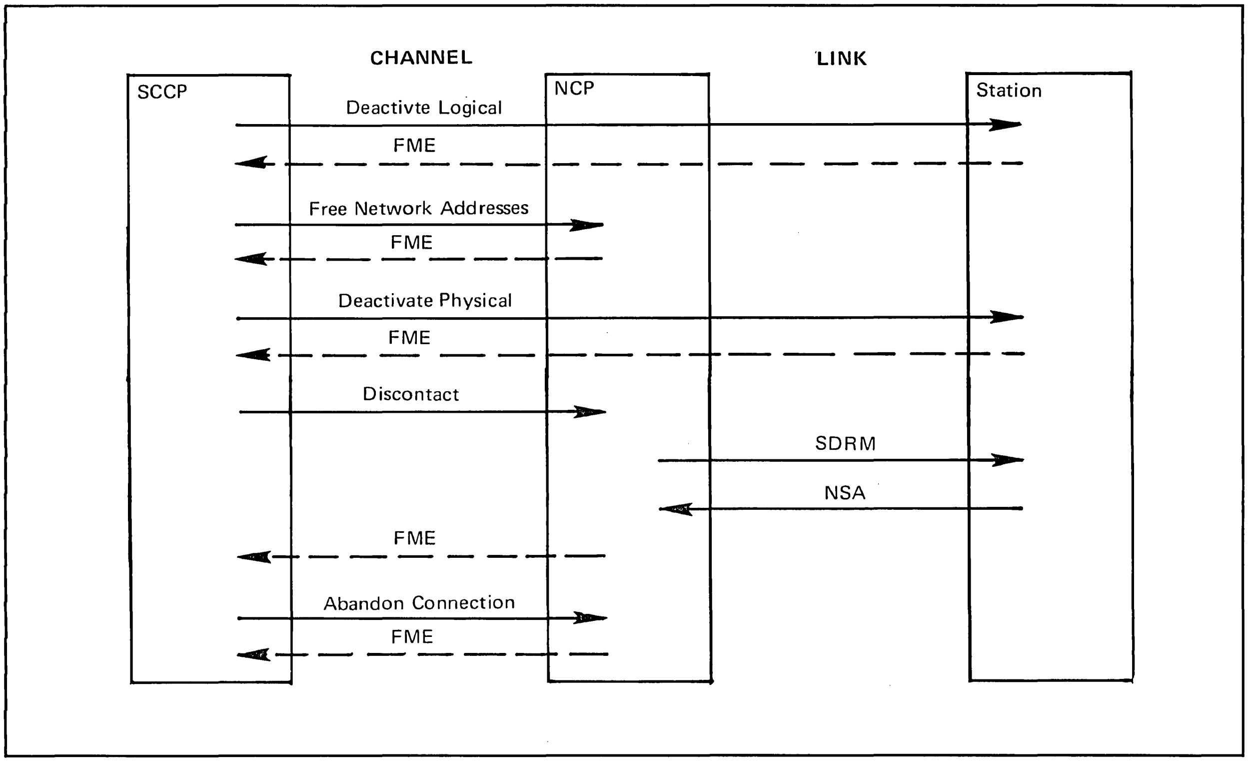

Figure 7.5. SNA and SDLC Commands to Terminate Switched Connections

Boundary Network Node (BNN) Summary

All PIUs in a session involving an SDLC link, except for a local/remote link, are processed by BNN routines. These routines handle session control requests and responses, and convert PIUs to the required format. Data transfers in an application/logical unit session are processed by pacing routines. On output to a physical unit, the buffer requirements of the physical unit segments PIUs as required. The NCP performs sequence-number processing on PIUs to and from type 1 physical units.

The user definition of pacing is vital to system performance. VPACING schedules PIUs on a logical unit basis between the host and the NCP to avoid buffer depletion. PACING schedules PIUs on a logical unit basis between the NCP and the physical unit to avoid depleting physical unit buffers and having one logical unit lock out other logical units. VPACING logic requires a definition of PACING also. In order to operate correctly, VPACING requires a delay on the CPM-OUT queue created by PACING requests.

Segmenting breaks up PIUs when the length of a PIU exceeds MAXDATA. A first segment is TH, RH, and RU to full NCP buffers of equal to or less than MAXDATA size. A nonfirst segment is TH (copied from the first segment into a separate buffer) plus one full NCP buffer or a multiple of buffers of less than or equal size of MAXDATA. If PIUs of more than MAXDATA length will be received, the NCP buffer size should be selected to provide an efficient segment size.

Figure 7.6 illustrates the flow of PIUs through the NCP for CUB and LUB devices. The numbered text that follows identifies the components and processing:

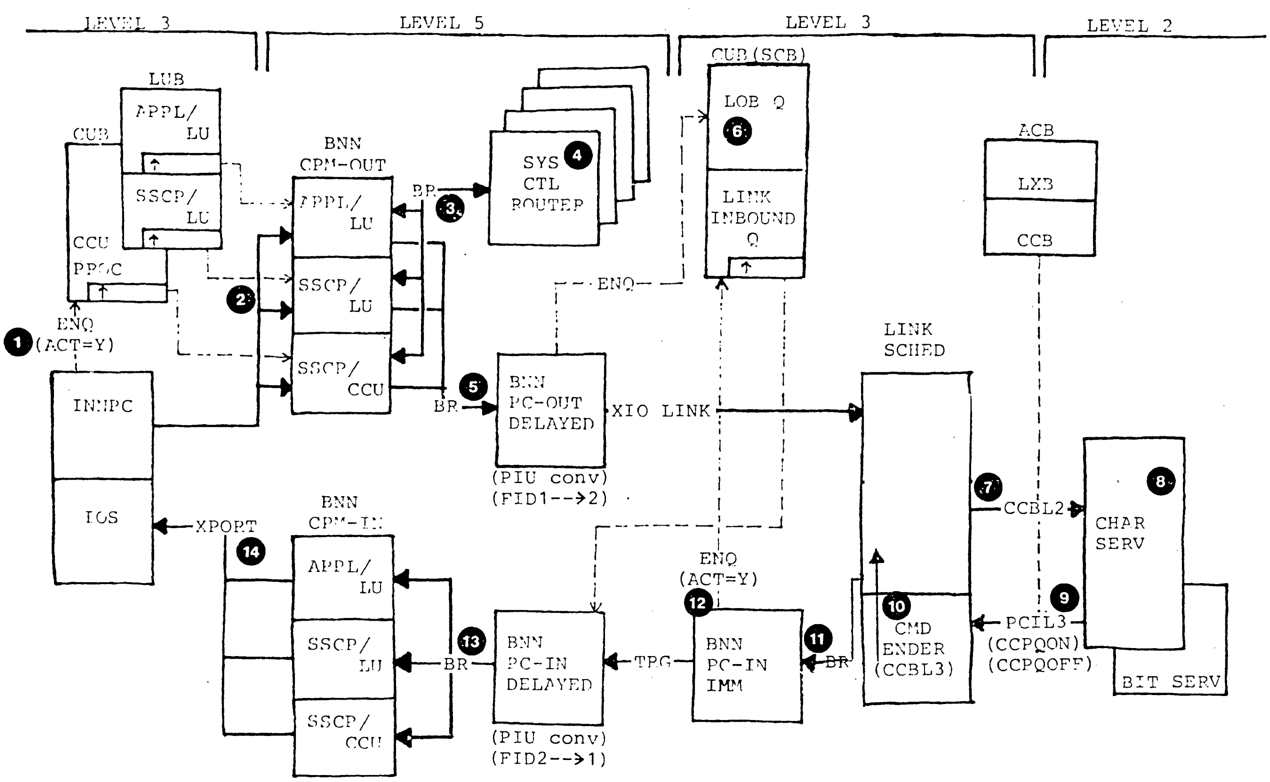

Figure 7.6. CUB and LUB PIU Processing

1. Channel IOS branches to ‘path control out’. Using the DAF to access the SIT, SVT, and RVT, path control enqueues the PIU to a CUB or LUB.
2. The enqueuing triggers the BNN CPM-OUT.
3. If the PIU is a session control request, the system control router gets control via a branch.
4. The system control router selects the proper subroutine and returns.

5. BNN CPM-OUT processes the PIU and calls 'BNN path control out'.
6. The PIU (FID2) is placed on the link outbound queue (LOB) and XIO is issued to the link.
7. The link scheduler locates the PIU on the LOB, then sets up the CCBL2 and ICW.
8. CSP handles the 'transmit' or 'receive'.
9. When level 2 ends, level 2 sets up CCPQON/OFF and issues a PCI to level 3 to return.
10. The 'command ender' routine uses CCBL3 to continue level 3 link scheduler processing.
11. The link scheduler branches to 'BNN path control in immediate'.
12. 'Path control in immediate' enqueues the PIU to the link inbound queue on the CUB.
13. 'Path control in delayed' selects the proper CPM-IN, using the FID1 or FID2 origin to locate the CUB or LUB queue.
14. The CPM-IN processes the PIU and XPORTs the PIU to the channel queue to be sent to the host.

Boundary Network Node Quiz

Use the storage listing in Appendix C to answer the following problems. Do not check the answers in Appendix B until you have answered all of the questions.

1. Which CUBs have a pending SNRM?
2. Which CUBs are in session?
3. What are the SDLC address/polling characters of the CUBs in session?
4. What are the network addresses of the CUBs in session?
5. What are the addresses of the LUB control blocks of the CUB at X'18C1C'?
6. Do the LUBs in question 5 have an SSCP/LU session?
7. Do the LUBs in question 5 have an application/LU session?
8. Locate and write down the pacing values of the LUBs at X'183C0', X'183F4', and X'18428'.
9. What are the local addresses of the LUBs in question 8?
10. Using the formatted buffers in Appendix C, analyze the buffers at the following addresses:

    X'1A7F0'

    X'1A83C'

    X'1A920' through X'1ACFC'

11. Using the formatted buffers in Appendix C, analyze the buffers at the following addresses:

    X'1A628'

    X'1A674'

    X'1B040'

    X'1ADE0'

    X'1AE2C'

    X'1B0D8'

    X'1AE78'

    X'1B254'

    X'1B124'

    X'1B170'

    X'1B1BC'

    X'1B2A0'

Criterion

If you missed more than two questions, you should review this section.

Local/Remote Link

Objective

Upon completion of this topic, the student should be able to identify the local/remote link control block, the flow of data to activate, load, communicate, and closedown a remote NCP, and operands which affect performance.

Activation of a Remote NCP

At generation time, a PU macro is used to define a remote (link-attached) NCP to a local (channel-attached) NCP. The path to a remote requires the same activation as type 1 and type 2 physical units. Once the link is active, 'path control out' XPORT's an outbound PIU to the PU generated station control block (SCB) by queuing the PIU to the SCB link outbound queue. Inbound PIUs are passed from the link scheduler to 'path control in immediate' at level 3. When 'path control in immediate' determines that the PIUs are from a remote to the host, the PIU is XPORTed to the channel intermediate queue of the CHB or COB.

Station Control Block (SCB) PU Type 4

If you compare the station control block (SCB) PU type 4 with the CUB PU type 1 and type 2, the fields are seen to be identical for the length of the type 4 SCB. The type 1 and type 2 CUB has an extension added for a QCB for outbound PIU processing. PIUs with the remote subarea identification are not processed but XPORTed by 'path control out' directly to the SCB link outbound queue at SCBLOBH (X'10). PIUs for the host are XPORTed directly to the channel intermediate queue of the CHB or COB. PIUs directed to the remote are enqueued to the SCB link inbound queue at SCB offset X'00'. Some of the main SCB fields are as follows:

X'00'	Shifted address of the first element queued
X'02'	Shifted address of the last element queued
X'08'	SSCP/SCB CPM-IN task address
X'10'	Shifted address of the first element on the link outbound queue
X'12'	Shifted address of the last element on the link outbound queue
X'14'	Shifted address of the first element on the link outstanding queue. One to seven PIUs are transmitted on the link, but not acknowledged.
X'16'	Shifted address of the last element on the link outstanding queue
X'18'	SDLC addressing character of remote
X'18'	Address of link control block (LKB)
X'1C'	Network address of resource (local subarea and element address). Remote subarea and element address is in the SVT.
X'1E'	Service seeking and contact poll commands
X'20'	Remote status
X'22'	Transmission counter
X'24'	Address of physical services

Initializing the Remote

PIUs from the host can be directed only to the remote subarea specified in the PU macro SUBAREA operand. A local type 4 PU station control block (SCB) has no queue or task to process a PIU. The format of the type 1 or type 2 CUB of basically the same format has an extension input QCB for queuing PIUs from the host. All PIUs which are for a remote or which refer to a remote are directed to the local NCP physical services or are queued directly to the SCB link outbound queue for processing by the link scheduler.

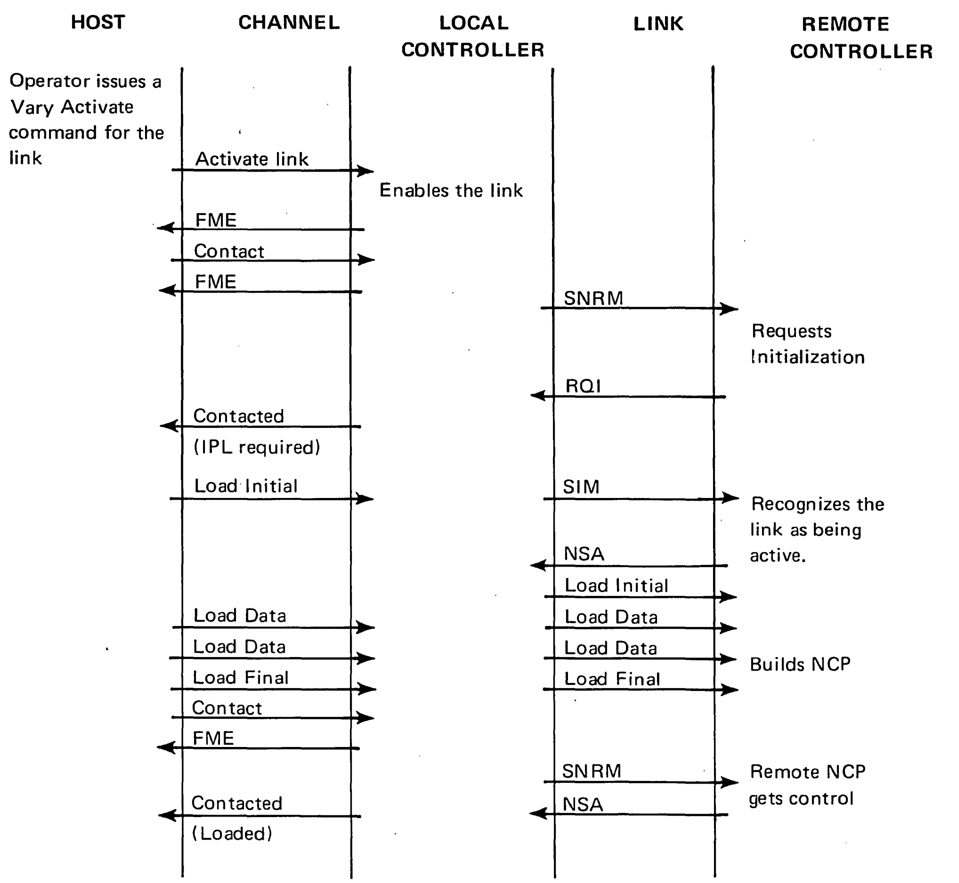

Figure 8.1 Command Sequence to Activate a Remote

Before PIUs can be directed to a remote, the link must be activated, contact established, and the remote loaded. Figure 8.1 illustrates the command sequence which is required between SSCP and the local NCP physical services, and between the NCP and the remote.

The sequence of commands from SSCP to physical services is identical to the type 1 or type 2 PU. The response from the remote may be either a 'request initialization' (RQI) or the 'nonsequenced acknowledge' (NSA) of the type 1 or type 2 PU. The contacted command from physical services in response to the RQI informs SSCP that the remote requires loading; the NSA specifies a warm start capability.

In response to an RQI, the SSCP obtains the remote load module and sends the load initial, load data, load final, and a second contact command. Physical services schedules a 'set initialization mode' (SIM) command and receives a 'nonsequenced acknowledge. (NSA). The 'load initial', 'load data', and 'load final' are transmitted to the remote. Physical services acknowledges receipt of the 'contact' by sending a 'set normal response mode' (SNRM) to the remote and a FME response to the SSCP, to acknowledge that the 'contact' command was received. Now that the remote is operational, it can reply to the SNRM with an NSA. The NSA response results in a contacted command being sent to the SSCP.

All of the responses from the remote are processed by the SSCP/PU connection point manager in, with a task address at SCBTSKEP (SCB plus X'08'). All responses from a remote directed to the host are XPORTed directly to the channel queue. Some replies and status are enqueued by link control to the SCB.

Now that the remote is loaded, the same SSCP and application sessions are established in the remote as are established in the local. An SSCP/PSB 'activate physical', 'start data traffic', 'set state vector', 'activate link', and other session command sequences must be established between the SSCP and remote elements.

Host to Remote PIU Processing

PIUs from the host are received by channel IOS and passed to 'path control out'. 'Path control out' at level 3 validates the FID0 or FID1, verifies that the local/remote link is active, and XPORTs the PIU to the SCB link outbound queue (SCB plus X'10). The link scheduler locates and transmits the PIU to the remote.

Remote to Host PIU Processing

The PIUs received on a link are passed at level 3 from the link scheduler to 'path control in immediate'. 'Path control in immediate' has a pointer to the control block which provided the poll request. The station type is at the control block address plus X'24'. If the station is a type 1 or type 2 PU, the PIU is enqueued to the BNN connection point manager in (CPM-IN) queue. If the device is a type 4 PU SCB and the PIU is normal link traffic, the PIU is validated as FID0 or FID1 and XPORTed to the channel intermediate queue of the CHB or COB. If the remote had a failure, the SCB connection point manager in (CPM-IN) is triggered for error recovery.

Remote NCP

The remote NCP has basically the same facilities as the local NCP. The remote controller does not have a channel adapter and therefore does not have the channel adapter IOS. The link is serviced by the link scheduler and outbound PIUs are passed to 'path control out'. 'Path control out' enqueues the PIUs to physical services, BNN CPM-OUT., or the BSC/SS processor. The same session control sequence is required among SSCP, applications and remote elements as was required in the local.

Loading a Remote NCP The remote 3704 or 3705 controller includes a diskette which contains programs used to test the remote hardware and to load and dump the remote NCP. The diskette is prewritten with the configuration data set (CDS) file. This file must be configurated before the remote controller is used. The CDS defines the link to be monitored for communication and the pointers to the diskette data sets.

Loading and dumping of a remote NCP is performed by the load/dump program that resides on the diskette. This program is loaded into the high 8K of storage when one of the following occurs:

- Power is turned on
- The load pushbutton on the remote console is pressed
- The remote NCP terminates abnormally
- An error occurred during a load or dump
- Host issues a load or dump network command

Before loading the load/dump program into high storage, the NCP checks to see if the high 8K of storage should be saved and written on the disk. Also, checks are made to see if any diagnostics or initial tests are to be executed. Figure 8.2 illustrates the format of the remote disk files.

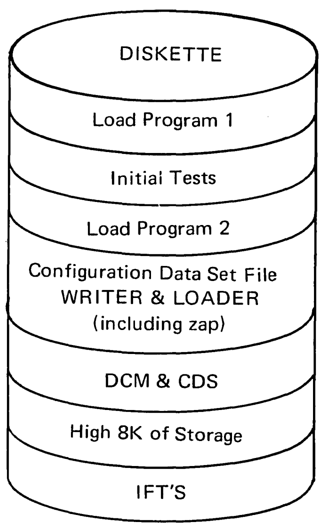

Figure 8.2 Remote Disk Format

When the load/dump program is loaded into storage, control is passed to program level 1. External register X'6B' contains IPL flags; general register 6 of program level 3 contains a line address for the load/dump program to monitor. This line must have been defined in the remote configuration data set (CDS) file. A byte in the CDS file entry determines if this line is to be used for loading and dumping of the remote NCP. This check prevents unauthorized loading and dumping of a remote controller.

After the load/dump program is initialized, the program executes in levels 2 and 3 performing link scheduler and SDLC functions. Level 1 is reentered when control is passed to the remote NCP after it is loaded.

If a 'load' is to be performed, after the link is activated and the remote contacted, the host sends PIUs containing the remote version of the NCP to the local NCP. Physical services in the local determine that the PIU is a function management request and call the function manager. The FM router uses the

RU of the PIU to select the remote PIU decoder routine from the appropriate FM table.

The remote PIU decoder (CSDKRPD) determines that the request is a 'load initial'. It sets up the station control block for the remote and sends a 'set initialization mode' (SIM) SDLC command to the remote. The load/dump program in the remote controller responds with the 'nonsequenced acknowledgement' (NSA). The NSA ends the run command in the local (CSDKRNT) and passes control to the SIM terminator (CSDKRST). The SIM terminator checks that an NSA was received and issues an XIO LINK to send the load initial PIU to the remote controller. The 'load data' and 'load final' commands that follow are all processed through the local NCP's physical services to the remote PIU decoder (CSDKRPD), which issues XIO LINK commands and sends them to the remote controller. Figure 8.1 illustrates the sequence of commands for loading a remote NCP.

After the load final PIU is sent, a contact is sent by the host SSCP to the local NCP. The local NCP issues a 'contact poll' to the remote controller (send SNRM). On receiving the SNRM, the remote load/dump program passes control to the remote NCP which has been loaded. The remote NCP responds with an NSA to the local NCP. The local NCP sends a contacted response PIU back to the SSCP indicating that the remote is loaded.

Dumping a Remote NCP If a printout of remote storage is to be made, the SSCP sends a dump request to the local NCP physical services, which forwards the 'dump initial', 'dump data', and 'dump final' network commands to the remote controller. Figure 8.3 illustrates the command sequences for a dump.

The processing of the dump commands is similar to the load process using the remote PIU decoder (CSDKRPD) and the remote SIM terminator (CSDKRST). The dump data requests are sent to the remote load/dump program which returns the requested data area. The local NCP returns the dump data PIUs to the SSCP for writing to a host disk dump file. After the 'dump final' command is sent to the remote, a 'discontact' command is sent to the local NCP to stop normal polling of the remote controller.

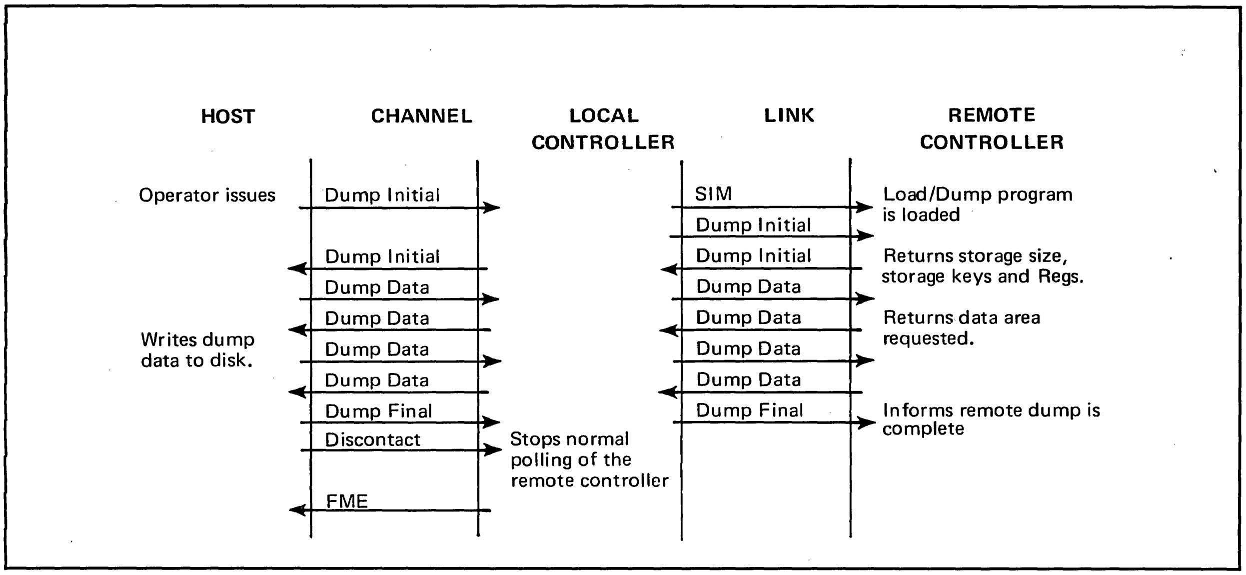

Figure 8.3 Command Sequence to Dump a Remote

Link Failure to a Remote If a load is to be performed due to a permanent link failure, the SSCP activates the alternate link. Once the alternate link has been activated, the load and dump process is the same as described above. Figure 8.4 illustrates the command sequence for a recovery from a link failure and loading of a remote NCP.

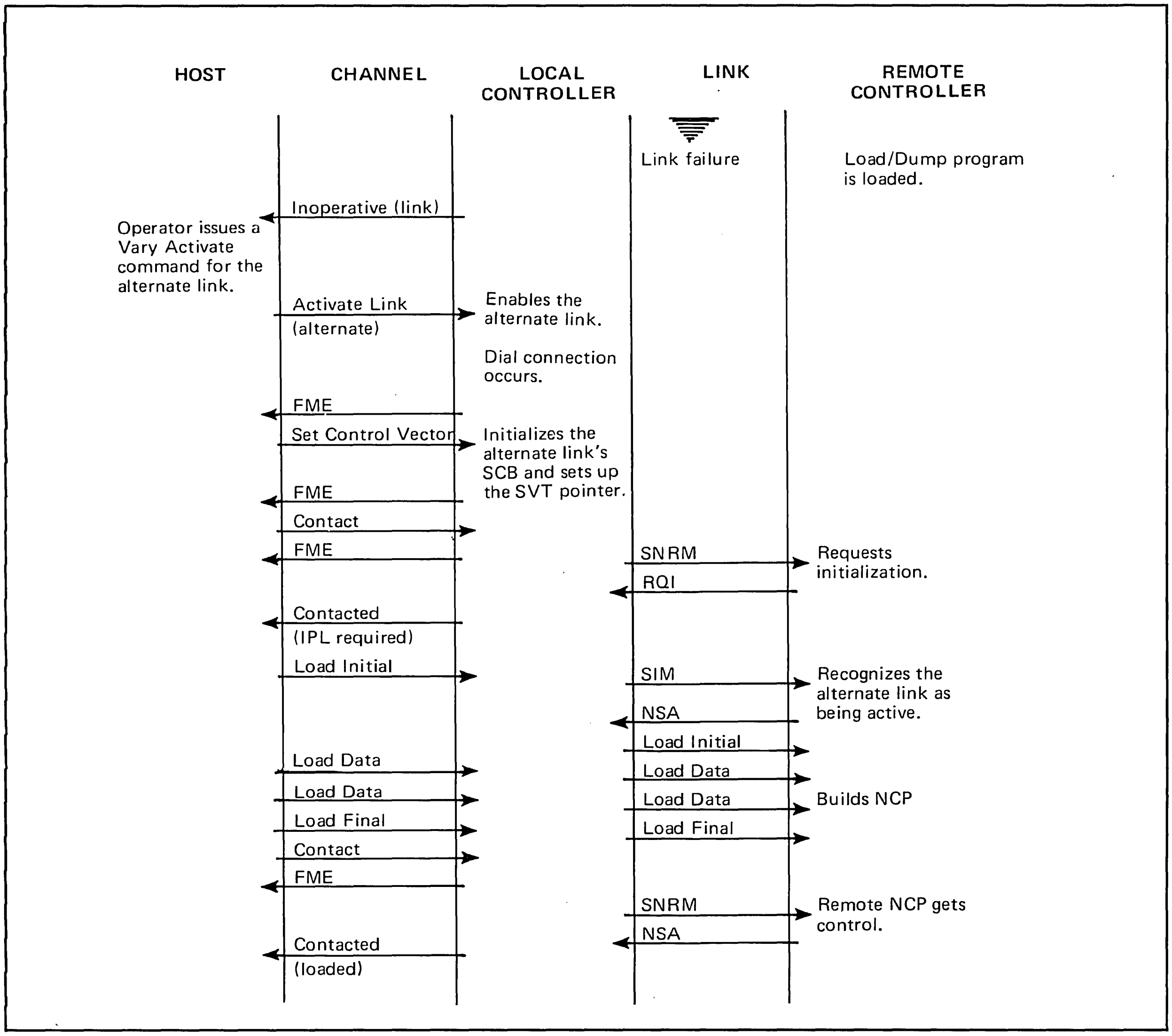

Figure 8.4 Command Sequence for Alternate Link

Remote Power Off

The SSCP may power off a remote controller by issuing a 'remote power off' command to the local NCP physical services. Function management remote PIU decoder (CSDKRPD) sets up the SCB for the remote to send a SIM to the remote NCP. Upon receiving the SIM, the remote NCP link scheduler causes an abend condition to load the load/dump program. Figure 8.5 illustrates the command sequence.

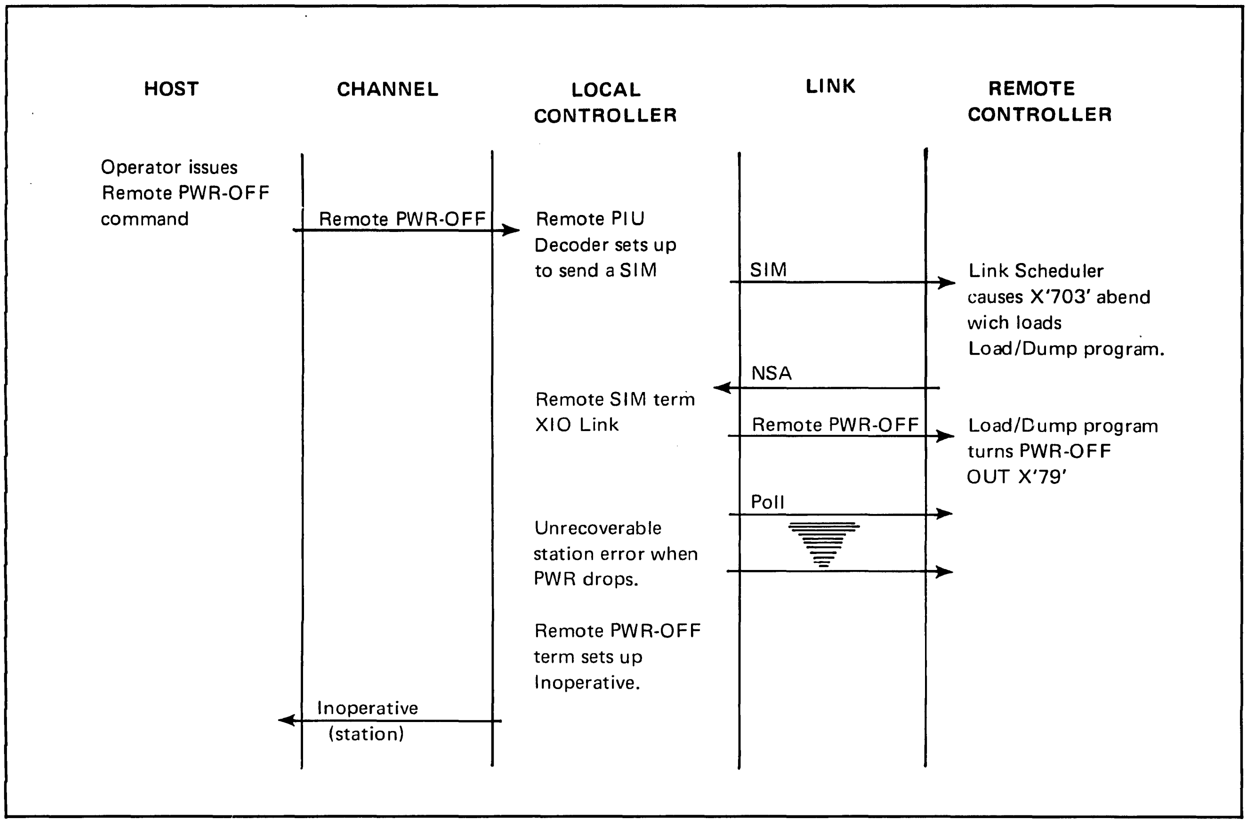

Figure 8.5 Command Sequence for Remote Power Off

The load/dump program responds to the local NCP with a 'nonsequenced acknowledgment' (NSA), causing the remote SIM terminator in the local to get control. The remote SIM terminator issues an XIO LINK to send the 'remote power off' command to the remote controller. The load/dump program checks for a 'remote power off' command and, finding it, issues an OUT X'79' instruction to power off the controller.

Local/Remote Link Summary

The type 4 PU station control block (SCB) represents the remote controller on a link. Control commands required to enable, load, dump, or power off a remote controller are all directed through physical services in the local NCP. Once the remote is active, the sessions must be established for the remote physical services, CUBs and LUBs as for the local. Session commands and data PIUs directed to the remote are XPORTed by 'path control out' in the local to the link outbound queue of the remote in level 3. PIUs from the remote are validated by 'path control in immediate' and XPORTed to the channel intermediate queue on the COB or CHB in level 3.

Local/Remote Link Quiz

Answer the following questions. Do not refer to the answers in Appendix B until you have finished the quiz.

1. What type of physical unit defines a remote/local link?
2. What type of control block is generated for a remote/local link?
3. What are the two possible SDLC responses to an SNRM (other than a timeout)?

Criterion

If you made any errors, you should review this section.

Data Link Control

Objective

Upon completion of this topic, the student should be able to identify the control blocks, flow of data and operands which affect performance of link operations.

What is Data Link Control

Data link control (DLC) provides the scheduling and control for link operations. Data link control is made up of three main parts:

1. Communications interrupt control program (CICP)
2. Link scheduler
3. Synchronous data link control (SDLC)

The CICP interfaces with the background tasks and drives the link scheduler. The link scheduler schedules, initiates, and ends all SDLC link operations. The SDLC transfers the data between the data buffers and the hardware scanner.

This topic covers data link control in relation to a full-duplex (FDX) link.

The flow of control from initiation of the link scheduler to termination of the link scheduler involves the components covered in the previous sections. The physical services process the commands to 'activate link' and 'contact' the physical devices on the line. The 'activate link' initiates the link scheduler. As each 'contact' completes, the run terminator gets control, but the link scheduler is reinitiated for a new run command. After the contact commands the session initiation commands to physical units must be sent on the link to establish the session with the physical units. The session commands and responses are processed as data by the data link control support.

The first pass through the service order table (SOT) issues a 'contact poll' (from a 'contact' command) for each physical device. After the first pass the run terminator reissues the XIO RUN, which remains in effect until a permanent error or deactivate link command.

Once the link is operative, the service order table is used to locate a link outbound queue of a CUB or SCB. If no element is queued and the device session is established, the 'receive' leg is scheduled with a poll. With the 'receive' leg now committed, the send ACB can search for a service order table entry with PIU to send to a station other than to the polled station.

The first link outbound queue (in service order table sequence) sends one to seven PIUs depending on several factors. If there is only one PIU, only one is sent before going to the next SOT entry. In addition, there are two operands on the CUB or SCB which qualify the number of PIUs sent on a link. MAXOUT specifies that one to seven frames may be sent before an SDLC response is required. PASSLIM specifies the maximum number of frames sent before going to the next entry in the SOT. The type 4 SCB PASSLIM may be set to 254 frames maximum on a full duplex link. On a full duplex link, after each frame the 'receive' link is checked for a busy condition. If the 'receive' leg is released, a poll is sent between frames to a device other than the one currently being transmitted to.

The LINE macro SERVLIM operand (default of 4) specifies the number of passes through the service order table for polling and addressing before special handling is scheduled. Special handling is a search for a command (contact, discontact, deactivate link, etc.). If one is found, one command is attempted before returning to normal data traffic scheduling.

Any pass through the service order table without a PIU to send or with no incoming traffic from polling causes special handling to be scheduled immediately.

The PAUSE operand defines a time value for one pass through the service order table. If the time value has expired before the end of the service order table is reached, normal processing continues. If the time value has not expired, the link scheduler suspends service on the link until (1) the time expires or (2) a PIU is enqueued to a CUB to be transmitted on this link. If the link scheduler is triggered for sending a PIU, the PIU is sent, but no polling occurs until the time has expired.

Each line is initially disabled for interrupts to level 2. When the line is enabled from level 3, the CCB is primed on each interrupt with the address of the next character service routine at CCB plus X'00' (CCBL2). When the sequence at level 2 is complete, a PCI to level 3 gives control to the routine specified at CCB plus X'4C' (CCBL3). The level 3 processing passes input to 'path control in immediate' and schedules the next poll. Output PIUs are retained on the link outstanding queue until an SDLC response confirms a good transmission; then the buffers are released.

Data Link Control (DLC) Control Blocks

There are several control blocks generated from a LINE macro definition at NCP generation. In addition to the LINE macro, the GROUP macro- and SERVICE macro-generated control blocks are used by data link control. The following control blocks and key fields are of special interest:

Line Group Table (LGT) The line group table (LGT) is generated by the GROUP macro. SDLC groups generate a shorter LGT (X'17' bytes) than the BSC/SS groups. Some of the primary fields are as follows:

- X'00' Line group type. An X'8C' value is an SDLC primary station. An X'8E' indicates an SDLC secondary system.
- X'0C' LCD/PCF transmit initial value
- X'0D' LCD/PCF receive initial value
- X'10' Command decode vector table address

Link Control Block (LKB) The link control block (LKB) contains fields for scheduling link operations and for maintaining link status information. The LKB is generated for each link from the LINE macro. The resource vector table (RVT) contains a pointer to the LKB. Some of the primary fields are as follows:

- X'00' Shifted address to first element queued.
- X'02' Shifted address to last element queued.
- X'08' Enable terminator task address at generation time. When the link is enabled by XIO LINK, the address is replaced by the address

of the run terminator. This task address is the only SDLC task pointer which changes from the generated address.

X'10' Network address of the link. This network address is used at PIU plus X1E' for 'activate link' and 'deactivate link' commands processed by physical services.

X'12' Status of link. Bit 0 indicates an 'active link', bit 1 an 'activate link in progress', bit 2 indicates indicates 'deactivate link in progress'.

X'13' Link type. Specifies this link is leased, switched, one or more type 1 PUs, one or more type 2 PUs, one or more type 4 PUs, and whether the link is primary or secondary.

X'24' Address of adapter control block (ACB).

Adapter Control Block (ACB) The adapter control block (ACB) is generated by a LINE macro. The ACB contains line control information and the status of input or output operations for SDLC links. At X'24' the link control block (LKB) has an address pointer to the only ACB for a half-duplex link or to the 'receive' ACB for a full-duplex link. At ACB plus X'22' is the address of the 'transmit' ACB for a full-duplex line. The ACB can be located from the line vector table (LNVT) using the line address. The ACB contains the link XIO block (LXB) from X'00' to X'23' and the character control block (CCB) from X'24' to X'5C'. The fields are covered under the LXB and CCB which follow.

Link XIO Block (LXB) The link XIO block (LXB) is generated as the first X'24' bytes of the adapter control block and contains the status of link operations. Some of the primary fields are as follows:

X'00' Immediate control command flags

X'01' I/O commands. The only valid commands are X'8D' (enable), X'30' (run SDLC link), and X'83' (disable), X'8F' (dial).

X'06' Command ending status and completion code status

X'0E' Shifted address of first buffer of data received

X'10' Shifted address of final buffer of data received

X'14' Pass count

X'18' Pointer to link control block

X'1A' Received block size (number of data characters stored)

X'1C' Pointer to current service order table (SOT) for 'receive'

X'1C' 'Contact poll' command executed (see X'20')

X'1E' Duplex link pointer to 'receive' leg ('transmit' leg ACB only)

X'20' Pointer to current service order table (SOT) for 'transmit'.

X'20' Offset into SOT of current 'contact poll' device (see X'1C')

X'22' Duplex link pointer to 'transmit' leg ('receive' leg ACB only)

Character Control Block (CCB) The character control block (CCB) is generated as bytes X‘24’ through X‘5C’ of an adapter control block and contains line control operations. Some of the primary fields as offsets from the ACB are as follows:

X‘24’	Address of current level 2 character service routine
X‘26’	Pointer to character service state address table
X‘30’	Line address for type 2 scanner. Bit control block (BCB) address if type 1 scanner.
X‘34’	Pointer to the line group table (LGT)
X‘3C’	Address of current data byte being sent or received
X‘40’	Address of current buffer
X‘4C’	Address of next level 3 routine to be executed
X‘5B’	Address expected in response (SDLC address/poll character)

Line Vector Table (LNVT) The line vector table (LNVT) is generated from the CSB macro and initialized by the LINE macro. A different format is created for type 1 than for type 2 or 3 scanners.

Type 1 Line Vector Table (LNVT)

The type 1 line vector table (LNVT) generates an entry of X‘10’ bytes for each possible line address for a type 1 scanner. A 3705 generates 64 entries from address X‘800’ to X‘BFF’. A 3704 generates 32 entries starting at X‘800’. A line address of X‘00’ to X‘3F’ is multiplied by X‘10’, and added to X‘800’ to calculate the BCB address. The BCB is used by the level 2 routines in program support for the interface control word (ICW) used by a type 2 scanner. An undefined line address has the rightmost bit set to 1 in the first halfword. If the bit is 0, the first halfword points to the adapter control block (ACB).

Type 2 or Type 3 Line Vector Table (LNVT)

The type 2 or type 3 line vector table (LNVT) generates a two-byte entry for each possible line address (maximum=96) for each defined scanner (CSB macro). A single scanner generates 96 halfword entries from X‘800’ to X‘8BF’. Each subsequent CSB macro reserves an additional 96 halfwords. An undefined line address has the rightmost bit set to 1 in a halfword entry. A bit of 0 indicates that the halfword contains the address of the adapter control block (ACB) for this line. The first X‘20’ entries from X‘800’ to X‘83F’ are always invalid because the first scanner has only 64 lines starting at line address X‘20’.

If a line address is known for a type 2 or type 3 scanner, the LNVT entry can be calculated by multiplying the line address by 2 and adding X‘800’. The LNVT allows the level 2 routines to find the ACB (and CCB) for a line when only the line address is known.

Bit Control Block (BCB) The bit control block (BCB) is a X‘10’ byte control block which provides the same facility for a type 1 scanner as the ICW hardware provides for a type 2 scanner. A BCB is generated for each LINE macro defined for a type 1 scanner, and is placed as a valid entry in the type 1 line vector table (LNVT).

Service Order Table (SOT) The service order table (SOT) is generated by a SERVICE macro to identify the sequence of service to devices on a line. A pointer in the link XIO control block (LXB) at X'1C' points to the current entry in the table for service. All SDLC links, except the link of a local/remote or SDLC-switched, have a service order table. The table contains the following entries:

X'00'	Halfword of zero
X'02'	Maximum number of entries
X'03'	Number of entries in use
X'xx'	Four-byte entries with the leftmost 14 bits a negative offset to SOT Header. The rightmost 18 bits are the address of a SCB.
X'xx'	Last four-byte entry has an offset and address of zero.

Link Scheduler Initiation

At the termination of the 'activate link' process, the enable terminator receives control and issues the XIO LINK macro with the run command stored in the LXBCMAND field of the LXB. The XIO macro causes an SVC level 4 interrupt into the supervisor. The supervisor uses the SVC code to vector into the branch table for a pointer to the CICP at entry CXECMDCO. The CICP passes control to level 3 via a PCI level 3 interrupt. Level 3 is used to eliminate any interference while setting up to start the command.

The CICP running in level 3 checks to see if the link is busy by checking the receive-CCB control field (CCBCTL) phase bits for 00. Finding the link not busy, CICP zeros out the status fields in the LXB. No check is made to see whether command initialization should be delayed. If no delay is required, the receive-CCB is checked for any outstanding status.

Next, the transmit-CCB is checked for any outstanding status. With no outstanding status on either leg, the link's PCF field is set to zero to prevent any level 2 interrupts on this line from changing any fields that will be set up now. CICP vectors into the command decode vector table, using the LGTCMD pointer from the line group table (LGT) and the command from the LXB. The pointer at the vector is loaded into the instruction address register (IAR), causing a direct branch to the link scheduler at entry point CXELNKSI. The entry point is the 'run' command initialization entry into the link scheduler. Here the phase bits (CCBCTL) are set to indicate command active, then a branch is taken to the scheduler to schedule run command activity.

When scheduling run command activity, the link scheduler decides whether to schedule a poll or a data transmission. The first test determines whether the 'transmit' leg of the link is busy. If not, the 'receive' leg is checked to see whether it is busy. With both legs of the link idle, the scheduler branches to the poll subroutine to schedule a poll operation. The poll operation is started by scanning the service order table (SOT) for a station control block (SCB) or common physical unit block (CUB) to poll. The scheduler first checks the service-seeking control flags (SCBSSCP) and the service-seeking output control flags (SCBOCF) to be sure that this entry has not already been polled or that a second level error recovery program is not in progress. If the station has not been polled and there is no second level error recovery in progress, the scheduler proceeds to poll the station.

Before the actual transmission of the poll frame, a test is made for the station type. Is the station a type 1, type 2 or type 4 physical unit? Type is checked so that the 'receive' buffer used to store the response can be set up properly for the type of FID. A branch is then taken to the 'receive initialization' subroutine (RCVINIT) to set up the 'receive' leg to handle the response from polling. This routine prepares the 'receive' leg to monitor for flags, then returns to the scheduler. The scheduler sets up the 'transmit' leg to send an 'RR' poll command (CCBCFLD). The CCB, if not already transmitting continuous flags, is set up to transmit a flag character. Returning from the transmit initialization subroutine, the scheduler sets the data length field in the CCB (CCBCHAR) to zero for the poll, and exits from the program level.

The SDLC character service program sends a flag byte on the link. The program also prepares the CCBL2 pointer to send the address field from the CCB (CCBAFLD) at the next level 2 interrupt. When the complete poll frame has been sent, the scanner is set up to transmit continuous flags until the link scheduler finds the next service order table (SOT) entry that can be polled. The ACB is then queued to the ACB queue and a PCI level 3 interrupt is issued. The PCI level 3 interrupt causes the link scheduler to get control again, via the CCBL3 pointer, to poll the next entry in the service order table (SOT).

XIO LINK to the Link Scheduler

The XIO LINK macro is used to put PIUs on the link outbound queue (LOB) to be transmitted down the link. The XIO LINK macro stores the pointer to the PIU in the LOB and checks for an active 'run' command. With a 'run' command already active, XIO LINK does not have to trigger the link scheduler. During its normal scan, the link scheduler finds the PIU on the LOB and sends it down the link.

Entry to the link scheduler is at CSELNKX for normal scan. Before sending the PIU, the link scheduler checks to see if the 'receive' leg is busy as a result of the last poll. If the leg is busy, the link scheduler tries to select a CUB or SCB with data on its LOB. The current service order table (SOT) select pointer from the 'transmit' leg (LXBSEL) is used to get the station's SOT pointer. A test of the station's output control flags (SCBOCF) is made to see if the station is ready and data is waiting. If the station is not ready, the link scheduler advances to the next SOT select entry. With the station ready the link scheduler branches to the SENDPIU subroutine.

The SENDPIU subroutine first checks the basic link unit (BLU) outstanding count (SCBOCL) defined by the MAXOUT operand and the pass count (CCBPASCT) defined by the PASSLIM operand. If the counts have been exceeded, SENDPIU returns to the calling routine (SELECT). SELECT increments the select pointer and continues to the next SOT entry except for a CUB or SCB MAXOUT condition. A local/remote link SOT pointer is not incremented until the PASSLIM operand value is reached. If the counts have not been exceeded, the PIU is sent.

SENDPIU increments the BLU outstanding count, takes the PIU off the LOB queue and puts it on the link outstanding queue (LOS). Next an 'I' format BLU command is built and passed to the XMTINIT subroutine along with the ending process pointer (CSELNKX). A branch is taken to the XMTINIT subroutine to initiate the transmission. The XMTINIT subroutine stores the ending processor address in the CCBL3 field and the BLU command in the CCBCFLD.

Level 2 interrupts are now disabled and a test is made to see if flags are already being transmitted. If so, XMTINIT loads the CCBL2 field with the address to the SDLC send address routine (CSBDLXZ). Level 2 interrupts are enabled again and a 'transmit' time-out is started. XMTINIT now returns to SENDPIU to complete the setup of the CCB for transmission. In the CCB, SENDPIU stores the character count (CCBCHAR), the pointer to the current buffer (CCBSTART), and the pointer to the first data character (CCBDATA). SENDPIU returns to the calling routine (SELECT). SELECT stores the SOT pointer in the LXB (LXBSEL) and EXITs from the program level.

The SDLC character-service routines take over to transmit the PIU on the link. The link scheduler subroutine (XMTINIT) previously setup the CCBL2 pointer to point to the 'transmit address' routine (CSBDLXA). When the scanner hardware finishes sending a flag character, a level 2 interrupt is generated to the 'transmit address' routine. This routine initializes the BCC field (CCBBCC), than passes the address field (CCBAFLD) and the next CCBL2 pointer (CXBDlXC) to the BCC accumulation routine. The BCC accumulation routine sends the address to the scanner, accumulates the BCC character, stores the CCBL2 pointer passed to it in CCBL2, and then EXITs from the program level.

The next level 2 interrupt is to the 'transmit control field' routine (CXBDLXC). This routine sends the control character from CCBCFLD and tests the character count (CCBCHAR) for zero. If the count is not zero, CCBL2 is set up to transmit data (CXBDLXI). If it is zero, the CCBL2 is set up to transmit the first BCC character (CXBDLXB1). On the next level 2 interrupt, with the CCBL2 pointer set to CXBDLXI, the character-service routine sends the data out on the link. This routine loops until all the data has been sent on the link. With no more data to send, this routine sets up the CCBL2 pointer to transmit the BCC character that has been accumulated in the CCB.

The next level 2 interrupt transmits the rightmost byte of the BCC field (CCBBCC) in the CCB. The CCBL2 is set up to transmit the leftmost byte of the BCC field on the next level 2 interrupt. After the second BCC character is transmitted, CCBL2 is set up (CXBDLXFF) to transmit a flag to end the frame.

On the next level 2 interrupt, a check made for half-duplex to see whether a turnaround is needed on the line. If no turnaround is needed, 'frame transmitted' status is stored in the CCB (CCBCMPCD) and the line is set to transmit continuous flags (LCD/PCF=9D). A branch is taken to QACBL3 to queue the ACB to the ACB queue for level 3 processing and a PCI level 3 is set. Returning from QACBL3, the CCBL2 pointer is set to ignore interrupts from the line (CSBDLIDL) before EXITing from the program level. At this point, one PIU has been sent on the link.

The PCI level 3 interrupt gives control back to the link scheduler at entry CXELNKX, via the CCBL3 pointer. The 'transmit leg busy' flag is reset and a check is made to see if the last frame transmitted was an 'I'-format frame. If not, the frame must have been in 'S' or 'NS' format, so execution returns is to the scheduler at entry CXELNKSX to continue link activity.

Link Poll to Path Control Inbound

A poll frame has been sent down the link. The correct offset for the type of FID has been stored in the CCB (CCBOFSET), based on the secondary station type, and the 'receive' leg CCBL2 pointer has been set to monitor for flags. The CCBL3 pointer has been set up with the normal read-end processor address (CXELNKR).

When the first flag character is received, the 'monitor for flags' routine sets CCBL2 to receive the address (CXBDLRA). The hardware in the scanner handles any other flags received without causing any level 2 interrupts. The next level 2 interrupt comes with the first nonflags character received. This character should be the address field of the frame. The 'receive address' routine (CXBDLRA) checks the character received to see if it is the address expected. If it is not, then the link is reset to monitor for flags again. If the character is the expected address, the address is stored in the CCB (CCBAFLD). The BCC (CCBBCC) is initialized next and the CCBL2 pointer is set to receive the control field (CXBDLRC). Before EXITing from the program level, the BCC is accumulated for the address field which was received.

The next level 2 interrupt gives control to the control field routine (CXBDLRC). If the character received was a flag, a format error has occured. The status is set to indicate format exception and the ACB is queued back for level 3 processing. If the ACB cannot be queued back for processing, 'block overrun' status is set and the remainder of the frame is flushed. If the character received is the control field, tests are made for the frame format. If the frame is an 'I' format, a buffer is leased and initialized. The CCBL2 pointer is set to receive data (CXBDLRI) before EXITing from the program level.

The 'receive data' routine accepts characters until a flag is received. The characters are stored in the buffer leased by the control field routine (CXBDLRC). If more buffers are needed, buffers are leased one at a time. When the flag character is received, the pointer to the data buffers is stored in the LXB (LXBDATAP). Next, three checks are made, testing for: (1) correct BCC for this frame, (2) the expected address, and (3) final frame. If this is not the final frame, the ACB is queued back to level 3 to process this frame and the CCB is set up to receive the next frame, starting with the address field (CXBDLRA). If this was the final frame (P/F bit on), the transmitting terminal sets 'poll/final' status and queues the ACB back to level 3 to process the frame.

The return to the link scheduler is via CXELNKR from the CCBL3 pointer. If the frame received is an 'I' format, a branch occurs to PROCIFMT to process the frame. PROCIFMT computes the frame length and sets the data offset and counts in each buffer. The last buffer count is adjusted for the BCC characters that were stored. The total data count is stored in the NCP buffer prefix and a test for station type is made: type 4 or not type 4. As a result of the text, a branch is taken to the appropriate path control routine to route the PIU to its destination. Before returning to normal scheduling, the N(C) count is updated by 1.

Termination and Restart of an XIO Run Command

The 'run' command is ended by triggering the link process queue in the LKB. The task pointer in the link process queue is for the 'run terminator' task. There are only six valid reasons for ending the run command:

1. Reset immediate ('deactivate link in progress', or 'contact' command)
2. Permanent link error (hardware or XMIT error)
3. Station counters overflow
4. Buffer pool end
5. Valid response or ERPs exhausted on 'contact poll'
6. Unrecoverable station error during poll

When the SDLC character-service routines uses PCI to return to level 3 for processing, the link scheduler checks the link status to see if 'run termination' is required. If 'run termination' is required, (CXELNKSS) the 'stop run' command is set in both of the CCB's (CCBCTL) for a full-duplex link. When both legs of the link become idle, the link scheduler ENDRUN subroutine triggers the run terminator task.

Based on the error status received, the ENDRUN subroutine flushes the LOB and LOS queues. For hardware or transmit error status, the ENDRUN subroutine flushes the LOB and LOS for all stations on the link. All PIUs on the station's LOB and LOS are set with 'path error' status, and put on the link inbound queue for that station. The link inbound queue gets triggered along with the run terminator task. For this type of error, the 'run' command is not reissued.

For other exceptions, only the current stations LOB and LOS queues are flushed. Again, all the PIUs on the current station's LOB and LOS are set with 'path error' and are put on the station's link inbound queue. The link inbound queue is triggered along with the run terminator task, but in this case the run terminator reissues the RUN command when the task finishes its processing.

The run terminator determines the reason for termination and the appropriate routine is called to handle the status. In an example of a permanent link error, the link is set inactive (LKBSTAT), the 'active links count' is decremented by 1, an 'inoperative' request is built and sent to the SSCP, and an MDR record is returned to the host. All the stations on the link are checked for FM data requests and if any are found they are returned to the SSCP with an error indication. All stations are left with 'inoperative' and 'poll skip' flags on.

Data Link Control Review

The link scheduler is initiated for this link by an 'activate link' command addressed to NCP physical services. NCP physical services identifies the link to be activated in the PIU RU1NA field, and an 'enable' is processed for nonswitched links.

The link scheduler has a three-part cycle:

1. SERVLIM data passes are made through the service order table as long as one PIU is sent or received per pass. The first pass without a PIU transfer invokes part 2.
2. The physical units are searched for a contact command to be processed. The search begins with the first physical unit following the last unit serviced for a contact command and ends when a command has been serviced or all physical units have been scanned.
3. If in the last data pass (see point 1), the time specified in the PAUSE operand had not expired, the link scheduler waits until (a) a PIU is enqueued for a PU on this link and then transmits only; or (b) the time expires to begin polling.

The flow of an 'activate link' for an SDLC link is illustrated in Figure 9.1. The numbered items that follow identify the flow of the 'activate link' command and processing that takes place.

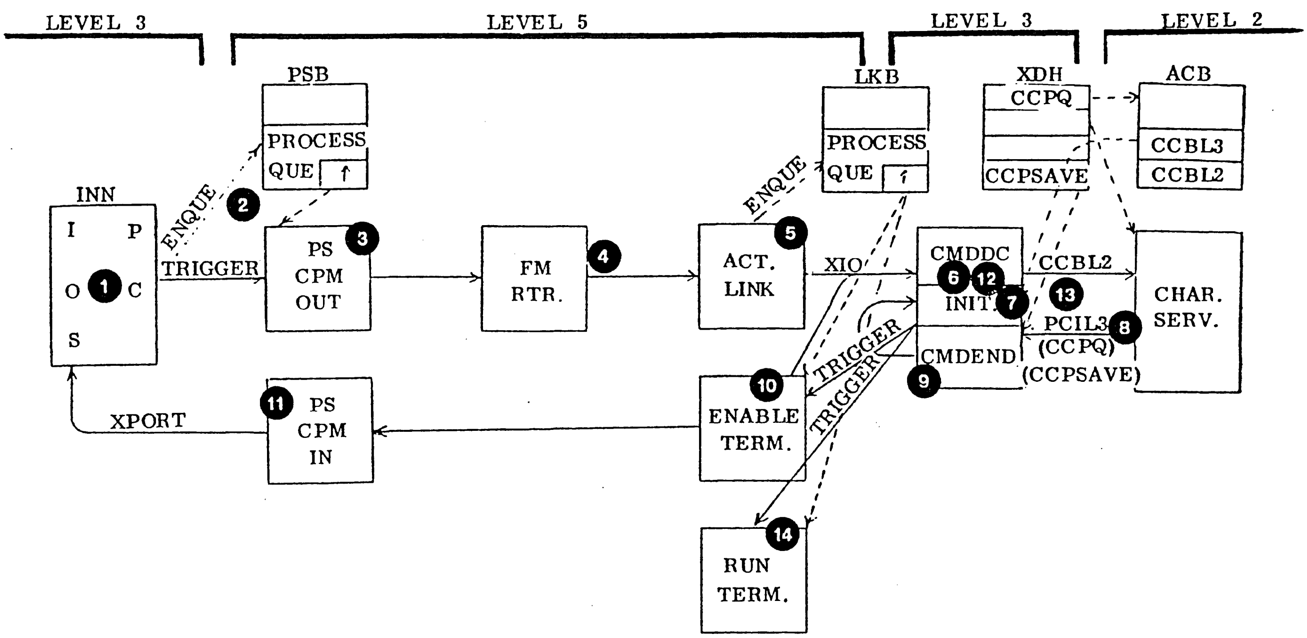

Figure 9.1 Activate Link Command Flow

1. At channel stop, IOS passes the PIU to path control via a branch.
2. Using the PIU DAF to access the SIT, SVT and RVT, path control enqueues the PIU to NCP physical services.
3. The PSB task is dispatched (PSB CPM-OUT), which calls the function management router.
4. Using RU1BT1 and RU1RC2 (bytes 1 and 2 of the RU), the 'function management router' selects and calls the 'activate link' processor.

5. 'Activate link' enqueues the PIU to the LKB, sets the LKB task pointer to 'enable terminator', sets 'activate link in progress', and issues 'enable XIO'.
6. Command decoder selects the proper initialization routine for 'enable'.
7. CCBL3 is set for the proper return from level 2, the ICW or BCB is set to 'data terminal ready', and CCBL2 is set to the proper level 2 routine to wait for 'data set ready'.
8. At 'data set ready', level 2 enqueues the ACB on the ACB queue (CCPQON) and issues a PCI to level 3.
9. CCPSAVE contains the address of the command ender, which gives control to the CCBL3 pointer.
10. The LKB is triggered, which schedules the 'enable terminator' task. The enable terminator task changes the LKB task pointer to 'run terminator', sets 'link active', and issues 'run XIO'.
11. NCP physical services CPM-IN sends a response to the channel queue for routing to the host.
12. The command decoder resolves the link scheduler as the initialization routine for 'run XIO'.
13. The link scheduler begins polling and selection for this link until the termination of the run command.
14. Should the 'run' command terminate, the 'run terminator' is dispatched because of the LKB task pointer.

Data Link Control Quiz

Answer all of the following questions before checking the answers in Appendix B.

1. What command invokes the link scheduler for a specific link?
2. What two conditions restrict the number of passes through the service order table for data service?
3. When a level 2 scanner interrupt occurs, where can you find the address of the level 2 routine to be executed?
4. When a level 3 PCI is issued by a level 2 scanner routine, where can you find the address of the level 3 routine to be executed?
5. Where is the identifier of the current physical unit to be serviced by a contact poll?
6. Where can you find the identification of the current 'contact poll' command being executed?
7. What are the addresses of the LKBs of the active links?
8. What are the addresses of the LKBs of the switched links and non-switched links?
9. What are the addresses of the LKBs of the half-duplex links and the full-duplex links?

Criterion

If you missed more than one question, you should review this section.

BSC/SS Processor

Objective Upon completion of this topic, the student should be able to identify the main components of the BSC/SS processor, the major control blocks, and flow of data in the modules.

Definition of the BSC/SS Processor The BSC/SS processor is that part of the NCP that processes requests for BSC/SS resources. Instead of the PIU, the basic unit of work is the basic transmission unit (BTU). Therefore, the BSC/SS processor must convert a FID0 PIU received from the host to a BTU and convert a BTU destined for the host to a FID0 PIU.

Processing within the BSC/SS processor is totally different from SDLC support for SDLC resources in boundary network node support. The routing of information to a BSC/SS resource includes the system router, command processor, work scheduler, I/O line task (including I/O line subtasks), character-service routines, and, if a type 1 scanner is defined, bit-service routines. Also, in addition to using a BTU instead of a PIU, many of the queues and control blocks are different.

This topic presents the data format, control blocks, components, and data flow used in the BSC/SS processor for communicating with BSC/SS resources and BSC/SS supporting routines.

BSC/SS Major Control Blocks

Block Control Unit (BCU) When the BSC/SS router receives a FID0 PIU, the PIU/BTU converter builds the block control unit (BCU). The BCU consists of the first buffer prefix, event control block, a workarea, and the basic transmission unit (BTU). The format preceding the BTU is similar to the PIU prefix area. The BTU contains 14 bytes of control information from the FID0 and may contain text. The BCU may be contained in one buffer or in many buffers, depending on the size of the buffers and the amount of text in the BTU.

The major areas of the block control unit (BCU) are:

```
X'00'  Buffer prefix
X'04'  Event control block
X'0C'  Work area
X'14'  Basic transmission unit
```

The following are the fields of the basic transmission unit (BTU), which is contained within the block control unit (BCU). Offsets are from the beginning of the NCP buffer.

X'14'	Origin address field (always host resource, FID0 X'12')
X'16'	Destination address field (always nonhost resource, FID0 X'10')
X'18'	Sequence number (FID0 X'14')
X'1A'	System and extended BTU response, (FID0 X'20')

X'1C'	BSC/SS BTU command and modifier, (FID0 X'1C')
X'1E'	Function flags (FID0 X'1E')
X'20'	Text length (FID0 X'16' minus RH length of 3)
X'22'	User data (FID0 X'22')

BTU commands and modifiers are covered later in this topic.

Resource Vector Table (RVT) The BSC/SS portion of the RVT contains an entry for each LINE, CLUSTER, TERMINAL, and COMP macro in the BSC/SS portion of the NCP generation. Each LINE macro causes an entry to be built describing the type of entry and containing a pointer to the LCB representing that line. Each TERMINAL, COMP, or BSC/SS CLUSTER macro causes an entry to be built describing the type of entry and containing a pointer to the DVB representing that entry. The entries are built as the macros are encountered in the generation.

The format of the resource vector table (RVT) was described in the section on path control.

Device Base Control Block (DVB) The device base control block (DVB) contains an input QCB for the device input queue and a work QCB for the device work queue, as well as all parameters needed to operate a device. One DVB is built at NCP generation time for each CLUSTER, TERMINAL, and COMP macro coded (except for CLUSTER macros coded without the GPOLL operand). The DVB may have one or more external extensions, depending on the type of device and the features of the device represented.

Some of the key fields of the DVB are as follows:

X'00'	Device work QCB
X'08'	Device input QCB
X'18'	Block-handler status and address pointer
X'1C'	Device resource ID
X'1E'	Device features
X'2C'	Service-seeking control block
X'32'	Polling/addressing extension
X'36'	Polling extension

There are variable extensions to the DVB, depending upon the options selected when the generation definition is coded. Following are the control block extensions to the DVB (offsets to the extensions, if included, are in the DVB from X'27' to X'2A'. The format and values of the extensions can be found in the *IBM 3704 and 3705 Program Reference Handbook* under 'DVB'.):

BHR	Block handler routine extension
BUE	Switched backup extension
CGP	Cluster general poll extension
CIE	Callin extension

COE Callout extension

DAE Device addressing extension

Line Control Block (LCB) At NCP generation time, a line control block (LCB) is built for each BSC/SS line connected to the controller. The LCB contains information required for scheduling line operations. The LCB also has fields for maintaining line significant status information and three queue control blocks: (1) line I/O queue, (2) line work queue, and (3) the suspended sessions queue when the LCB represents a multipoint line. Depending upon the line type, the LCB may have nonswitched point-to-point, multipoint, or switched extension.

Some of the key fields of the line control block (LCB) are:

X'00'	Line I/O QCB
X'14'	Line work QCB
X'24'	Pointer to the adapter control block (ACB)
X'28'	Pointer to the line type command table (LTCT)
X'2C'	Pointer to the device (DVB) currently connected over the line
X'34'	Subtask sequence pointer
X'36'	LCB features, status, etc.
X'42'	Resource ID
X'44'	Multipoint extension and BSC/SS session definitions
X'44'	Switched extension

Line Type Command Table (LTCT) The LTCT contains the system command table, the offset table, and a collection of subtask sequence tables. The system command table is a table of all valid BTU command/modifier combinations. The line work scheduler finds the position in the system command table corresponding to the command and modifiers specified in the BTU. The corresponding position of the offset table gives the offset to the appropriate entry in the subtask sequence table.

BTU commands and modifiers are covered later.

Adapter Control Block (ACB) At NCP generation, an ACB is built for each line defined in the NCP. A BSC/SS ACB contains an input/output block (IOB) and a character control block (CCB). All ACBs are located in the first 64K of storage.

The ACB fields are as follows:

```
-X'03' Retry count for dialout
-X'02' Address of dialout line
       for auto call
 X'00' Input/output block (IOB)
 X'24' Character control block (CCB)
```

Input/output Block (IOB) The input/output block (IOB) contains the command and modifier to indicate the I/O operation to be performed. The IOB also contains status fields to indicate the outcome of the operation, and pointers to the beginning point and ending point of data sent or received, if any data is present.

Some of the key fields of the input/output block are:

X'00'	Flags, I/O command and modifiers
X'0E'	Pointer to first buffer in the block
X'10'	Pointer to last buffer in the block
X'18'	Pointer to the line control block (LCB)
X'20'	Partitioned emulation (PEP) flags

Character Control Block (CCB) The character control block (CCB) contains current information on the physical operation of the line and the data being transferred to or from the line. Some of the contents of the CCB are a pointer to the translate/decode table, a CCBL2 pointer, a CCBL3 pointer, and counters that maintain the position of data being accessed within buffers.

Some of the key fields of the CCB are as follows:

X'24'	Address of current level 2 character-service routine (CCBL2)
X'30'	Line address (type 2 or 3 scanners) or bit control block (BCB) address (type 1 scanner)
X'34'	Pointer to line group table (LGT)
X'38'	Current operational status
X'46'	Leftmost byte of transmit translate table (rightmost byte is character to be translated)
X'4C'	Address of next level 3 routine (CCBL3)

Line Vector Table (LNVT) The line vector table (LNVT) is generated from the CSB macro and initialized by the LINE macro. A different format is created for type 1 than for type 2 or 3 scanners.

Type 1 LNVT

The type 1 line vector table (LNVT) generates an entry of X'10' bytes for each possible line address for a type 1 scanner. An operand of MODEL=3705 generates 64 entries from address X'800' to X'BFF'. An operand of MODEL=3704 generates 32 entries starting at X'800'. A line address of X'00' to X'3F' is multiplied by X'10', then added to X'800' to calculate the BCB address. The BCB is used by the level 2 routines in program support of the ICW used by a type 2 scanner. An undefined line address has the rightmost bit set to 1 in the first halfword. If the bit is 0, the first halfword points to the adapter control block (ACB).

Type 2 or 3 LNVT

The type 2 or 3 line vector table (LNVT) generates a two-byte entry for each possible line address (96) for each defined scanner (CSB macro). A single scanner generates 96 halfword entries from X'800' to X'8BF'. Each subsequent CSB macro reserves an additional 96 halfwords. An undefined line address has the rightmost bit set to 1 in a halfword entry. A bit of 0 indicates that the halfword contains the address of the adapter control block (ACB) for this line. Because the first scanner has 64 lines starting at line address X'20', the first X'20' entries from X'800' to X'83F' are set as invalid.

If a line address is known for a type 2 or 3 scanner, the LNVT entry can be calculated by multiplying the line address by 2 and adding X'800'. The LNVT allows the level 2 routines to find the ACB (and CCB) for a line when only the line address is known.

Bit Control Block (BCB) The bit control block (BCB) is a X'10' byte control block which provides the same facility for a type 1 scanner as the ICW hardware provides for a type 2 scanner. A BCB is generated for each LINE macro defined for a type 1 scanner and is a valid entry of the type 1 line vector table (LNVT).

Service Order Table (SOT) The BSC/SS service order table (SOT) is generated by a SERVICE macro to identify the sequence of service given to devices on a multipoint line. A pointer in the line control block (LCB) at X'4C' points to the current entry in the table for service. All BSC/SS multipoint lines have a service order table, which contains the following entries:

X'00' Maximum number of entries

X'01' Number of entries in use

X'02' Reserved

X'04' Four-byte entries of address pointers to the DVBSTAT field of the DVB for a device in the SOT. More than one entry can point to the same DVB.

X'xx' Last four-byte entry has a negative offset to the first entry in the SOT in the first two bytes, and zeros in the last halfword.

BSC/SS Processor Components

Processing within the BSC/SS processor is totally different than in the SDLC support for SDLC resources. The routing of information to a BSC/SS resource includes the system router, command processor, work scheduler, input/output line task (including input/output subtasks), character-service routines, and if required, bit-service routines.

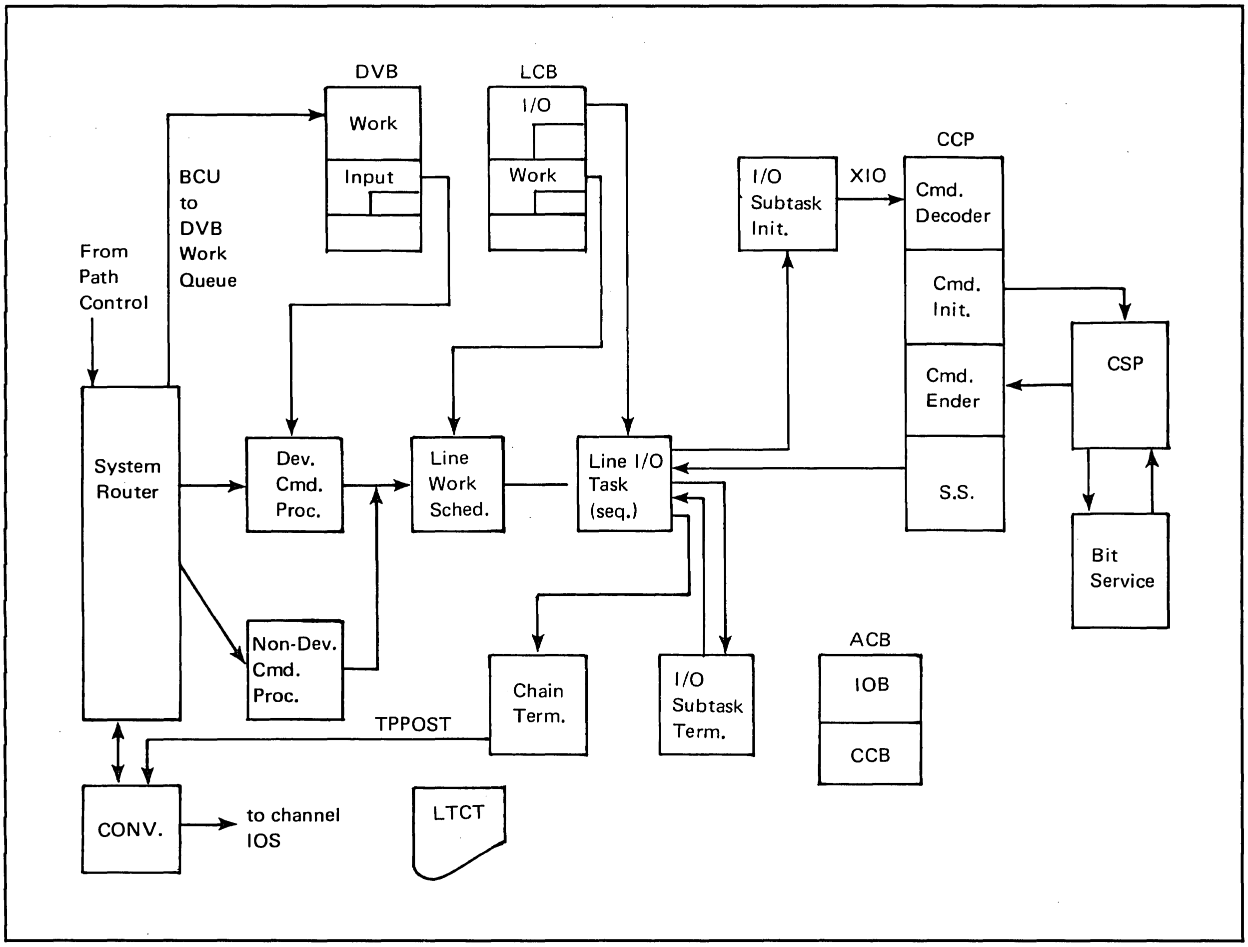

Figure 10.1. BSC/SS Processor Components

This section describes the BSC/SS processor components, providing information about the functions each component performs, the control blocks each component uses, and the manner in which each component passes control to the next. Figure 10.1 illustrates the components and processing flow.

System Router The system router receives control and data PIUs from 'path control out' via a branch. The system router branches to the PIU/BTU converter and, after conversion, control is returned to the system router. The system router resolves the BCU resource ID using the BSC/SS portion of the RVT. From the RVT, the system router obtains resource type information and the address of the control block representing this resource. The control block may be a device base control block (DVB) or a line control block (LCB). A DVB represents a terminal, component, or a BSC/SS cluster (these are considered to be device-type resources). An LCB represents a line (nondevice).

If the resource is not a device, the system router enqueues the BCU on the nondevice input queue. There is only one nondevice input queue, the address of which is in the extended halfword direct addressable (HWE) at X'2C'.

If the resource is a device, the system router enqueues the BCU on the input queue of the DVB representing that resource. If the command and modifier for the device indicate a critical control command (bit 1=1), the BTU is enqueued on the devices input queue ahead of data and noncritical control commands. The ENQUE macro used contains the ACTV=YES operand which results in a trigger.

Nondevice Command Processor If the system router enqueues a BCU on the nondevice input queue, the nondevice command processor is triggered. The nondevice command processor dequeues the BCU from the nondevice input queue and processes the nondevice command contained within the BCU.

Device Command Processor If the system router enqueued a BCU on the input queue for a DVB, the device command processor is triggered. The device command processor validates the BTU command and modifiers, dequeues the BCU from the DVB input queue, enqueues it to the DVB work queue, and triggers the line work scheduler.

Line Work Scheduler The line work scheduler uses the BTU command and modifiers as a search argument against the line-type command table (LTCT). In the LTCT, the chain of subtasks necessary to process the BTU command and modifiers is found. The line work scheduler also dequeues the BCU from the DVB work queue, enqueues it to the line I/O queue, and triggers the line I/O task.

Line I/O Task The line I/O task is made up of the sequencer and line I/O subtasks.

The sequencer simply gives control sequentially, as required, to the line I/O subtasks contained in the selected chain.

The line I/O subtask chains are made up of pairs of subtask initiators and subtask terminators (different pairs according to the BTU command and modifiers), plus a chain terminator (read or write version).

Each I/O subtask initiator stores an IOB command in the IOB (contained in the ACB for a BSC/SS line) and issues an XIO macro to pass control to the communications control program (CCP), which runs in level 3.

After the CCP and level 2 processing is completed for a given IOB command, each I/O subtask terminator gets control when the line I/O sequencer is triggered by the CCP. The I/O subtask terminator checks to see if the command completed successfully; if so, the terminator passes control back to the sequencer, which gives control to the next I/O subtask initiator or the chain terminator for this chain.

The chain terminator updates the response field in the BCU and issues a TPPOST macro which branches to the BTU/PIU converter. The converter then passes the PIU to the channel adapter I/O supervisor.

Communications Control Program The BSC/SS CCP is made up of (1) the command decoder, (2) the command initializer, (3) the command ender, and (4) the BSC/SS service-seeking module.

The command decoder receives control from the XIO macro issued in an I/O subtask initiator. The decoder selects the proper initialization routine by using the command that was placed in the IOB. The command decoder then passes control to the command initializer.

The command initializer initializes the CCB (contained in the BSC/SS ACB) and the communication scanner in whatever way is necessary to accomplish the level 2 processing for the IOB command. When the command initializer is finished, level 2 interrupts begin to occur on this line for the IOB command.

When level 2 has finished processing the IOB command, the command ender receives control via a level 3 PCI initiated by level 2. The command ender checks whether a good completion occured; if so, it triggers the line I/O task.

Character Service Program (CSP) The CSP processes level 2 interrupts from the communications scanner. Processing initially begins according to how the command initializer sets up the CCB level 2 pointer. From then on, CSP updates the CCBL2 pointer as required. For a type 2 scanner (CSB macro-coded with an operand of TYPE=TYPE2), the CSP moves a character at a time into the scanner's ICW for a given line (for 'write' operations) or removes a character at a time from the ICW for a given line (for a 'read' operation). For a type 3 scanner (CSB macro coded with an operand of TYPE=TYPE3), the data characters are transferred by cycle steal to the end of an NCP buffer or end of block. When CSP processing is complete for an IOB command, a level 3 PCI is issued to pass control back to the CCP.

Bit Service Bit-service routines are included in the NCP for type 1 communications scanner support only. The bit-service routines emulate the type 2 scanner hardware (serializer/deserializer, ICW, and related functions) not included in the type 1 scanner. To accomplish this emulation, the bit control block (which takes the place of the ICW) is included in the NCP if a CSB macro is coded with an operand of TYPE=TYPE1 For each level 2 bit-service interrupt, the bit-service routines move/remove one bit at a time to the type 1 scanner, and cause the scanner to present a character-service level 2 interrupt when required.

BTU Commands for BSC/SS Resources

The basic transmission unit (BTU) is the unit of transfer within the BSC/SS processor. Data that passes between the host and the BSC/SS processor must be converted between the PIU and the BTU formats. In the buffer, the BTU is contained within the block control unit (BCU).

For data transfer to or from the BSC/SS resources, the BSC/SS processor uses three units of transfer: block, message, and transmission.

A block is the smallest unit recognized by the network control program. For SS devices, the data between two end-of-block (EOB) characters; for BSC devices, the data between a start-of-text (STX) or start-of-header (SOH) character and an end-of-transmission block (ETB).

A message for SS devices is the same as a transmission, that is, the data between a start-of-data (circle D) and end-of-block (EOB), end-of-transmission (EOT); for BSC devices a message is the data between a start-of-text (STX) or start-of-header (SOH) character and ended by an end-of-text (ETX) character.

A transmission for SS devices is the same as a message. For BSC devices, a transmission is ended by an end-of-transmission (EOT).

For large amounts of data coming from a terminal, the BSC/SS processor can run in subblocking mode. The BSC/SS processor passes data to the host as a subblock before receiving an EOB, ETX, or EOT. Subblocking is in full multiples of NCP buffers, as specified on the TRANSFER operand of the LINE macro, and CUTOFF specifies the number of subblocks before the data is flushed. The BSC/SS processor automatically sends data to the host on an EOB or ETX.

There are five BTU commands that are used with all BSC/SS devices. The commands are: 'invite', 'contact', 'read', 'write', and 'disconnect'. Even though the physical operation may be different for each device, the same commands are used. Each of these commands is discussed in detail later in this manual.

The 'invite' and 'contact' commands establish a BSC/SS session. The 'invite' command implies a 'read'. The 'read' and 'write' commands transfer data between the host and a device. The 'disconnect' command ends a session. By the use of command modifiers a number of commands can be combined into one request from the host.

There are two other commands the host can send to the BSC/SS processor: 'control' and 'test'. The 'control' command is used to alter or examine the status of a line or device. The 'test' command is used to test a BSC/SS device or line. The online line test (OLLT) tests BSC/SS lines; the online terminal test (OLTT) tests BSC/SS terminals. For these tests, the text portion of the BTU contains interpretive commands.

The BTU response information is contained within the system response byte of the BTU and the extended response byte of the BTU. The system response byte identifies a response as an error response or normal response. The system response byte also contains the phase (0, 1, 2, or 3) to which this response applies and the system response code. The extended response byte contains the initial status of the line and the final status of the line.

The BTU commands given below may be found in *IBM 3704 and 3705 Program Reference Handbook* (GY30-3012), Section 3: BTU commands and modifiers.

Contact Command The 'contact' has a BTU command of X'06' with no modifiers. The 'contact' does not imply any data transfer, but only assures that a connection is available for data transfer. When a response to a 'contact' is received by the host, the host may then issue either a 'read' or 'write' command. Control commands, such as 'reset device queues' or 'reset immediate' can request termination of a 'contact' command.

Invite Command 'Invite' has a BTU command of X'05', with several modifiers available to qualify the 'invite', as follows:

X'00' Invite normal. Unit of data for this command (block, message or transmission) is specified on the NCP macro defining the device. Default is block.

X'01' Invite block. Unit of data for this command is a block. Ended by EOB.

X'02' Invite message. Unit of data for this command is a message. Ended by ETX (BSC) or EOT (SS). Message and transmission are the same for SS.

X'03' Invite transmission. Unit of data for this command is a transmission. Ended by EOT (BSC).

X'04' Invite transmission with disconnect. Executed as an 'invite transmission' command followed by a 'disconnect' command.

X'05' Invite with auto restart. Executed as unbounded series of 'invite with disconnect' commands. This command must be terminated with a 'reset' command.

X'06' Invite perpetual. Valid only for clusters. Executed as an unbounded series of 'invite transmission' commands with no intervening 'disconnect' commands.

If an 'invite' is pending (no response from the terminal), and data is available to send to the device, the 'invite' can be terminated by control commands of 'reset invite', 'reset conditional', or 'reset at end of command'.

A 'write' to a BSC 3270 occurs without a reset of the 'invite perpetual'.

Read Command 'Read' has a BTU command of X'01' with several modifiers, as follows:

X'00' Read normal. Unit of data for this command (block, message, transmission) is specified on the NCP macro which defines the device. Default is block.

X'01' Read block. Unit of data for this command is the block. Ends with an EOB.

X'02' Read message. Unit of data for this command is the message. Ends with an ETX (BSC) or EOT (SS). The message and transmission are the same for SS.

X'03' Read transmission. Unit of data for this command is a transmission. Ends with an EOT (BSC).

X'04' Read transmission with disconnect. Executed as a 'read transmission' command followed by a 'disconnect' command.

X'05' Read with invite. Executed as a 'read transmission with disconnect' followed by an 'invite normal' command.

The read command can be terminated by a 'reset device queues', 'reset immediate', 'reset conditional', or 'reset at end of command'.

Write Command 'Write has a BTU command of X'02' with several modifiers, as follows:

X'00' Write normal. Unit of data is one block. Ended by an EOB.

X'01' Write with end-of-message. Unit of data is one block followed by the appropriate control sequence for an end of message.

X'02' Write with end of transmission. Unit of data is one block followed by the control sequence for end of transmission.

X'03' Write with disconnect. Executed as a 'write transmission' command followed by a 'disconnect command'.

X'06' Write with read. Executed as a 'write with end of transmission' followed by a 'read' command.

X'07' Write with invite. Executed as a 'write with end of transmission' followed by a 'disconnect' command and then an 'invite' command.

X'08' Write with contact. Executed as a 'contact' command followed by a 'write normal' command. Ended with an EOB.

X'09' Write with contact. Executed as a 'contact' command followed by a 'write with end of message'. Ended with ETX (BSC) or EOT (SS).

X'0A' Write with contact. Executed as a 'contact' command followed by a 'write with end of transmission'. Ended with EOT.

X'0B' Write with contact and disconnect. Executed as a 'contact' command followed by a 'write with end of transmission' followed by a 'disconnect' command.

X'0E' Write with contact and read. Executed as a 'contact' command followed by a 'write with end of transmission' followed by a 'read normal' command.

The 'write' command can be terminated by 'reset device queues', 'reset immediate', 'reset conditional', or 'reset at end of command'.

Disconnect Command 'Disconnect' has a BTU command of X'07' with several modifiers, as follows:

X'00' Disconnect normal. No modifier

X'01' Disconnect with invite. Executed as a 'disconnect normal' followed by an 'invite normal' command.

X'02' Disconnect with end of call. For switched lines, this modifier results in the physical connection between the terminal and the communications controller being broken. For nonswitched lines, this modifier is the same as 'disconnect normal'.

X'03' Disconnect with end of call and invite. Executed as a 'disconnect with end of call' followed by an 'invite' command.

The 'disconnect' command is reset by 'reset immediate'.

Control and Test Commands The control commands have a BTU command of X'08' with many modifiers. The test commands have a BTU command of X'03' with many modifiers. A listing of commands and modifiers is given in *IBM 3704 and 3705 Program Reference Handbook* (GY30-3012), Section 3: BTU Commands and Modifiers.

BSC and SS Sessions

The ability of the NCP BSC/SS processor to conduct multiple sessions on the same multipoint line depends upon the fact that data transfer does not occur continuously for the duration of a session. For example, for inquiry/response applications, the elapsed time between receiving a response from the host processor and entering the next inquiry typically exceeds the time required for transmission of the inquiry and response. This elapsed time is the result of operator 'think' time. The interval during which the terminal is not using the line can profitably be used to service other terminals on the same line.

The number of concurrent sessions to be conducted on a line depends upon several factors. Among these are (1) the relative amount of time a terminal in use does not need the line, and (2) the permissible delay between the time the operator is ready to use the terminal and the time the line is available to that terminal. The number of concurrent sessions on a line is specified by the user in the SESSION operand of the LINE macro. This value is called a session Limit.

The sequence by which the BSC/SS processor attempts to establish sessions on a multipoint line is determined by the service order table associated with the line. This table is defined by the SERVICE macro, directly following the LINE macro.

Logical Connections A session is active when the BSC/SS processor is communicating with, or is ready to communicate with, the associated device. If the NCP is not communicating with, or is not ready to communicate with, the associated device, the session is either suspended (but within an active session) or inactive.

In most applications it is necessary to limit the amount of time a session is permitted to be active in order to prevent a device, once in session, from monopolizing the line. The period during which a session is active is called a logical connection. The length of a logical connection is the maximum number of transmissions that may be transferred in either direction between the BSC/SS processor and the device during the logical connection. The limit is specified in the XMITLIM operand of the CLUSTER, TERMINAL, or COMP macro representing the device. The user can indicate that the XMITLIM specifies the number of blocks, rather than transmissions, by coding ENDTRNS=EOB on the macro.

Once a session has been established, the BSC/SS processor repolls the device for each subsequent transmission solicited from the device. You may have the program repeat the polling operation one or more times, if you wish to allow the device more time in which to respond. The number of polling operations allowed during this period is specified in the POLIMIT operand of the LINE macro. The value specified in the POLIMIT operand is called the negative response limit. The best performance results occur with a value of 1.

Once the negative response limit is reached, the BSC/SS processor can proceed in one of three ways:

1. NOWAIT. The BSC/SS processor breaks the logical connection and cancels the read request that caused the polling. The host is informed.

2. WAIT. The BSC/SS processor maintains the logical connection, holding the line; informs the host the negative poll limit has been reached, and waits for a new command from the host.

3. QUEUE. The logical session is suspended, the command is queued for the next logical connection for this device, and the host is notified that the negative poll limit was reached.

Note that the specific operand may be host-system dependent; refer to the appropriate system Programmer's Guide for additional information.

Most types of I/O errors that occur during an active session cause suspension of that session. The host is notified of the error.

Session-Servicing and Service-Seeking The activity of attempting to establish a new session on a BSC or SS line is called service-seeking. Service-seeking occurs by searching all DVBs for an 'invite' or 'contact pending' bit in DVBSTAT, in the sequence of the service order table (SERVICE macro). If either the 'invite' or 'contact pending' bits have a value of 1, the device is polled or addressed (if it is a polled device) or otherwise enabled for communication. These bits are 0 once a session is established, but the 'connection exists' bit indicates that 'read' or 'write' commands may be processed during a logical connection. The 'disconnect received' bit in DVBSTAT, set when a 'disconnect' command is received, indicates that the session is to be terminated.

The activity of servicing existing sessions is called session-servicing. Session-servicing occurs by sequentially servicing all of the DVBs queued on the suspended session queue in the LCB for that line. Servicing a session consists of establishing a logical connection, then sending or receiving data (or both) until the logical connection ends.

Session-servicing and service-seeking alternate in a sequence of operations called a service cycle. A service cycle consists of service-seeking and session-servicing if at least one session exists. If no sessions exist, only service-seeking is performed. If the existing sessions equal the session limit, only session-servicing is performed.

The maximum number of devices with which the program attempts to establish a session during each service-seeking operation is called the service-seeking limit. To specify the service-seeking limit, the SERVLIM operand of the LINE macro should be coded with the maximum number of devices with which the program is to attempt service-seeking during one service-seeking operation. Service-seeking attempts are in service order table (SOT) sequence for this count, even if the DVBs searched are currently in session; each DVB is scanned for an 'invite' or 'contact pending'. If response time is poor for existing sessions, you may improve performance by coding SERVLIM with a low value; the default is one-half the entries in the service order table.

You may also specify whether service-seeking or session-servicing is to have priority. This option is specified by coding SERVPRI=OLD if session-servicing is to have priority, or SERVPRI=NEW if service-seeking is to have priority. If response time is poor for existing sessions, you may improve performance significantly by coding SERVPRI=OLD.

Nonproductive polling and the associated processing overhead can be minimized by specifying a service-seeking pause. The pause is in effect only when there are no established sessions and only service-seeking occurs for this line. The pause is specified in the PAUSE operand of the LINE macro. When the first session is established, the pause becomes inoperative until all active sessions have terminated for this line.

Session information can be changed by commands from the host. The control command (X'08') with the following modifiers can be used for dynamic tuning of the network:

X'84' Change line service-seeking pause

X'85' Change line negative poll response limit

X'86' Change session limit

X'8C' Change device transmission limit

The fields which are changed by these commands are in the line control block (LCB) in the multipoint extension. These values can also be changed from the 3704 or 3705 control panel.

In specifying session limits, special consideration must be given to devices which use general polling. The BSC 3270 uses the general poll ('invite perpetual') to obtain input. A response to a general poll may include data from all 3277s on the cluster controller, exceeding the session limit. If the session limit is reached by a general poll of one cluster, other clusters on the same line are not polled. BSC 3270s should have a session limit equal to the total entries in the service order table; one per cluster controller plus one per 3277.

Write operations to BSC 3270s are queued to the DVB which represents the terminal. Read operations occur when the DVB representing the cluster controller is processed for service-seeking.

BSC/SS Flow

The scheduling of the BSC/SS request for execution begins with the device command processor, operating from the device input queue, and is composed of a main routine and several subroutines. The device command processor decodes the command, makes various error checks, depending upon the command, and, if no errors are found, accepts the command. If errors are found, the proper response code is moved to the BTU and is returned to the host.

Accepting the command, the device command processor enqueues the BCU on the device work queue (DVB X'00'). Since the work queue has no executable code associated with it, no task is triggered as a result of the enqueuing. If the line work scheduler is idle, the device command processor must trigger the line work scheduler to ensure that the input/output operation is initiated.

The device command processor also processes control commands directed to a device. If the command is a control command, the device command processor enqueues the BCU to the device work queue, provided the control command is noncritical and the device is in session. If the command is critical, or if the device is not in session, the device command processor passes control to the control router.

The nondevice command processor, operating from the nondevice input queue, processes all control commands that are not directed to a device. The processor dequeues the BCU from the nondevice input queue and uses the resource vector table (RVT) to determine the address of the line control block (LCB) representing that line.

If the control command is supported in the system, the nondevice command processor calls the control router. The control router scans the supported control command tables looking for a match. When a match is found, the control router branches to the routine. When the control command routine has finished its processing, the control router triggers the line work scheduler.

The same line work scheduler gets control regardless of the line type. A different subroutine of this task exists for each type of line: point-to-point (which also supports switched callin), switched callout, and multipoint. The line work scheduler assigns a subtask sequence chain to the request by decoding the command, using the line type command table (LTCT). The LTCT contains an offset table and a collection of subtask sequence tables. The offset table corresponds to the system modifier table (a table of all valid command/modifier combinations). The line work scheduler finds the position in the system command table corresponding to the command and modifiers specified in the BTU. The corresponding position in the offset table of the LTCT gives the offset to the appropriate entry in the subtask sequence table. Each entry in the subtask sequence table is a series of pointers to the I/O subtasks necessary to process a particular command. Each pointer is the fullword address of an I/O subtask.

Once the initial pointer to the required subtask sequence has been established by the line work scheduler, the offset into the subtask sequence is stored in the LCB (LCBSSP) for the line. The line work scheduler then enqueues the request BCU on the line I/O queue.

The next task to get control is the line I/O task which was triggered by the line work scheduler. The line I/O task consists of a line I/O sequencer and a series of initiator/terminator subtasks. The subtasks associated with a line I/O task vary, depending upon the command being processed at any given time, and the type of line, switched or nonswitched.

When the line I/O QCB is activated, the line I/O sequencer receives control. The line I/O sequencer updates the subtask sequence pointer passed to it by the line work scheduler and gives control to the next subtask in the sequence. The initiator/terminator subtasks are structured to perform a series of I/O operations. A complete sequence of subtasks executes all the I/O operations necessary to perform a requested function. Initiator subtasks structure the line's input/output block (IOB) by inserting the required I/O command and modifier codes and initializing other appropriate fields, then issuing an XIO macro to start the I/O operation.

When the I/O operation completes, the terminator subtask checks the I/O completion status, initiates any error recovery procedures, and prepares the line I/O task for the next operation. If a terminator does not initiate any action that requires supervisor dispatching (such as issuing an XIO or TRIGGER macro), control returns to the supervisor via the SYSXIT macro to allow other level 5 tasks to compete for level 5 system time.

BSC/SS XIO Processing

BSC/SS XIO processing is handled by the communications control program (CCP). The CCP for BSC/SS processing consists of the command decoder (CXECMDC), command initializers (CSECMDI), the command ender (CXECEND) and the BSC/SS service-seeking module (CXESVSK). The CCP routines initiate and terminate data transmissions on the line; the character service program accomplishes the actual data transmission.

After an XIO is issued to a communications line by the level 5 I/O subtask, the communications control program (CCP) gets control from the supervisor. One of three decode routines is entered, depending upon which type of XIO was executed. The three types of XIO commands are:

- Normal IOB (CSEMDC0)
- Set mode (CSECMDCI)
- Immediate control (CXECMDC2)

Normal IOB Command (CSECMDC0) With information about the command in the line IOB, the nucleus routine for decoding normal XIO commands performs a number of initialization steps common to all such commands.

Certain IOB fields (status fields, input block size, and immediate control field) are set to zero, and the connection between the adapter control block (ACB) and line vector table (LNVT) is validated. If the ACB/LNVT connection is invalid, the XIO SVC is abended.

The character control block (CCB) is checked to see if that block is already busy executing a command or subblocked operation. The phase bits in CCBCTL are nonzero if the line is busy. If the CCB is found to be busy, the XIO SVC is abended unless the new command is appropriate for completing an outstanding subblocked operation.

The line adapter (ACB) is placed in the NO-OP state unless the ACB is completing a subblocked operation. This state permits level 2 to be enabled while command initialization steps are performed to the CCB, without interference from level 2 interrupt processing on this particular line.

At the start of command initialization, CCB fields are checked for any outstanding status conditions. Such conditions prevent the new command from being executed at this time. The new command is ended, using the outstanding status as its ending status and using the phase set to indicate the clearing of outstanding status.

The command control byte (CCBNCFL) is checked to see whether command initialization can proceed immediately or must be suspended until (1) something is received from the terminal or (2) a timeout completes.

As far as the decoder is concerned, there are three classes of commands: normal, common control, and subblock mode.

The first class consists of the normal data transfer commands, such as 'read initial' and 'write with end of transmission', since their execution is dependent on the particular type of line control. The initialization routine to be branched to is located through the command decode table pointer of the line group table (LGT) for the line. The initialization routines for these commands reside in the CSECMDI CSECT.

The common control commands include 'enable', 'dial', and 'disable'. Their functions are common to different types of line control, so the initializing routines are the same for all common control commands, which reside in the CSECMDC CSECT.

The subblock mode commands are normally accepted only if the line is busy. The decoder branches to the subblock command initializer, which resides in the CXECMDI CSECT.

The function of the command initializer routines is to examine the command and set up the adapter control block (ACB) with the proper values to handle the I/O on the lines. This module also sets initial timeouts and sets up the interface control word (ICW). Upon completion of level 2 operations, if the expected ending status is satisfied, control returns to the address contained in CCBL3.

Set Mode Command (CSECMDC1) The entry point into the communications control program (CCP) for an XIO 'set mode' is CXECMDC1. This code validates the 'set mode' command, vectors into the set mode command decode vector table, using parameters passed from level 5, then branches to the routine for execution. When the set mode function has completed, control returns to the level 5 routine via the supervisor.

Immediate Control Command (CXECMDC2) The entry point into the communications control program (CCP) for an XIO immediate is CXECMDC2. Several different types of resets are provided. Some resets are conditional and some are unconditional. The purpose of the resets is to terminate an IOB command operation or an ongoing subblocking operation. If the reset is successful, storing of received data is halted; if the line is subblocking, the receive buffers are released and the data is lost. If the line is transmitting when the reset is executed, the transmission is terminated in an orderly way.

The reset routine contains a branch tree to determine exactly what type of operation is to be reset: receive text, receive control data, transmit text, or transmit control data. For all 'reset immediate' routines, the linkage through the command ender is established via the CCBL3 pointer to the common reset end routine in CXECEND (CXECENDY), and by zeroing expected status. Then if the reset operation is completed without any hardware errors, the IOB command is ended with IOB status set to 'special' and 'reset', and phase set 'on' in the error flags byte. The phase of 'reset' is always 'control'.

There are two other types of 'immediate control' XIO commands. The first causes the break signal (SS only) to be sent if the line is currently executing a 'read' type IOB command. The second type places the line in monitor mode, provided the line is not executing an IOB command. If not busy or if handling a subblock between commands, the line is set to monitor mode, in which the line triggers the LCB's input/output task if an ending status condition occurs.

While in monitor mode, the line is busy to all IOB XIO commands issued to it. The result of an XIO being issued is to abend the task that executed the XIO, if monitor mode has not ended due to ending status or reset.

Character Service Program (CSP) Flow

The function of the character service program (CSP) is to maintain the line discipline while transmitting or receiving data. There are two types of CSP: one for BSC line control, one for SS line control.

Each CSP is made up of routines to handle the line discipline in addition to the transmission and reception of data. Each CSP routine sets up the CCBL2 pointer for the next function needed to complete the I/O operation.

When the I/O operation has completed, the last level 2 CSP routine that gets control queues the ACB to the CCP ACB queue (CCPQOFF) for processing to the level 3 command ender via a PCI level 3 interrupt.

When the CSP routines have finished processing, the last routine issues a PCI level 3 after queueing the ACB to the ACB queue. The PCI level 3 interrupt passes control to the command ender routine in the CCP in level 3. The command ender removes the ACB from the ACB queue, and, if the queue is empty, resets the PCI level 3.

The command ender compares the ending status of the current command with the expected status stored in the CCBESTAT field. If the two agree, and no error bits were flagged, the routine exits to the routine pointed to by CCBL3. The CCBESTAT and CCBL3 fields were both set during command initialization. If CCBESTAT=0, the command ender automatically accepts the results.

If the ending status does not agree with the expected status, or if any error bits were flagged, the error recovery program (ERP) setup routine schedules the appropriate ERPs.

The ERP setup routine uses the phase bits (CCBCTL) and CCBEND1 to vector to the correct ERP branch table within the command ender. The ERP setup routine branches to the ERP routine, where a check is made for retry limits. If the limit has not been reached, the ERP routine branches to the initialization routine to retry the operation. If the limit is reached, the command is ended and the ERP routine triggers the line I/O task. The line I/O task gives control to the I/O terminator subtask to check whether the second level ERP limit has been reached. If the second level ERP limit has not been reached, the I/O terminator subtask reschedules the I/O initiator subtask. Error recovery continues either until the limit is reached or the I/O operation has completed successfully. In either case the I/O terminator subtask TPPOSTs the appropriate response back to the host.

Figure 10.2 illustrates the flow of the BSC/SS Processor. The command sequence is identified in the numbered points following the figure.

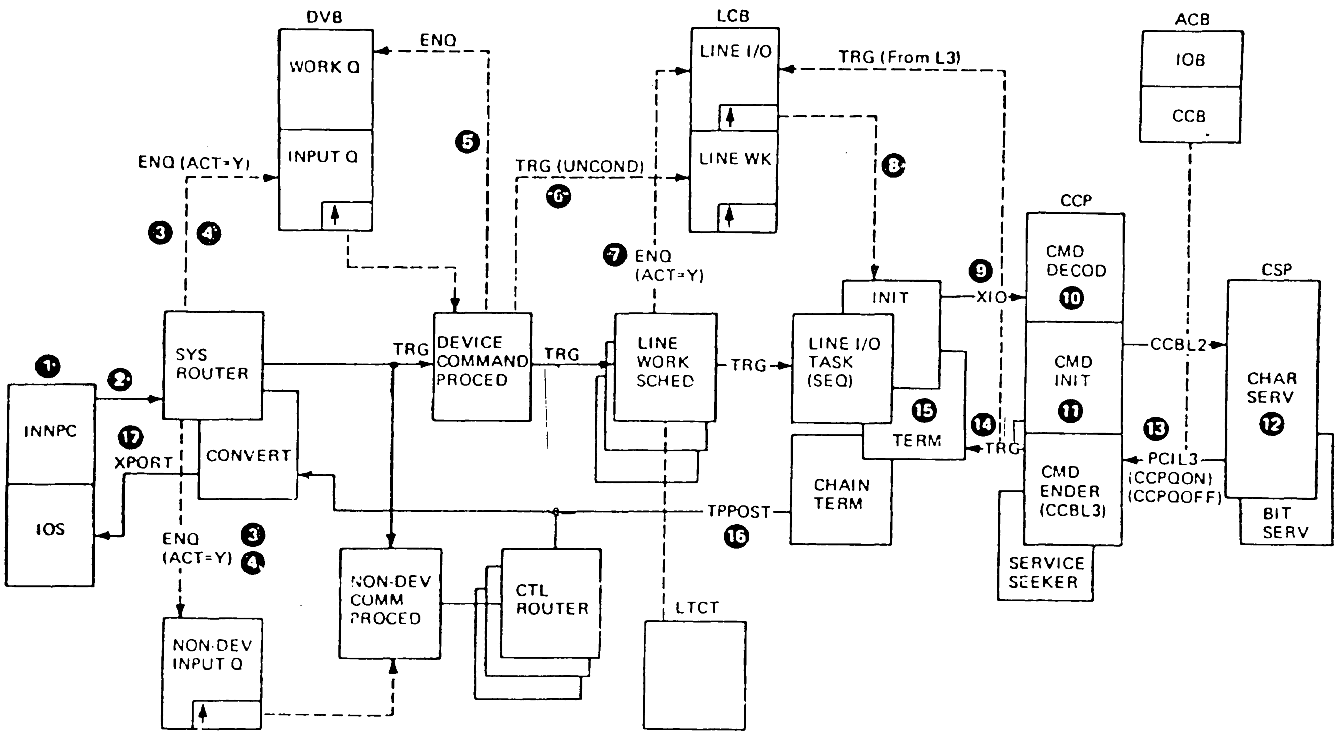

Figure 10.2. BSC/SS Processor Flow

1. Channel IOS branches to path control.
2. Path control uses the DAF to access the SIT, SVT, and RVT in order to identify a BSC/SS resource. Path control branches to the system router, which converts the FID0 PIU to a BTU.
3. The system router enqueues the BTU to either (1) a DVB queue, or (2) if the destination is a line, to the nondevice input queue.
4. The enqueuing triggers the DVB or nondevice processor.
5. The device command processor moves the BTU to the DVB work queue.
6. The line work queue is unconditionally triggered.
7. The line work scheduler moves the BTU to the line I/O queue and selects the proper subtask sequence.
8. The line I/O task sequences the initiators and terminators via branches.
9. The initiators issue the XIO.
10. Command decode selects the command initiator.

11. The command initiator sets up the line ICW, CCB, and CCBL2.
12. CSP handles the transmission or receive.
13. The end of the command at level 2 initiates a PCI to level 3 to the command ender.
14. The line I/O queue is triggered.
15. The terminator subtask (or error routine, if necessary) returns control to the line I/O task sequence (item 8).
16. The chain terminator TPPOSTs the BTU to the convert routine to change the BTU to a FID0 PIU.
17. The convert routine XPORTs the PIU to the channel queue to be sent to the host.

Refer to the following publication for additional information:

IBM 3704 and 3705 Communications Controllers, Network Control Program/VS, Program Logic Manual (SY30-3013). See:

Appendix B:	BSC/SS Control Command Cross Reference Table
Appendix C:	Sequences of I/O Subtasks for BSC/SS Processing in Level 5
Appendix D:	Command Sequence Charts (identifies the CCBL2 and CCBL3 Routines)
Appendix F:	Online tests

Block-handler Routines

The BSC/SS processor provides three points at which user-written routines or IBM-supplied routines may be executed for the manipulation of data. These data manipulation routines are called block-handler routines (BHR).

Block-handler routines are data-oriented. The routines are given access to blocks that contain data at the following times:

1. Before the output is sent to a device: blocks accompany 'write' commands only (execution points 1 and 2).
2. After input is received from a device: blocks accompanying commands of 'read', 'invite', 'write conversational', 'write with read modifier' (in read phase), 'write with contact and read modifiers' (in read phase) (execution points 2 and 3).
3. When the block is in error (execution points 2 and 3).

Block-handler routines (BHR) are grouped into units called block-handlers (BH). A block-handler is designated at NCP generation to be executed at one of the three points listed below. Up to three block-handlers (a possibility of one for each execution point) are grouped to form a block-handler set (BHS). Each device can be assigned a BHS at NCP generation. The BHS can be flagged as initially executable or it can be activated later by a control command. A control command can also be used to assign a BHS dynamically to a device, or to change the BHS association specified at NCP generation.

The BCU being edited by the BHRs resides on a different queue at each of the three points of execution. At point 1, the BCU is on the device input queue (DVB); at point 2, the BCU is on the line input/output queue; at point 3, the BCU is on the point 3 BHR queue extension to the DVB.

The three execution points are as follows:

Point 1

The point 1 entry is used for BCUs to be written to the BSC or SS device. Point 1 BHRs are executed after the BTU is received from the host and before the line has been scheduled for the I/O operation. The device command processor is the interface with the BHR mechanism for point 1. No BCUs are in error at this point.

Point 2

Point 2 BHR is invoked during execution of certain initiator and terminator subtasks by the BHEXIT macro. Since BHRs are data-oriented, the only initiator subtask that invokes BHRs at point 2 is the write initiator. All terminator subtasks that represent termination of a read command invoke BHRs at this point. The subtasks include the common read terminator, the display service-seeking terminator, and the chain terminator (read entry point only). The following subtasks invoke BHRs at point 2 for BCUs that are in error: the 'write terminator', the 'read terminator' routine, the 'common read terminator', the 'display service-seeking terminator', the 'contact terminator', and the 'error retry' routine.

Point 3

The TPPOST routine is the interface for point 3. At this point all processing on the BCU has been completed and the BCU is ready to be sent to the host. The TPPOST routine puts the BCU on the point 3 BHR queue of the DVB. When the BHRs have completed processing, an XIO macro instruction is used to send the BCU to the host.

Block-handler Control Blocks Figure 10.3 shows the relationships of the control blocks associated with block-handler routines. The paragraphs that follow explain the function of each block. The BHR extension to the DVB exists for those devices specified to have block-handler routines associated with them. The extension reserves space for a pointer to the block-handler set. If a block-handler set is defined at generation time, the address of a block-handler set is assigned at the same time. The pointer is changed if the block-handler set for this device is changed via an optional control command. The BHR extension also contains the QCB for a BHR queue, which is used at point 3 if the device macro is coded with an operand of PT3EXEC=YES.

The block-handler set (BHS) contains pointers to the block-handler driver tables (BHD) that are to be executed at each of the three points (or the BHS entry contains zero if no block-handler is defined for a point).

The block-handler driver table (BHD) defines the block-handler routines that are to be executed for each block-handler. Each entry contains a pointer to the BHR, control information related to the BHR, and a one-byte parameter or an address to a parameter list.

A block-handler set table (BST) has an entry for each block-handler set (BHS) defined in the NCP. Each entry contains control flags, plus the address of the block-handler set (BHS). This table is used in modifying block-handler sets associated with particular devices.

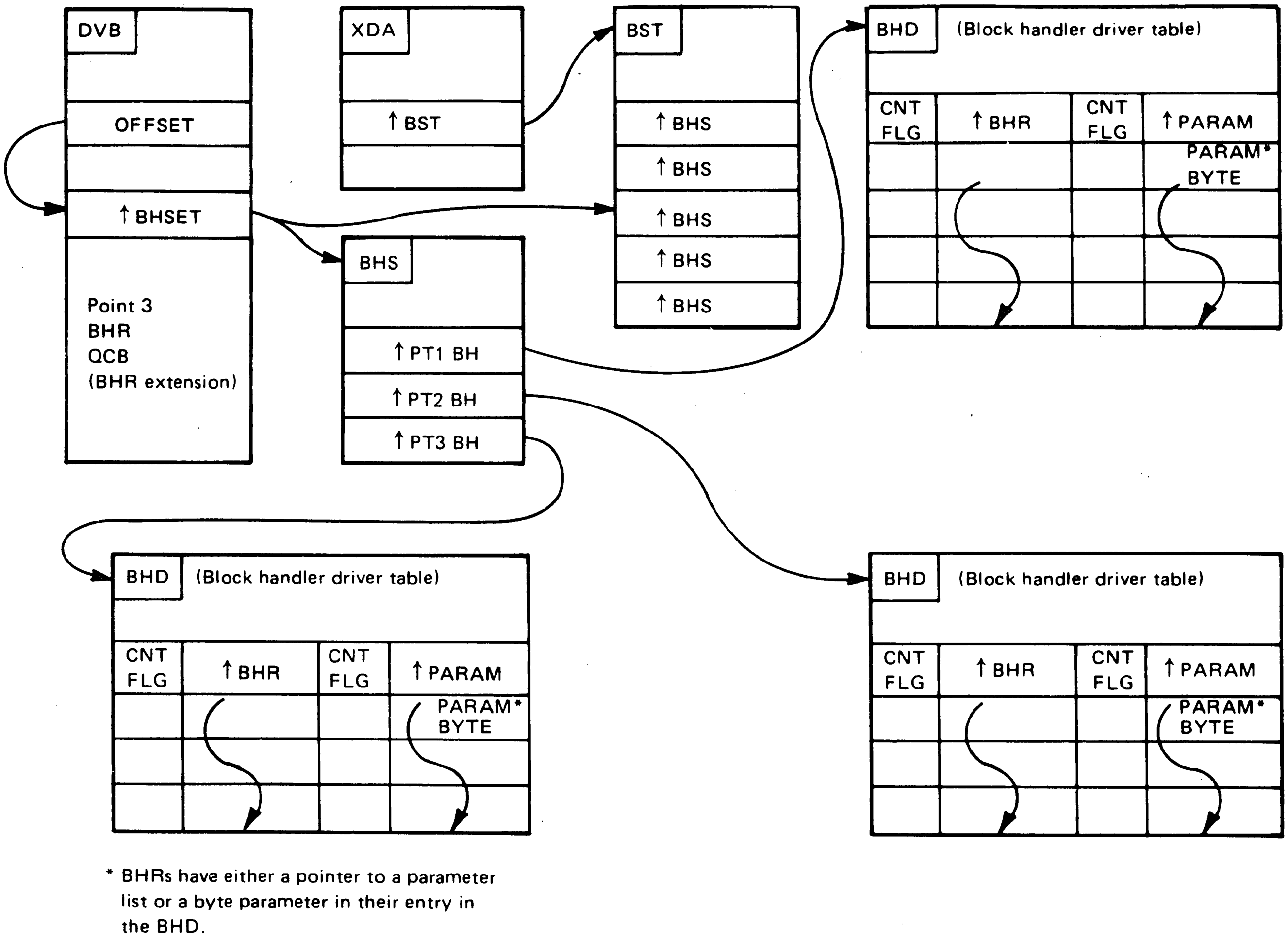

Figure 10.3. BSC/SS BLock-handler Control Block Relationships

The following information provides more detail on the control blocks used with block-handlers and block-handler routines.

BHR Extension to the DVB

Terminals that have BHRs associated with them have a DVB with a BHR extension. This extension contains a pointer to the block-handler set (BHS) for this terminal, and also contains the point 3 BHR QCB (if PT3EXEC=YES was coded on the CLUSTER, TERMINAL, or COMP macro).

The DVB address relating to BHRs is:

X‘28’ Offset to BHR extension

The two fields in the block-handler extension to the DVB (BHR) are:

X‘00’ Pointer to the block-handler set (BHS)

X'04' Point 3 QCB

Block-handler Set (BHS)

The block-handler set (BHS) contains pointers to the one, two, or three block-handlers that are to be executed for this set. If a block-handler is not defined, the address pointer contains zeros. If a block-handler is defined, the pointers are addresses of a block handler driver table.

The following are the fields of a block-handler set:

X'00' Pointer to point 1 BHD

X'04' Pointer to point 2 BHD

X'08' Pointer to point 3 BHD

Block-handler Driver Table (BHD)

The block-handler driver table (BHD) defines the block-handler routines (time and date, edit, and user block-handler) that are to be executed, at a point, for a block-handler. The BHD is created by the STARTBH, DATE-TIME, EDIT, UBHR, ENDBH macro grouping. Each entry in the BHD contains a pointer to the BHR, control information, and parameter information.

The BHD contains one entry for each coded macro of DATETIME, EDIT, or UBHR, with the following fields:

X'00' Pointer to the block-handler routine

X'04' Pointer to parameter list for edit

The parameter list for the EDIT BHD contains the following fields:

X'00' Backspace character

X'01' Flags

X'02' Record descriptor masking configuration

Block-handler Set Table (BST)

The block-handler set table (BST) contains an entry for each block-handler set defined in the NCP generation. The address of the BST is in XDA at X'7F4'. This table is used for dynamic block-handler set association.

The block-handler set table (BST) contains one entry for each block-handler set (BHS) defined. Each entry contains an address of a block-handler set (BHS).

User Block-handler Routines User block-handler routines are identified in a block-handler by the UBHR macro. The user routine must be preassembled in the library identified by the USERLIB (and QUALIFY) operand of the BUILD macro.

The user routine is written with 3704 and 3705 communications controller instructions, assembler instructions, and internal macros. *IBM 3704 and 3705 NCP Instructions and Supervisor Macros* (SR20-4512) provides user coding information.

At entry to a user routine, register 2 contains the address of the QCB which contains the block to be processed. The NCP abends if a valid BCU is not available when the user code returns control to the NCP.

Multiple Terminal Access (MTA)

The multiple terminal access (MTA) feature of the network control program allows the communications controller to communicate with several common types of SS terminals over a single switched network port. When a terminal calls in over a line identified at NCP generation as an MTA line, the NCP identifies the type of terminal and the transmission code being used, and initializes the line's adapter control block (ACB) accordingly. The NCP then communicates with the terminal normally until the session ends.

The types of terminals supported by MTA are:

- IBM 2741
- Western Union TWX
- IBM 2740 transmit control (with or without checking)
- IBM 1050
- IBM 2740 basic (with or without checking)

The NCP terminal identification procedure always tests for terminal type (of terminals defined in the NCP system), in the order listed above.

Multiple Terminal Access (MTA) Control Blocks In order to identify the type of terminal and to establish the appropriate operating parameters (speed and transmission code) once the terminal is identified, the NCP uses several tables. This section describes the function and relationships of these tables.

MTA GROUP, LINE, and TERMINAL

The actual line interface definition requires a GROUP, LINE, and TERMINAL macro definition. The TERMINAL macro has an operand of TERM=MTA. These macros create the line group table (LGT), line control block (LCB), adapter control block (ACB), and device base control block (DVB) which are used for the initial connection. The incoming MTA call is received using these control block definitions.

MTA List

The MTA list is a table of one-byte entries, each entry representing one of the five terminal types that can call in on an MTA line. The list consists of a group of entries for each combination of terminal types on MTA lines in the telecommunication subsystem. The entries in a group are always in the order in which the NCP tests for terminal type. The following values represent the given terminal type in the MTA list:

X'00'	2741
X'01'	TWX
X'02'	2740 transmit control
X'03'	1050
X'04'	2740 basic

A group of entries is delimited by a byte containing the value X'FF'.

The MTA identification routine uses the MTA list to determine which types of terminals to test for. The initial offset into the list is in IOBSTOFS field of the line's IOB.

The multiple terminal access (MTA) identification routine uses the MTA list as an index into the code for testing the terminal type. The routine sets a timeout at the beginning of each test. If the terminal does not respond before the timeout expires, the MTA routine is reentered and the next MTA list entry is used to test for the next terminal type. If the delimiter entry X'FF' is reached, the routine disconnects the line and ends the command.

The sequence for terminal checking occurs in the following manner:

The MTA identification routine checks for both 2741 and TWX at the same time (if either terminal type is specified in the MTA list). The routine sends an EOT to the device and sets a timeout. If the terminal responds with an EOA, the routine assumes the terminal is a 2741. If leading graphics are present and the response is the WRU character, the routine assumes a TWX terminal.

To test for 2740 transmit control, the MTA routine sends a slash-space (/b) character sequence. If the terminal responds with an EOA, the routine assumes the terminal is a 2740 with transmit control. If the response is a NAK, a 1050 terminal is implied.

To test for a 1050, the MTA routine must poll the terminal. The routine fetches and sends the polling characters for each device on the 1050 polling list until it receives a response. If the response ends in EOT, the routine disconnects the line and ends the command.

The 2740 basic test consists of transmitting a BID message to the terminal. The message, sent in both EBCD and correspondence code, prints at the terminal and indicates that the operator is to enter the MTA sign-on sequence (covered later in this manual).

When the terminal type (but not the transmission code) has been identified, the control pointer from the original line group table (LGT) can be updated to the stand-alone line group table (LGT). The two tables were created by GROUP macros defined for each MTA terminal type.

As an example, consider a telecommunication subsystem with three MTA lines. One line has all five terminal types; the second has 2741 and 1050 terminals; and the third has TWX, 2740 transmit control, and 1050 terminals. The MTA list for this NCP has the format shown in Figure 10.4.

Offset	MTA List		
0	X'00'	Entries for line 1	IOBSTOFS=X'00'
1	X'01'		
2	X'02'		
3	X'03'		
4	X'04'		
5	X'FF'	Delimiter	
6	X'00'	Entries for line 2	IOBSTOFS=X'06'
7	X'03'		
8	X'FF'	Delimiter	
9	X'01'	Entries for line 3	IOBSTOFS=X'09'
A	X'02'		
B	X'03'		
C	X'FF'	Delimiter	

Figure 10.4. MTA List Format

The MTA list is defined by MTALIST macros coded for NCP generation.

MTA Line Group Table (LGT)

A GROUP macro, creating a line group table (LGT), is defined for the MTA line, plus one line-group table per MTA terminal type which calls in. The MTA identification routine initially uses the group definition associated with the MTA line. As soon as the terminal type and transmission code are identified, the pointer is changed to the specific LGT for the terminal type.

Line Control Selection Table (LCST)

The line control selection table (one per NCP) is used by the multiple terminal access (MTA) identification routine to initialize the line's character control block (CCB), once the routine has identified the type of terminal calling in. The table is also used to establish CCB parameters when the NCP calls a device on an MTA line.

The LCST may contain up to sixty-three 16-byte entries, each representing a particular set of operating parameters for some MTA device (or devices) in the telecommunication subsystem. The first entry in the LCST is used by the MTA identification routine during the identification process and does not represent a particular type of device.

The parameters in an LCST entry are those that can vary for terminal type, transmission code, or individual device. These parameters include such variables as line speed, carriage return rate, translate table addresses, size of print line, and error retry limits.

A series of MTALCST macros is coded for NCP generation to define the LCST entries.

Once the MTA identification routine has identified the terminal type calling in, the routine determines which LCST entry to use by referring to a list of valid LCSTs for that terminal type. One list exists for each possible combination of terminal type and transmission code. The terminal operator must enter a sign-on sequence to identify the correct terminal/code list and entry within the list. Each list contains up to ten halfword pointers to valid LCSTs for the combinations which that list represents. The sign-on sequence may include two identical digits, representing the number of the list entry to be used, relative to the beginning of the list for this terminal/code type. If the number is omitted, the routine assumes the first entry is to be used.

As an example, assume that the terminal has been identified as a 1050. The terminal operator enters sign-on sequence, /"44 CR EOB. The /" is unique for each type code, which identifies the code as BCD. Now that the terminal type and code are known, the digits '44' indicate that the MTA identification routine is to use entry 4 in the list of LCST pointers for 1050 BCD terminals. All 1050 terminals are checked terminals; however, the EOB, rather than EOT, provides the definition of a terminal with checking verses nonchecking features. Once the appropriate pointer to an LCST entry is located, the control block fields can be filled in. The relationship is shown in Figure 10.5.

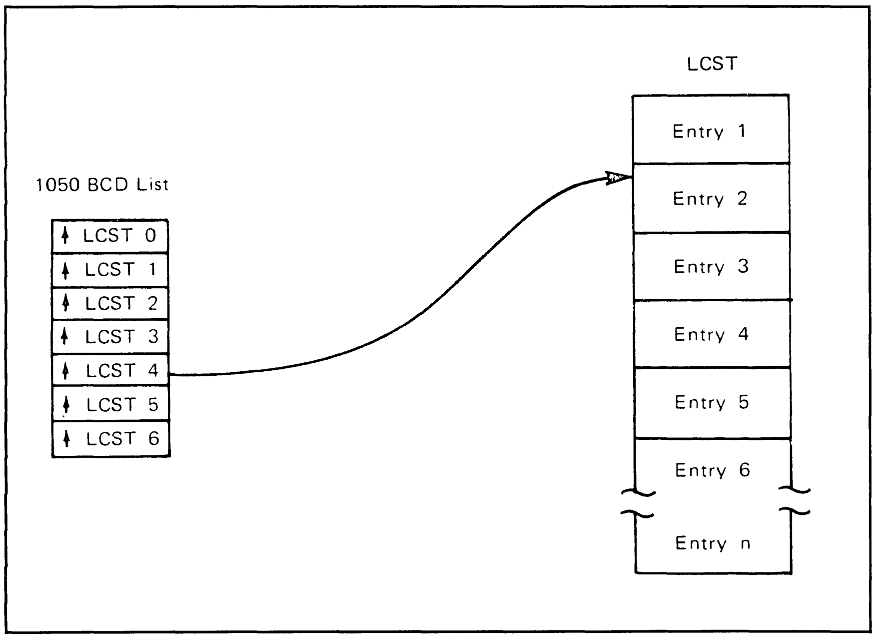

Figure 10.5. LCST Entry Relationships

The relationship of the pointers in the list to the LCST entries which the pointers represent is established during NCP generation, according to the parameters specified for the MTA lines and devices. MTATABL macros are used to define these lists for NCP generation.

1050 Polling List

When testing for a 1050 terminal, the MTA identification routine must poll the terminal. For this purpose, a single polling list exists in the NCP for all 1050 terminals on all MTA lines. The polling list contains a halfword pointer to the polling characters for each such device. The MTA identification routine goes through each entry in the polling list until it receives a positive response from the device or until it exhausts the list. In the latter case, the routine assumes that the device is not a 1050 and goes on to test for the next terminal type. Each polling attempt which is not successful requires a polling timeout; if many sets of 1050 polling characters are in the list, with a one-minute timeout per polling attempt, the sign-on could take excessively long.

The entries in the 1050 polling list are specified with the MTAPOLL NCP generation macro.

BSC/SS Processor Summary

The BSC/SS processor is that part of the NCP that processes requests for BSC or SS resources. The first BSC/SS processor component to receive control is the BSC/SS system router.

When 'path control out' passes a PIU to the BSC/SS system router, the system router branches to the PIU/BTU converter to convert the PIU to a BCU. From this point the BSC/SS processor component flow is as follows:

Upon receiving the BCU from the converter, the system router enqueues the BCU for the device command processor or nondevice command processor for line-oriented control commands. The device command processor passes control to the line work scheduler. The line work scheduler selects a chain of subtasks and passes control to the line I/O task. The communications control program gets control and sets up for the start of level 2 activity. The character-service program (or the bit-service routines, if present) transfers data between the NCP buffers and the communications scanner. Upon completion of the level 2 activity, control returns to the CCP and then to the line I/O task. The BCU is converted to a FID0 PIU and XPORTed to the channel queue.

BSC/SS Processor Quiz

The storage listing in Appendix C is required for the following quiz. Do not refer to the solution in Appendix B until you have answered all of the questions.

1. The BSC/SS processor receives what type of FID from 'path control out'?
2. What is the FID converted to before BSC/SS processing modules may process the buffers?
3. The system router enqueues the buffers from the host on one of two types of queues. What are the queues?
4. How many BSC and/or SS lines are defined in Appendix C?
5. How many BSC and/or SS resources are defined in Appendix C?
6. Using the formatted buffers in Appendix C, analyze the buffers from X'19E24' through X'19F08', X'19FA0' through X'1A414', and X'1A5DC' to determine PIU origin, destination, command, and element affected by the command.
7. Using the formatted buffers in Appendix C, analyze the buffers from X'1B208', X'1B2EC' through X'1B3D0', and X'1B4B4' to determine PIU origin, destination, command, and element affected by the command.

Criterion

If you missed more than two questions, you should review this topic.

Service Aids and Diagnostics

Objective

Upon completion of this topic, the student should be able to identify the NCP service aids and diagnostic aids.

Purpose of Service Aids and Diagnostics

Service aid facilities and panel support routines provide the means for isolating and/or interrogating NCP failures. The NCP supports several functions to aid in problem determination and diagnostics. This topic explores the aids and diagnostic facilities available with the NCP, describes their implementation, and discusses their output.

For additional information, refer to *IBM Advanced Function NCP and Related Host Traces* (SR20-4510).

Dynamic Panel Display

The NCP allows you to display dynamically the following types of information on the 3704/3705 control panels:

- Communication scanner interface control word (ICW)
- Contents of external registers
- Contents of a halfword of 3704/3705 controller storage

Dynamic display functions are selected by setting the display/function select and storage address/register data switches on the panel and pressing the interrupt key.

NCP uses a group of routines to process level 3 interrupts from the panel. The panel control block (PCB) is the common data area for all panel routines.

The panel routines are provided in one of the following:

Guide to Using the IBM 3704 Communications Controller Control Panel (GA27-3086)

Guide to Using the IBM 3705 Communications Controller Control Panel (GA27-3087)

Line Test

The line test facility allows the user to address, poll, dial, and transmit to or receive from a terminal. Testing is initiated by entering variables through the 3704/3705 control panel. The status of the line resulting from the test is displayed in the panel lights. The line test control block (LTS) contains control information for panel test operations. See one of the two control panel guides mentioned above (under 'Dynamic Panel Display') for operating instructions.

The line test facility is included in the NCP whenever SS or BSC devices are defined for the generation.

Address Trace

The address trace facility allows the user to select any combination of up to four registers and storage halfwords, contents of which are to be recorded each time data is loaded from or stored into a specified 3704/3705 storage address at a specified program level. The NCP records the trace data in a trace table within controller storage. The contents of the trace table can be displayed on the control panel or examined in a dump listing. The address trace control block (ATB) has the address trace control information within it.

Operating procedures are given in one of the two control panel guides identified above (see the section on 'Dynamic Panel Display').

The TRACE operand of the BUILD macro specifies whether the address trace facility is to be included in the NCP and specifies the size of the trace table.

Channel Adapter Trace

Channel adapter trace is an optional diagnostic and debugging aid that stores certain fields from the channel control block, type 2 or 3 channel adapter (CHB) or channel operations block, type 1 or 4 channel adapter (COB), in a trace table. An entry is made for channel adapter spurious interrupts, channel adapter level 3 interrupts, and level 1 interrupts caused by channel adapter errors.

The trace is included in the NCP by reassembling SYSCG006 and specifying the TRACE operand which indicates the number of trace entries desired.

This trace cannot be activated or deactivated, only included or excluded. The trace involves significant overhead, especially with a type 1 or type 4 channel adapter. The trace should not be included except in cases where a suspected or known channel error must be isolated.

Line Trace

The line trace facility is a diagnostic and debugging aid that stores certain fields from the ICW (or bit control block) each time a level 2 interrupt occurs on a designated communication line. Line trace is activated and deactivated by network control commands from the host. Only one line at a time may be traced. If the line is duplex, both legs are traced. The fields traced are the line control definer (LCD), primary control field (PCF), secondary control field (SCF), and the parallel data field (PDF). A timer field is also included. The line trace control block (LTCB) contains pertinent information about the trace.

An explanation of the line trace fields is available in *Advanced Function NCP and Related Host Traces* (SR20-4510).

Error and Statistic Recording

NCP has the ability to create records for the miscellaneous data recorder (MDR). There are two types of records:

1. MDR records are built in the check-record pool (CRP) for adapter checks, program checks and unresolved interrupts, then are and sent to the host on the next level 3 timer interrupt.
2. MDR records are dynamically built for line statistics and permanent line errors and are immediately sent to the host.

Online Tests

The online tests (a user selected option) provide the IBM customer engineer with online maintenance capability. Testing is performed by one or two routines depending on the type of resource to be tested. The online line tests (OLLT) check BSC/SS lines and SDLC links. The online terminal test (OLTT) checks BSC/SS devices. Both tests are controlled by the terminal online test executive program (TOLTEP) which resides in the host.

To include this facility in NCP, code the OLT=YES operand in the BUILD macro.

Abend

Programming errors detected during execution of supervisory and nonsupervisory code of the NCP cause an abnormal end of program execution. The examination of abend codes within an NCP dump can help in locating the error. The optional abend service aid extends detection of programming errors to the NCP supervisor, thus causing the program to terminate before a supervisor error can be propagated into nonsupervisory portions of the program. The abend service aid stores an abend code at X'760' in controller storage and the controller is hard-stopped.

To include the abend service aid for programming levels 1 through 4 of the NCP, code ABEND=YES in the BUILD macro.

Appendix A

PIU Command Sequence

PIU Command Sequences

The following SRL references may be of assistance:

IBM 3704 and 3705 Program Reference Handbook (GY30-3012), Section 4: NCP Network Commands

IBM 3704 and 3705 Communications Controllers, Network Control Program/VS Program Logic Manual (SY30-3013), Appendix A: Network Commands

This section describes the command sequence to be followed for activation and session initiation for switched SDLC. Each entry in the 'switched' sequence is marked with an asterisk; you can determine the 'nonswitched' SDLC sequence by skipping those entries. In addition, this section identifies the general processing within the NCP and specifies the NCP control block changes made to record command processing.

If the correct operation takes place, the following command sequence occurs on a PIU trace:

1. Initialization complete -- from NCP physical services to SSCP

   This message, generated at the completion of NCP initialization, is placed on the channel intermediate queue of the channel control block (COB or CHB) for transmission as the first message to the host. No response is requested.

2. Activate physical -- from SSCP to NCP physical services

   This command is enqueued on the physical services block (PSB) connection point manager (CPM-OUT) queue. The processing sets the 'session established' bit to 1 in PSBPSTAT. A response is provided to SSCP from PSB CPM-IN and XPORTed to the channel intermediate queue of the channel control block (CHB or COB).

   Configuration restart specifies a warm or cold restart. The cold restart results in a new initial program load or in initialization of a loaded NCP which has not been previously activated. Cold restart results in commands being directed only to the network addresses which are to be activated (ISTATUS=ACT). A warm restart to a previously activated NCP has a network command addressed to every network resource: an 'activate' to network addresses to be initially active, and a 'deactivate' to each network address to be inactive. The active or inactive status of each network addressable resource is maintained in the disk configuration data set of VTAM. A warm restart allows an NCP with partitioned emulation program (PEP) to be restarted without affecting the emulation lines by reloading.

   The response in the request/response unit (RU) contains the name of the NCP. This name is the NEWNAME operand value from the BUILD macro, which was obtained from the physical services block (PSB) at PSBLDID.

NOTE: This command completes the first level of sessions between SSCP and NCP.

3. Start data traffic -- from SSCP to NCP physical services

   This command is enqueued on the PSB CPM-OUT queue. The 'data flow enabled' bit and 'data flow active' bits of PSBPSTAT are set to 1. A response is provided to SSCP from PSB CPM-IN and XPORTed to the channel intermediate queue of the CHB or COB.

4. Set control vector -- from SSCP to NCP physical services

   This command is optional (from NCP requirements) during activation. In the request unit (RU) byte 5, a value of 01 identifies this as the command which provides the time and date to be stored in the time and date control block. A response from PSB CPM-IN is sent to the host via the channel queue.

5. Set control vector -- from SSCP to NCP physical services

   This command is optional (from NCP requirements) during activation. In the request unit (RU) byte 5, a value of 05 identifies this as the command which changes the channel delay from the user-coded value of zero for the duration of the bring-up sequence. A response from NCP CPM-IN is sent to the host.

   The same command is used to change the channel delay back to the original value after initialization is complete; the present VTAM support of this command resets the delay after the 'activate link' command responses are received.

6. Activate link -- from SSCP to NCP physical services

   A command for each defined link is sent to NCP physical services CPM-OUT. Each command identifies the network address of the link to be activated in the request unit (RU) field of RU1NA. The PSB CPM-OUT triggers the link control block (LKB) which defines the link. The processing initiates the link scheduler code (level 3 NCP code) to search the service order table for that link for work to be done. For a nonswitched link, the modem is enabled. For a switched link, the modem is not enabled until a 'dial' or 'answer' command is processed. The active status of the link is provided in the LKB in LKBSTAT. The task address at LKB LKWTSKEP is changed from the run initiator to the address of the run terminator. (The change of the task address is referred to later under 'dial', 'answer', and 'contact' commands.) Finally, when processing is complete, the PSB CPM-IN is triggered to send a response to SSCP.

   The link scheduler is now active for this line definition. A timer queue is initiated for the PAUSE operand value before the link scheduler searches the service order table (SOT) for work to be performed. If the link scheduler completes a pass through the service order table in less than PAUSE value time, the LKB is placed on the timer queue. Service is suspended on this link until the time value expires or outbound data in enqueued for this link.

A negative response to an 'activate link' command normally indicates a modem problem, as only the 'enable' is processed on the link interface.

An activate line command to a BSC/SS line is followed by a set mode command for each device on the line. If the line is not multipoint, a buffer is allocated for input to the DVB work QCB. The BSC/SS BTU commands of Invite, Contact, Read, Write, and Discontact are valid.

7. * Answer or dial -- SSCP to physical services CPM-OUT (switched line only)

   On a switched link the line must be enabled for answering incoming calls or provided with a telephone number for outgoing calls. Either command is logical following an 'activate link' command. The 'dial' or 'answer' is addressed to physical services with the link identified in the request unit (RU) field of RU1NA. The 'dial' or 'answer' request is acknowledged by physical services CPM-IN and a connection is then attempted.

   The connection for 'answer' enables the link for an incoming call. The 'dial' connection consists of using the autocall unit to dial the telephone number provided in the 'dial' command request unit (RU), starting at RU byte 9. When the connection is established, an SDLC command of 'exchange ID' (XID) is transmitted to the physical unit with an address of FF (general poll). The XID response provides the terminal ID, and the LKB task at LKWTSKEP (run terminator task) is triggered. The task determines that a connection has been made, triggers physical services CPM-IN to send an 'off-hook' command to SSCP, and restarts the link scheduler run initiator.

   The terminal ID is a 48-bit value with the following fields:

0	Reserved
x	Physical unit type (1 or 2)
00	Reserved
xxx	ID block, hardware by device type (example: 3790 006)
xxxxx	ID number, hardware or control program specified

   The 'dial' or 'answer' status is indicated by bit settings in the LKB field of LKBSWST.

   If a failure occurs during a callin or dial callout, the NCP physical services creates an 'inoperative' command with the failing link network address identified in the request unit (RU) field of RU1NA. An explanation of the 'inoperative' command is covered later in this appendix.

8. * Off-hook -- physical services to SSCP (switched link only)

   'Off-hook' informs the SSCP that a physical connection has been established as a result of an 'answer' or 'dial' command. The network address of the link is carried in the request unit (RU) at RU1NA, and the terminal ID received by the SDLC XID response is sent in the RU in bytes 5-10. No response is requested by physical services.

9. * Set control vector PU -- SSCP to physical services (switched link only)

   The original definition of the physical unit on this switched link was given to provide an unformatted control block for any switched physical unit calling in or being called. The 'set control vector PU' (RU byte 5 with a value of 3) provides the values for the CUB control block. The data provided to initialize the control block starting at RU byte 6 is as follows (see Appendix A of PLM):

byte 6	SDLC station address
byte 7	Physical unit type
byte 8	Reserved
byte 9	MAXOUT value
byte 10	PASSLIM value
byte 11	Immediate or deferred error recovery
byte 12-13	Reserved
byte 14-15	MAXDATA value

   Physical services initializes the CUB control block and sends an acknowledgement to SSCP.

10. Contact -- from SSCP to NCP physical services

    The 'contact' command is addressed to NCP physical services PSB CPM-OUT. The network address to be contacted is provided in the request unit (RU) at RU1NA. The common unit physical block (CUB) is located and the 'set normal response mode' bit at CUBSSCP is set to 1. The PSB CPM-IN sends a response to SSCP acknowledging the PIU, but not acknowledging that the device was contacted.

    The link scheduler, which was started for this link by the 'activate link' command, placed the LKB on a timer queue. When the timer interrupt occurs, the link scheduler searches the CUBs on that link for work. Each CUB is initially defined as being in the disconnect mode (CUB field of CUBSSCP) and the poll skip flag at CUBSSCF is on. Normal servicing is still indicated as being disconnected; however, the link scheduler looks for command processing after the normal servicing sequence.

    When the 'set normal response mode' bit is found, the link scheduler sends an SDLC command of SNRM on the link to the device defined by the CUB. If a timeout occurs before a response, the 'set normal response' bit is left 'on'. With an SNRM bit 'on', an attempt is made to contact one of the CUBs on this link each time this link is serviced for 'contact poll' commands. If a response is received to the SDLC SNRM, the LKB task at LKWTSKEP of the LKB is triggered. This task is the run terminator task set up by the 'activate link' command. The 'run terminator' triggers the PSB CPM-IN to send in the 'contacted' command from NCP PSB to SSCP. Also, the link scheduler is restarted (as if a new 'activate link' were issued), and again the task address of the run terminator is in the LKB task address.

NOTE: If the physical unit contacted is type 4 (remote NCP), the bring-up sequence depends upon the response to the SNRM SDLC command. If 'request initialization' (RQI) was received, the 'load initial', 'load data' (repeated), 'load final' take place. The 'contact' command is retried until an SNRM response of 'nonsequenced acknowledgement' (NSA) is received. When an NSA is received, initialization of the remote begins with the first item of this list ('activate physical' to the remote NCP physical services).

11. Contacted -- NCP physical services to SSCP

    The 'contacted' command was initiated by a 'nonsequenced acknowledgement' (NSA) SDLC reply from a physical unit as a response to the 'set normal response mode' (SNRM). This command provides the network address of the physical device contacted in the request unit (RU) at RU1NA.

    This information sent to SSCP allows the physical unit to be sent the next command (an 'activate physical') to establish the next level of session.

12. Activate physical -- SSCP to CUB physical unit process queue

    The 'activate physical' command is enqueued to the CUB physical unit process queue. This command is the first command not addressed to NCP physical services and is the first which may be sent on a link to a physical unit. If the device is a type 2 physical unit, the command is transmitted to the physical unit. If the device is a type 1 physical unit, the command is processed by the NCP and is not sent to the physical unit.

    The processing of the command results in setting the 'processing session initiating request' bit of CUBSTAT in the CUB control block to 1. The command format is modified from FID1 to FID2 and placed on the CUB link outbound queue (CUBLOBH); this is the queue searched by the link scheduler (started by an 'activate link' command) for data to be transmitted to the physical unit.

    When the command has been processed by the physical unit and the response received by the link scheduler polling the physical unit, the response is enqueued on the CUB link inbound queue, triggering the CUB link inbound task. The task converts the PIU from FID2 to FID1 and checks for the type of response. If a positive response is received, the 'processing session initiation request' bit is set to 0, and the 'session established' bit is set to 1 in CUBSTAT of the CUB. If a negative response is received, the 'processing session initiation request' bit is set to 0. The response is XPORTed to the channel queue to be sent to SSCP.

    The response request/response unit (RU) contains the name of the control program generation name for type 2 physical units.

    For the type 1 PU, the 'session established' bit is set to 1 by the physical unit processing queue task, and the response to SSCP is created by the NCP.

NOTE: This command completes the second level of session (SSCP/CUB).

13. * Assign network addresses -- SSCP to physical services (switched link only)

The logical unit definitions for a switched SDLC link are created by the LUPOOL macro, and the network addresses assigned are the highest addresses in the NCP; that is, the last entries in the resource vector table (RVT). The logical units are not assigned to any switched link or physical unit at generation time. The CUB has a switched extension of four bytes which contains the maximum count of entries and an address pointer to a logical unit vector table (LUV). The definition on the PU macro of MAXLU creates the LUV and pointer to the LUV. This command initializes the LUV with the addresses of LUBs from the LUPOOL.

The fields in the 'assign network addresses' request unit are:

bytes 3-4	Network address of the physical unit
byte 5	Number of LU addresses to be assigned
byte 6	X'80'
bytes 7-n	Network (LU) addresses to be assigned

The number of addresses to be assigned may not exceed the entries in the LUV table (MAXLU operand of PU), and the addresses of LUs assigned are allocated from available entries in the logical unit pool (LUPOOL). When the logical unit block (LUB) address entry is provided in the LUV, the address pointer to the CUB is provided at LUBCUB field in the LUB.

Physical services builds a response to SSCP when the command has been processed and the network addresses have been assigned in the LUV.

14. * Set control vector LU -- SSCP to physical services (switched link only)

The 'set control vector LU' command to NCP physical services provides the LU network address in the request unit (RU). A separate 'set control vector LU' command must be processed for each logical unit (LUB) to be used during a switched connection.

The command provides the following data:

byte 6 - LUB network address

byte 7 - n pacing count

byte 8 - m pacing count

byte 9 - Dispatching priority of APPL/LU CPM-OUT task (BATCH operand of LU)

The logical unit block (LUB) is now initialized with appropriate definitions and pointers which are generated for nonswitched LUBs.

15. Activate logical -- SSCP to LU/SSCP process queue

    The 'activate logical' command is enqueued on the LU/SSCP process queue of the logical unit control block (LUB). The LUB CPM-OUT task checks the command type, turns the 'processing activate logical' bit to 1 in LUBCPSET of the LUB, converts the command from FID1 to FID2 (or FID3), and places the command on the CUB link outbound queue for the link scheduler to find and transmit. Except for SDLC 3270, an 'activate logical' is processed by the link-attached physical unit. All commands for the SDLC 3270 are processed by the network control program.

    The PIU response to polling the physical unit is enqueued to the CUB link inbound queue. The CUB link inbound task dequeues the FID2 (or FID3), converts it to a FID1, and branches to the CPM-IN task of LU/SSCP to process the input. A positive response requires the 'processing activate logical' bit to be set to 0 and the 'session established' bit to be set to 1 in LUBCPSET of the LUB. The response is then XPORTed to the channel queue to be sent to SSCP in the host.

    NOTE: This command completes the third level of sessions (SSCP/LU). No additional session is started until an application program is connected to be logical unit.

16. Initiate self -- from LU to SSCP (Logical unit initiated logon only)

    The 'initiate self' command is received from the polled physical unit and placed on the CUB link inbound queue. The CUB link inbound task dequeues the PIU, converts the FID2 or FID3 to FID1, and determines whether the PIU is from a defined LU which has a LU/SSCP session. The PIU is XPORTed to the channel queue to be sent to SSCP. No processing occurs. The host receives the PIU and processes the request. The request unit (RU) contains (1) the name of the application (VTAM APPL statement label, TCAM message handler label) to which logical unit wants to be connected, or (2) text used as an entry to the interpret table.

    The 'initiate self' is required only if the connection is initiated from the network logical unit. A host application initiates the connection with a 'bind' command.

17. Bind command -- host application to LU

    The 'bind' command is sent from the host application to the APPL/LU process queue of the logical unit block (LUB). The APPL/LU process queue task dequeues the request, sets to 1 the 'processing bind' bit of LUBAPSET of the LUB, converts the FID1 to FID2 or FID3, and places the PIU on the CUB link outbound queue for the link scheduler to transmit.

    The response to 'bind' command is received and queued on the CUB link inbound queue. The CUB link inbound task dequeues the FID2 or FID3, converts it to a FID1, and branches to the APPL/LU CPM-IN for processing. If the response is positive, the 'processing bind' is set to 0 and 'session established' bit is set to 1 in the LUBAPSET field of the

LUB. The response is sent to the host application by XPORTing it to the channel intermediate queue of the CHB or COB.

NOTE: This command completes the fourth and last level of sessions (application/LU).

18. Start data traffic -- from host application to LU

The 'start data traffic' command is required by specific logical unit types. If 'start data traffic' is not required, data and subsequent commands immediately follow the 'bind' command.

The 'start data traffic' and all subsequent commands and data transfers are placed on the LUB APPL/LU process queue for converting from FID1 to FID2 or FID3 and placed on the CUB link outbound queue for transmission to the SDLC terminal. If the device is a type 1 physical unit, the sequence number processing is performed by NCP. If the PIU is text, the PIU is checked for VPACING from the host, and for PACING control from NCP to the logical unit. Data traffic is also segmented as required by the MAXDATA operand of the PU.

All text and data from the logical unit are received and placed on the CUB link inbound queue, converted to FID1, processed to identify which logical unit (or the CUB) the FID1 is from to locate the LUB control block, and processed by type. A command or command response is processed as required and text is checked for PACING responses or requirements to carry a VPACING response on to the host. After required processing, the PIU is placed on the channel queue for transmission to the host.

NOTE: Two things which may not be initially apparent may occur during data transfer:

(1) An 'isolated pacing response' (IPR) is sent from devices to the NCP, or from the NCP to the host. These IPR responses have the FME/RRN bits of 0, but pacing bit of 1 to request more data. This condition occurs whenever a outbound PIU carries a pacing request without requiring an FME/RRN response.

(2) A pacing response resets the pacing counter. Therefore, if pacing of (2,1) is coded, the first PIU carries the pacing request. If the response is returned before a second PIU is processed, the second PIU becomes a 'first' PIU (carrying the pacing request) because the pacing counter was reset. If data traffic is not grouped in some manner (as in chaining), it appears that pacing is (1,1).

This command completes the initialization of the session. The last level of session could be ended by a 'terminate self' from the network logical unit followed by an 'unbind' or an 'unbind' initiated by the host application. A new 'bind' from a different or the same host application could initiate a new fourth level session without ending other levels. The switched support requires a full sequence of 'unbind', 'deactivate logical', 'free network addresses' (free LUBs to LUPOOL and clear LUV pointers), 'deactivate physical', 'discontact' (which sends SDLC 'set normal response mode' (SDRM) for a 'nonsequenced acknowledgment' (NSA), and 'abandon connection'; and then a new 'dial' or 'answer' command may be issued for that switched interface.

A PIU trace provides the above sequence, and a formatted control block dump of NCP provides the bit settings to identify the levels of commands in process or completed.

19. Inoperative -- from NCP physical services to SSCP

    The 'inoperative' command may be required at any point in the command sequences after the 'activate link' command. After the 'activate link' command, an 'answer', 'dial', or (nonswitched link) 'contact' command is issued by SSCP. If the request is for a valid network address in proper sequence, that command is immediately acknowledged with a positive response. The method of indicating an abnormal end or break in the processing on a link is for NCP physical services to send an 'inoperative' command to SSCP.

    The 'inoperative' command identifies the network address in the request unit (RU) field of RU1NA of the link or resource. If the current command is to the link, the link address is carried in the request unit (RU) field of RU1NA and byte 5 of the RU contains a value of X'02'. If the current command is to a resource on the link, the resource network address is in RU1NA and byte 5 of the RU contains a X'01'.

    No response is requested from SSCP; however, the host is expected to provide a sequence of commands to terminate, retry, or alternate path alternatives to the failing resource.

Appendix B

Problem Solutions

The following answers to the problems are based upon the generated values in the NCP dump listing in Appendix C.

Network Control Program Supervisor

1. No program levels were active.
2. General register 0 of groups 0, 1, and 2 are a halfword beyond an EXIT instruction, X'B840'. Group 3 register 0 is a fullword beyond the X'B840' and SVC qualifier; however, the true indicator of an active level 5 task is at X'0685', bit 1.

Channel Adapter IOS

1. The channel block is at X'6F48'. The halfword address pointer is at X'0772'. The address is at offset X'00' of the control block; the prefix area begins at X'6F18'.
2. A CHB, identified by XXCXTCHB (or XXCXTCOB for COB) at the address minus 8 of the channel control block (X'6F40').
3. Yes, at X'6F30' (CHB-X'18') in the channel hold queue is the last buffer sent to the host. No buffers are in the intermediate queue.
4. 04, from X'6FA0' at CHB plus X'58'.
5. 20 (X'0014'), from X'6FB8' at CHB plus X'70'.
6. 28 (X'001C'), from X'6FBC' at CHB plus X'74'.
7. 156 (X'009C'), from X'6FB4' at CHB plus X'6C'

Path Control

1. X'17A40', the SIT is immediately before the SVT, with a count of entries equal to the count of the maximum subareas plus 1. The address of the SIT is in the extended halfword direct addressables (HWE) at offset X'48'.
2. X'17A50', the SVT is immediately before the RVT, with a word of zeros as the first entry. All nonfirst entries are nonzero. The SVT end delimiter is a X'FF' in the leftmost byte of the last entry. The address of the SVT is in the extended halfword direct addressables (HWE) at offset X'4C'.
3. X'17A64', the address of the RVT minus 2, is at X'07E8'. The minus 4 offset of the RVT address is at X'17A60'.
4. 4, from the mask at X'0693' or X'0694'.
5. X'65', from the RVT count field at X'17A60'.

6. 3, from the leftmost bits used for identifying a subarea based on the network address of any resource, such as the PSB plus X'24', SCB or CUB plus X'1C', or LUB plus X'24'.
7. A contact command for a type 4 PU is the same as for a type 1 or 2 PU. The command is addressed to NCP physical services via SIT, SVT, and RVT with the type 4 PU 'local' RVT address in the RU1NA field.
8. An 'activate physical' command for a type 4 PU is addressed to the NCP Physical Services of the 'remote' NCP, using SIT and SVT control blocks to locate the SCB link outbound queue.

Network Control Program Physical Services

1. The PSB is at X'19C60'. The address is the first RVT entry.
2. NCP04M from X'19C8C', PSB plus X'2C'.
3. Yes, bit 0 is 1 at X'19C8A', PSB plus X'2A'.
4. Yes, bit 1 is 1 at X'19C8A', PSB plus X2A'.
5. 8, from X'19C88', PSB plus X'28'.
6. X'17', from address X'19C82', PSB plus X'22'. The counter contains the sequence number previously received (X'0016'.
7. No, from offset 0 of the PSB at X'19C60'.
8. The following identifies the buffer address and command within the buffer:

X'19CA8'	'Initialization complete' from NCP to SSCP
X'19CF4'	'Activate physical' to NCP from SSCP
X'19D40'	'Start data traffic' to NCP from SSCP
X'19D8C'	'Set control vector' (time and date, RU byte 5, 01)
X'19DD8'	'Set control vector' (channel delay to 0, RU byte 5, 05)
X'19E24'	'Activate link' (network address X'3001')
X'1A628'	'Activate link' (network address X'303C')
X'1A674'	'Answer' (network address X'303C')
X'1A6C0'	'Set control vector', channel delay reset (RU byte 5, 05)
X'1A70C'	'Contact' (network address X'3019')
X'1A758'	'Contact' (network address X'302D')
X'1A7A4'	'Contact' (network address X'302F')
X'1A8D4'	'Contacted' (network address X'302F')

9. The first buffer contains an 'activate link' response. X'1A038' in RH byte 0 has a value of X'8F' with bit 5 indicating sense data is included. The four bytes of sense data are inserted following the RH and prior to

the RU. The system sense data of X'8002' is specified in *IBM 3704 and 3705 Program Reference Handbook* (GY30-3012), Section 8: NCP# Exception Responses as Path error: link failure. The network address of the link was X'3005' on the request, but has been overlaid in the response. A PIU trace would show sequence number X'0005' outbound with the network address and the response could be associated by the sequence number.

X'1A168' is an additional indicator of the link failure. The record maintenance statistics identifies the network address of X'3005' as the failing resource.

Boundary Network Node

1. The CUBs at X'1836C' and X'1879C' have outstanding 'set normal response mode' (SNRM) from a 'contact' command. At offset X'1F' is a value of X'41'; the 4 is the 'set normal response mode' bit.
2. The CUBs at X'18830' and X'18C1C' are the CUBs with an established SSCP/PU session. At offset X'4C' is a value of X'80'; the leftmost bit is the 'session established' bit.
3. At CUB plus X'18' is the SDLC addressing/polling character. The CUB at X'18830' has an SDLC addressing/polling character of X'C5'. The CUB at X'18C1C' has an SDLC addressing/polling character of X'C4'.
4. The network address is at the CUB plus X'1C'. The network address of the CUB at X'18830' is X'302F', subarea 3 and element 2F. The network address of the CUB at X'18C1C' is X'303D', subarea 3 and element 3D.
5. The LUB of the X'18C1C' CUB is at addresses X'18CEC'. The LUB pointer can be located by the address at CUB plus X'54', at X'18C70'. The value X'14018C74' specifies a maximum of X'14' entries in the LUV at X'18C74'. The only active LUB in the LUV table ics at X'18CEC'.
6. Yes, the LUB has a session with SSCP with a X'80' value at offset X'28' at address X'18D14'.
7. No, the LUB does not have a host/LU, indicated by a value of X'00' at address X'18D18'.
8. Pacing is (2,2), (1,1), and (7,7); the pacing values are at offset X'2E' and X'2F'.
9. The identifier of the LUB local address is at offset X'31'. The local address of the LUBs are 1, 2, and 3.
10. To be understood, the following buffers must be grouped according to channel allocation. In groups of four buffers per allocation, the first channel buffers are: X'1A758', X'1A920', X'1AA50', X'1AC18', and X'1AD94'.

    The following entries identify the buffer address and command:

    X'1A7F0' 'Activate physical', network address X'302F'

X'1A83C' 'Activate Logical' (network address X'3030)

X'1A920' 'Activate Logical' (network address X'3031)

X'1A96C' 'Activate Logical' (network address X'3032)

X'1A9B8' 'Activate Logical' (network address X'3033)

X'1AA04' 'Activate Logical' (network address X'3034')

X'1AA50' 'Activate Logical' (network address X'3035')

X'1AA9C' 'Activate Logical' (network address X'3036')

X'1AAE8' 'Activate Logical' (network address X'3037')

X'1AB34' 'Bind' (network address X'3030')

X'1AB80' Unformated user data (network address X'3030')

X'1ABCC' Unformated user data (network address X'3030')

X'1AC18', X'1AC64', X'1ACB0', and X'1ACFC' Unformated user data, network address X'3030. This is one PIU in four buffers. This is the first PIU transmitted to the terminal. The format is FID2 (buffer offset X'12'). The terminal type is an SDLC 3270 which requires NCP to process all commands. Therefore, the previous commands were all in FID1 format with the response in the same buffer used for the request.

11. The following buffers provide the sequence for a switched SDLC sequence.

X'1A628' 'Activate link' (network address X'303C')

X'1A674' 'Answer' (network address X'303C')

X'1B040' 'Off hook' (network address X'303C')

X'1ADE0' 'Set control vector' (network address X'303D')

X'1AE2C' 'Contact' (network address X'303D')

X'1B0D8' 'Contacted' (network address X'303D')

X'1AE78' 'Activate physical' (network address X'303D', buffer offset X'0E' for FID2)

X'1B254' 'Activate physical' response

X'1B124' 'Assign network addresses' (to NCP physical services). The CUB is identified at offset X'1E' as X'303D'. At offset X'20' is a value of 01 to specify only one address being assigned. At offset X'22' is the assigned network address of X'303E'. This is a very unusual network address assignment of consecutive network addresses. The last defined CUB in the generation was the switched CUB with address X'303D', and the first available LUB in the LUPOOL had an address of X'303E'.

X'1B170' 'Set control vector LU' (network address X'303E')

X'1B1BC' 'Activate LU' (network address X'303E')

X'1B2A0' 'Activate logical' response

Local/Remote Link

1. Type 4 physical unit.
2. Station control block (SCB).
3. 'Nonsequenced acknowledgement' (NSA) or 'request initialization' (RQI).

Data Link Control

1. Activate link to NCP physical services with the link network address in the RU at RU1NA.
2. (1) The SERVLIM operand specifies the number of passes through the service order table (SOT) before suspending data transfer for command processing. (2) If the pass through the service order table occurs in less time than the value specified in the PAUSE operand, link service is suspended until the pause expires or until outbound data is queued for transmission.
3. In the character control block (CCB) at CCBL2 (offset X'24').
4. In the character control block (CCB) at CCBL3 (offset X'4C').
5. In the link XIO block (LXB) at offset X'20'.
6. In the link XIO block (LXB) at offset X'1C'.
7. The active links are LKBs at X'18B0C', X'18BE8' and X'18CC4', identified at offset X'12' with a value of X'80'.
8. The switched links are the LKBs at X'18BE8' and X'18CC4', identified at the offset X'13' bit value of x1xx xxxx.
9. Half-duplex or full-duplex (one or two scanner addresses) for the link is identified in the ACB (CCB) at offset X'53', CCBTYPE. A value of x1xx xxxx specifies two line adapters. The LKBs at X'18BE8' and X'118CC4 are half-duplex. The LKBs at X'18B0C' is full-duplex.

BSC/SS Processor

1. FID0
2. BTU
3. (1) Device queue of a device block (DVB) or (2) the nondevice input queue (pointer at HWE plus X'2C').
4. Seven lines, indicated by the leftmost bit of 1 in the resource vector table.
5. Fifteen devices, indicated by the second bit of 1 in the resource vector table.

6. The buffers are grouped in INBFRS quantity (4) at the following buffer addresses:

   X'19E24', X'19FA0, X'1A1B4', X'1A2E4 and X'1A414

   Buffers X'19F54', X'1A0D0 through X'1A168' were not allocated initially to the channel. The buffers contain the following information:

X'19E24'	'Activate link' (network address X'3001')
X'19E70'	'Set mode' (network address X'3002')
X'19EBC'	Allocated for input on the DVB work QCB for resource X'3002'. The DVB at X'17C48' contains a shifted address of X'67AF', or a nonshifted value of X'19EBC'. The chain pointer of buffer X'19EBC' contains X'0000'.
X'19F08'	'Activate link' (network resource X'3003')
X'19F54'	Allocated as the first buffer in the system save area pool. At address X'075C' in the halfword direct addressables (XDH) is a value of X'67D5' shifted address of buffer X'19F54'.
X'19FA0'	'Set mode' (network resource X'3004')
X'19FEC'	Allocated for input on the DVB work QCB for resource X'3004'
X'1A038'	'Activate link' (network resource X'3005'). This command failed as indicated exception response in RH byte 1 xxx1xxxx. Sense data is included as indicated in RH byte 0 xxxxx1xx. Four bytes of sense data is inserted following the RH. The RU is offset four bytes. This buffer contains the response, which does not include the resource identifier. In a PIU trace the request and response is associated by the sequence number field. A 'record maintenance statistics' PIU is generated by the NCP for SSCP to record the failure (see buffer X'1A168').
X'1A084'	'Activate link' (network resource X'3008')
X'1A0D0'	Work buffer for 'activate link' failure (buffer X'1A038').
X'1A11C'	Work buffer for 'activate link' failure (buffer X'1A038')
X'1A168'	'Record maintenance statistics for 'activate link' failure initiated in buffer X'1A038' for network resource X'3005'.
X'1A1B4'	'Set mode' (network resource X'3009')
X'1A200'	Allocated for input on the DVB work QCB for resource X'3009'

X'1A24C'	'Activate line' (network resource X'300A')
X'1A298'	'Set mode' (network resource X'300B')
X'1A2E4'	BSC/SS 'contact' command (network resource X'300B')
X'1A330'	'Activate link' (network resource X'300C')
X'1A37C'	'Set mode' (network resource X'300D')
X'1A3C8'	BSC/SS 'invite' command in BCU (BTU) format (network resource X'300D').
X'1A414'	'Activate link' (network resource X'300E'). This command failed as indicated exception response in RH byte 1 xxx1xxx. Sense data is included as indicated in RH byte 0 xxxx1xx.

7. The buffers contain the following information:

X'1B208'	Unformatted user data, attempted logon from X'300B'
X'1B2EC'	'Reset immediate' (network resource X'300B')
X'1B338'	'Write with end of transmission' (network resource X'300B')
X'1B384'	'Read transmission' (network resource X'300B')
X'1B3D0'	'Write with end of transmission' (network resource X'300B')
X'1B4B4'	'Record maintenance statistics' (network resource X'300B')

```
     DUMP BUF=Y,FORMAT=Y,FROMADDR=200                                  TEST0000
THE FOLLOWING IS A DUMP OF A LOCAL NCP


PSB (PHYSICAL SERVICES BLOCK)     19C60


        00000000 00A80000 0080F5D0 00000000    00000000 00A80000 0880F460 00000000   *..........5...............4.....*
        00060016 30001000 0008C000 D5C3D7F0    F4D44040 00000000 02000000 00000000   *............NCP04M  ............*
        00000000                                                                     *................................*


SIT (SUBAREA INDEX TABLE)     17A40


        00020001 0000000C 00000000 00000000                                          *.........................4.....*


SVT (SUBAREA VECTOR TABLE)     17A50


        00000000 80A17A60 48E06F18                                                   *.........................4.....*
        FF040404 00650016 00219C60                                                   *.........................4.....*
```

```
CHANNEL CONTROL BLOCK    06F48

     PREFIX AREA    06F18

        00000000 00A80000 0080F460 00000000    00000000 00000000 0001B3D0 0001B3D0    *..........4.......................*
        00800000 0001B598 E7E7C3E7 E3C3C8C2                                            *........XXCXTCHB.M  ............*

     COMMON AREA    06F48

        00000008 00000000 00000000 00005251    716C6FD8 002A0000 040021E1 20000000    *.....................Q............*
        001A3198 02200000 00008FD2 00008FE8    00008FFC 0001B5E4 00000000 0001B5E4    *...........K...Y.......U........U*
        0001B67C 0001B598 0001B598 7168716C    71747168 001400F9 04040001 00000000    *.........................9........*
        0001B3D0 000A0014 6FD06FD4 009C009C    00140013 001C0002 000004B0 00000000    *...........M.......................*

     OUT CW AREA    06FC8

        C3E7C3C1 D6C3E6C1 10706FBD 4051B3DE    10706FBD 4051B216 00000000 00000000    *CXCAOCWA.... ....... ............*
        00000000 00000000 00000000 00000000    00000000 00000000 00000000 00000000    *................................*
        00000000 00000000 00000000 00000000    00000000 00000000 00000000 00000000    *................................*
        00000000 00000000 00000000 00000000    00000000 00000000 00000000 00000000    *................................*
        00000000 00000000 00000000 00000000    00000000 00000000 00000000 00000000    *................................*
        00000000 00000000 00000000 00000000    00000000 00000000 00000000 00000000    *................................*
        00000000 00000000 00000000 00000000    00000000 00000000 00000000 00000000    *................................*
        00000000 00000000 00000000 00000000    00000000 00000000 00000000 00000000    *................................*
        00000000 00000000 00000000 00000000    00000000 00000000 00000000 00000000    *................................*
        00000000 00000000 00000000 00000000    00000000 00000000 00000000 00000000    *................................*
        00000000 00000000 00000000 00000000    00000000 00000000 00000000 00000000    *................................*
        00000000 00000000 00000000 00000000    00000000 00000000 00000000 00000000    *................................*
        00000000 00000000 00000000 00000000    00000000 00000000 C3E7C3C1 C9C3E6C1    *........................CXCAICWA*
        90F9B5A6 90F9B5F2 9121B634 A121B680    00000000 00867760 09000E20 16800302    *.9...9.2..........................*
        0A820000 00867456 00000000 00000000    00000000 00000000 00000000 00000000    *................................*
        00000000 E8E80000 00000200 0001C000    00000000 00000000 00019738 00000000    *....YY............................*
        00000000 00000000 00000000 00000000    00000000 00000000 00000000 00000000    *................................*
        00000000 00000000 00000000 00000000    00000000 00000000 00000000 00000000    *................................*
        00000000 00000000 00000000 00000000    00000000 00000000 00000000 00000000    *................................*
        00000000 00000000 00000000 00000000    00000000 00000000                      *................................*

     IN CW AREA    07160

        C3E7C3C1 C9C3E6C1 90F9B5A6 90F9B5F2    9121B634 A121B680                      *CXCAICWA.9...9.2................*
```

RESOURCE VECTOR TABLE 17A60 0066 ENTRIES

0000 TYPE 00 PTR 19C60

START-STOP AND/OR BSC RESOURCES:

0001	TYPE 84	PTR 17C94	0002	TYPE 5C	PTR 17C48	0003	TYPE 84	PTR 17D2C
0004	TYPE 5C	PTR 17CE0	0005	TYPE 80	PTR 17E18	0006	TYPE 58	PTR 17D88
0007	TYPE 58	PTR 17DD0	0008	TYPE 84	PTR 17EC0	0009	TYPE 5C	PTR 17E74
000A	TYPE 84	PTR 17F58	000B	TYPE 5C	PTR 17F0C	000C	TYPE 84	PTR 17FF0
000D	TYPE 5C	PTR 17FA4	000E	TYPE 80	PTR 182F8	000F	TYPE 50	PTR 18074
0010	TYPE 58	PTR 180CC	0011	TYPE 58	PTR 1811C	0012	TYPE 58	PTR 1816C
0013	TYPE 58	PTR 181BC	0014	TYPE 48	PTR 1820C	0015	TYPE 50	PTR 18250
0016	TYPE 58	PTR 182A8						

SDLC RESOURCES:

0018	TYPE 80	PTR 18B0C	0019	TYPE 60	PTR 1836C	001A	TYPE 08	PTR 183C0
001B	TYPE 08	PTR 183F4	001C	TYPE 08	PTR 18428	001D	TYPE 08	PTR 1845C
001E	TYPE 08	PTR 18490	001F	TYPE 08	PTR 184C4	0020	TYPE 08	PTR 184F8
0021	TYPE 08	PTR 1852C	0022	TYPE 08	PTR 18560	0023	TYPE 08	PTR 18594
0024	TYPE 08	PTR 185C8	0025	TYPE 08	PTR 185FC	0026	TYPE 08	PTR 18630
0027	TYPE 08	PTR 18664	0028	TYPE 08	PTR 18698	0029	TYPE 08	PTR 186CC
002A	TYPE 08	PTR 18700	002B	TYPE 08	PTR 18734	002C	TYPE 08	PTR 18768
002D	TYPE 60	PTR 1879C	002E	TYPE 08	PTR 187F0	002F	TYPE 60	PTR 18830
0030	TYPE 08	PTR 18884	0031	TYPE 08	PTR 188C4	0032	TYPE 08	PTR 18904
0033	TYPE 08	PTR 18944	0034	TYPE 08	PTR 18984	0035	TYPE 08	PTR 189C4
0036	TYPE 08	PTR 18A04	0037	TYPE 08	PTR 18A44	0038	TYPE 60	PTR 18A84
0039	TYPE 08	PTR 18AD8	003A	TYPE 84	PTR 18BE8	003B	TYPE 64	PTR 18B40
003C	TYPE 84	PTR 18CC4	003D	TYPE 64	PTR 18C1C	003E	TYPE 0C	PTR 18CEC
003F	TYPE 0C	PTR 18D2C	0040	TYPE 0C	PTR 18D6C	0041	TYPE 0C	PTR 18DAC
0042	TYPE 0C	PTR 18DEC	0043	TYPE 0C	PTR 18E2C	0044	TYPE 0C	PTR 18E6C
0045	TYPE 0C	PTR 18EAC	0046	TYPE 0C	PTR 18EEC	0047	TYPE 0C	PTR 18F2C
0048	TYPE 0C	PTR 18F6C	0049	TYPE 0C	PTR 18FAC	004A	TYPE 0C	PTR 18FEC
004B	TYPE 0C	PTR 1902C	004C	TYPE 0C	PTR 1906C	004D	TYPE 0C	PTR 190AC
004E	TYPE 0C	PTR 190EC	004F	TYPE 0C	PTR 1912C	0050	TYPE 0C	PTR 1916C
0051	TYPE 0C	PTR 191AC	0052	TYPE 0C	PTR 191EC	0053	TYPE 0C	PTR 1922C
0054	TYPE 0C	PTR 1926C	0055	TYPE 0C	PTR 192AC	0056	TYPE 0C	PTR 192EC
0057	TYPE 0C	PTR 1932C	0058	TYPE 0C	PTR 1936C	0059	TYPE 0C	PTR 193AC
005A	TYPE 0C	PTR 193EC	005B	TYPE 0C	PTR 1942C	005C	TYPE 0C	PTR 1946C
005D	TYPE 0C	PTR 194AC	005E	TYPE 0C	PTR 194EC	005F	TYPE 0C	PTR 1952C
0060	TYPE 0C	PTR 1956C	0061	TYPE 0C	PTR 195AC	0062	TYPE 0C	PTR 195EC
0063	TYPE 0C	PTR 1962C	0064	TYPE 0C	PTR 1966C	0065	TYPE 0C	PTR 196AC

```
LCB    17C94    0001

         00000000 1CA80000 0080CFC0 00000000    00000000 00000000 18A80000 0A40D3B0   *.............................. L.*
         00000000 00007210 8800128C 61017C48    00000000 01100000 01000200 01000000   *................................*
         00013001 40000000 00017C48 67FB67FB    00A00000 00000000                     *.... ...........................*

      ACB    07210

         008D0082 00000000 00000000 02000000    00000000 00000000 5F250000 03000000   *................................*
         FF000000 4C901680 79390980 0000C080    08480000 77600001 00F40000 00000000   *..........................4.....*
         04000000 09000E00 02800000 4D500300    204D0E00 00000100 0A820000 01004E00   *................................*
         008D0082                                                                     *................................*

      LGT    07760

         1D2A6A86 6A2C6E48 CECA8AC0 4847100A    00007C03 02020000 1C261F37 7C342F2F   *................................*
         6E6D405D FF3D003E 010D2C5E 370E004F    4C7F6140                              *.. .............. .....4.....*


LCB    17D2C    0003

         00000000 1CA80000 0080CFC0 00000000    00000000 00000000 18A80000 0A40D3B0   *.............................. L.*
         00000000 00007270 8800128C 61017CE0    00000000 01100000 01000200 01000000   *................................*
         00013003 40000000 00017CE0 02020000    00017DB4 00017DFC                     *.... ...........................*

      ACB    07270

         008D0082 00000000 00000000 00000000    00000000 00000000 5F4B0000 01000000   *................................*
         FF000000 4C901680 793F0980 0000C080    084A0000 77600001 00F40000 00000000   *..........................4.....*
         04000000 09000E00 02800000 4D500300    204D0E00 00000100 0A820000 01007900   *................................*
         008D0000                                                                     *................................*

      LGT    07760

         1D2A6A86 6A2C6E48 CECA8AC0 4847100A    00007C03 02020000 1C261F37 7C342F2F   *................................*
         6E6D405D FF3D003E 010D2C5E 370E004F    4C7F6140                              *.. .............. .....4.....*


LCB    17E18    0005

         00000000 1CA80000 0040CFC0 00000000    00000000 00000000 08A80000 0A40D3B0   *......... ..................... L.*
         00000000 000072DC 10001490 42000000    00000000 01200000 16000200 06010000   *................................*
         00003005 00000000 00A00000 00017D78    02030200 00000200                     *................................*

      ACB    072D0

         008D0000 000006F4 00000000 00000000    00000000 00000000 5F860000 00017D78   *.......4........................*
         FF000000 39E61680 794501FF 00004800    0854F400 732E0001 0000009C 00000000   *.....W............4.............*
         04000000 0A000F00 03000000 4C040800    204B0004 00000100 0A820000 0100082A   *................................*
         6A866A2C                                                                     *................................*

      LGT    0732E
```

```
         082A6A86 6A2C6E48 C8C08AC0 48471005    7A087C03 03020000 1C261F37 7C342F2F   *........H.......................*
         6E6D405D FF3D003E 010D2C5E 370E004F    4C7F6140                              *.. ................ ............*


LCB      17EC0      0008

         00000000 1CA80000 0080CFC0 00000000    00000000 00000000 18A80000 0A40D3B0   *............................. L.*
         00000000 00007364 8800128C 41017E74    00000000 01100000 00000000 00000000   *................................*
         00013008 40000000 00017E74 00000000    80A00000 00000000                     *.... ...........................*

    ACB      07364

         008D0080 00000000 00000000 00000000    00000000 00000000 5FB00000 60000000   *................................*
         FF000000 4C9016C0 794B0380 0000C080    084E0000 73C20001 00F40000 00000000   *.....................B...4......*
         04000000 0A000F00 2B800000 4D500200    214D0600 00000100 05820000 0100002A   *................................*
         6B026B02                                                                     *................................*

    LGT      073C2

         002A6B02 6B026B02 C0C08AC0 48471006    79C87F01 00000000 1C371F37 3D342F2F   *.................H..............*
         6E6D405D FF3D003E 7C0D2C3D 7C0E004F    4C7F6140                              *.. ................ .B...4......*


LCB      17F58      000A

         6D666D66 1CA80000 0080CFC0 00000000    00000000 5FC35FC3 18A80000 0A80D3B0   *.....................C.C......L.*
         00000000 000073F8 A000128C 41017F0C    00000000 004C0000 01000000 00000000   *.......8........................*
         0000300A 50000000 00017F0C 00000000    00A00000 00000000                     *................................*

    ACB      073F8

         00282850 0000000C 00000000 1E336D66    6CF40000 01000000 5FD60000 60000000   *.................4.......O......*
         00000000 36FC16CC 79516680 0000C080    08500000 74560101 00200000 0001B407   *................................*
         2201B598 0C001100 2B81B598 633A0200    204D6E00 99340100 0A820000 0100002A   *................................*
         6B026B02                                                                     *................................*

    LGT      07456

         002A6B02 6B026B02 C0C08AC0 48471006    79C87F01 00000000 1C371F37 3D342F2F   *.................H..............*
         6E6D405D FF3D003E 7C0D2C3D 7C0E004F    4C7F6140                              *.. ................ ............*


LCB      17FF0      000C

         00000000 1CA80000 0080CFC0 00000000    00000000 00000000 18A80000 0A40D3B0   *............................. L.*
         00000000 0000748C 8800128C 41017FA4    00000000 01280000 01000000 00010000   *................................*
         0001300C 40000000 00017FA4 0C0C9140    000180A0 0001827C                     *.... .......... ................*

    ACB      0748C

         008D0080 00000000 00000000 00000000    00000000 00000000 5FFC0000 31000000   *................................*
         FF000000 4C901700 72100680 0000C080    08520000 74EA0001 00F40000 00000000   *.........................4......*
```

```
      04000000 0B001000 2B800000 4D500200    217D0600 00000100 0A500000 0100222A    *................................*
      6B5A6BA2                                                                      *................................*

    LGT    074EA

      222A6B5A 6BA26BC2 C0C08AC0 78771106    79D8FF01 00000000 1C381F84 7C808B89    *.......B.........Q..............*
      8A8D405D 803DE085 910D9391 9140B100    3400008D                               *.. .......... ...........4......*

LCB     182F8     000E

      00000000 1CA80000 0040CFC0 00000000    00000000 00000000 08A80000 0A40D3B0    *.......... .................. L.*
      00000000 0000751C 10001490 46000000    00000000 01200000 16000300 04010000    *................................*
      0000300E 00000000 00A00000 0201803C    02090800 00000800                      *................................*

    ACB    0751C

      008D0000 000006F4 00000000 00000000    00000000 00000000 60BE0000 0001803C    *.......4........................*
      00000000 31C21640 793301FF 00004800    0888F400 75780001 0000009C 00000000    *.....B. ..........4.............*
      04000000 08C00D00 06000000 4C040700    38CD001E 00000200 00000000 4C1666D6    *...............................O*
      67CC6E48                                                                      *....H...........................*

    LGT    07578

      4C1666D6 67CC6E48 C8D484C6 C8C51A07    79F8AA03 0F0F3202 10261037 1002101F    *...O....HM.FHE...8..............*
      10701061 107C102D 3D011003 106B8888    00300000                               *................................*
```

```
DVB     17C48     0002

        67AF67AF 00A00000 00000000 04A80000    0400C810 00000000 00000000 300203A4    *................H.............*
        80017C94 00000040 00003800 60000008    01000000 00000000 11000002 00000000    *...... .......................*
        00000000 00000000 01000000 00000000    1CA80000                               *.............................O*

DVB     17CE0     0004

        67FB67FB 00A00000 00000000 04A80000    0400C810 00000000 00000000 300407A4    *................H.............*
        80017D2C 0000004C 00003800 60000008    01000000 00000000 11000000 00000000    *...... .......................*
        00000000 00000000 01000000 00000000    1CA80000                               *.............................O*

DVB     17D88     0006

        00000000 00A0000C 00000000 04A80000    0480C810 00000000 00000000 30060087    *................H.............*
        84017E18 0000003E 00000000 B0002028    00000100 0F0002C1 40000301 C1400000    *.....................A ...A ..*
        00000000 0000012C 00000000 00A00000    00000000                               *.............................O*

DVB     17DD0     0007

        00000000 00A00000 00000000 04A80000    0480C810 00000000 00000000 30070087    *................H.............*
        84017E18 0000003E 00000000 B0002028    00000100 0F0002C2 40000301 C2400000    *.....................B ...B ..*
        00000000 00000100 00000000 1CA80000    0040CFC0                               *............... .............O*

DVB     17E74     0009

        68806880 00A00000 00000000 04A80000    0400C810 00000000 00000000 300907A4    *................H.............*
        85017EC0 00000040 00003800 60000008    01000000 00000000 10000000 00000000    *...... .......................*
        00000000 00000000 01000000 00000000    1CA80000                               *.............................O*

DVB     17F0C     000B

        00000000 80A00000 00000000 04A80000    0400C810 00000000 00000000 300B07A4    *................H.............*
        85017F58 00030040 00003800 AA000008    00000000 00000000 10000000 00000000    *...... .......................*
        00000000 00000000 01000358 6D666D66    1CA80000                               *.............................O*

DVB     17FA4     000D

        00000000 00A00000 00000000 04A80000    0480C810 00000000 00000000 300D07A4    *................H.............*
        8A017FF0 00000040 00003800 31000008    00000000 00000000 10000000 00000000    *...0... ......................*
        01017A98 00001001 01000000 00000000    1CA80000                               *.............................O*

DVB     18074     000F

        00000000 00A00000 00000000 04A80000    0480C810 00000000 00000000 300F000D    *................H.............*
        CC0182F8 0000004C 00000000 B0002028    00000100 003C0540 407F7F2D 00017AA0    *...8................   .......*
        00000002 00000000 00A00000 00000000    00000000                               *.............................O*

DVB     180CC     0010

        00000000 00A00000 00000000 04A80000    0480C810 00000000 00000000 30101087    *................H.............*
        4C018074 00000044 00000000 B0002028    00000100 12000540 4040402D 00056060    *....................    .....*
```

```
         40402D00 00000000 00000000 01040000    00000000                                    *  ...........................O*

DVB      1811C     0011

         00000000 00A00000 00000000 04A80000    0480C810 00000000 00000000 30111087        *.................H.............*
         4C018074 00000044 00000000 B0002028    00000100 12000540 40C1C12D 00056060        *......................  AA.....*
         C1C12D00 00000000 00000000 01000000    00000000                                    *AA............................O*

DVB      1816C     0012

         00000000 00A00000 00000000 04A80000    0480C810 00000000 00000000 30121087        *.................H.............*
         4C018074 00000044 00000000 B0002028    00000100 12000540 40C2C22D 00056060        *......................  BB.....*
         C2C22D00 00000000 00000000 01000000    00000000                                    *BB............................O*

DVB      181BC     0013

         00000000 00A00000 00000000 04A80000    0480C810 00000000 00000000 30131087        *.................H.............*
         4C018074 00000044 00000000 B0002028    00000100 12000540 40C3C32D 00056060        *......................  CC.....*
         C3C32D00 00000000 00000000 01842000    00000000                                    *CC............................O*

DVB      1820C     0014

         00000000 00A00000 00000000 04A80000    0480C810 00000000 00000000 30143083        *.................H.............*
         4C018074 00000000 00000000 B0002020    00000100 12000540 40C4C42D 0D056060        *......................  DD.....*
         C4C42D9C 00000000 00A00000 00000000    04A80000                                    *DD............................O*

DVB      18250     0015

         00000000 00A00000 00000000 04A80000    0480C810 00000000 00000000 3015000D        *.................H.............*
         CC0182F8 0000004C 00000000 B0002028    00000100 003C05C1 C17F7F2D 00017AB8        *...8..................AA.......*
         000000C0 00000000 00A00000 00000000    00000000                                    *..............................O*

DVB      182A8     0016

         00000000 00A00000 00000000 04A80000    0480C810 00000000 00000000 30161087        *.................H.............*
         4C018250 00000044 00000000 B0002028    00000100 120005C1 C140402D 00056161        *......................AA  .....*
         40402D00 00000000 00000000 01000000    00000000                                    *  ...........................O*
```

```
LKB     18B0C     0018

        00000000 00A80000 00412088 00000000    301880A0 00000000 00000000 00000000    *................................*
        00000000 00007604                                                             *......................AA  .....*

    ACB-R  07604

        00300000 00000000 00000000 C9020000    00000000 00000000 62C30000 41018354    *............I............C......*
        040075A8 1ACC1740 75A80440 0000C480    0842F0B8 7660302B 00000000 5101AF79    *....... ... ..D...0.............*
        1281AF5C 04040051 2B040000 216A051C    389C0E41 FF801ACC C5514101             *.......................E......O*

    ACB-X  075A8

        00300000 00000000 00000000 0E000000    54A40000 00000000 62C30000 00007604    *.........................C......*
        00018360 1D961770 751C3A80 00004000    08404B18 76600001 00000000 00000000    *............. .. ...............*
        0401AD94 04040000 2B040000 1E340500    389D0E61 FF981D96 C9930001             *.......................I......O*

    LGT    07660

        8C0E217E 217E219E C4C088C6 98842000    79E80000 00000000 008D0080 00000000    *........D..F.....Y..............*
        00000000 0E000000 00000000 00000000    62FA0000                               *................................*

LKB     18BE8     003A

        00000000 00A80000 00411618 00000000    303A8060 00500000 00000000 00000000    *................................*
        00000000 00007678                                                             *................................*

    ACB-R  07678

        008D0080 00000000 00000000 0E000000    00000000 00000000 62FA0000 00018B34    *................................*
        00018B38 4C901740 76043880 00004000    08440000 76D40001 00F40000 00000000    *....... ...... ......M...4......*
        04000000 01010000 2B800000 4D500500    389C0621 00000100 00000000             *...............................O*

    LGT    076D4

        8C0E217E 217E219E C4C088C6 98842000    79E80000 00000000 00300000 00000000    *........D..F.....Y..............*
        00000000 C4220000 54A70000 00000000    63310000                               *....D...............M...4......*

LKB     18CC4     003C

        00000000 00A80000 00412088 00000000    303C8060 00C00000 00000000 00000000    *................................*
        00000000 000076EC                                                             *.....................M...4......*

    ACB-R  076EC

        00300000 00000000 00000000 C4220000    54A70000 00000000 63310000 00018C14    *............D...................*
        00018C14 1ACC1740 76780940 0000C480    08461E7E 7748002B 00000000 5101B2BF    *....... ... ..D.................*
        1281B2A0 01010051 2B840000 1E48051C    389C0A21 D6141ACC C4514100             *....................O...D......O*

    LGT    07748
```

```
8C0E217E 217E219E C4C088C6 98842000    79E80000 00000000 1D2A6A86 6A2C6E48   *........D..F.....Y..............*
CECA8AC0 4847100A 00007C03 02020000    1C261F37                              *................................*
```

```
CUB    1836C    0019

       00000000 00A80000 008103F0 00000000    00000000 00000000 C9018B0C 3019A141    *...........0............I.......*
       00800000 02000000 00000000 00000700    00070000 04000000 000A0000 00000000    *................................*
       00A80000 1F810AD0 00000000 00000300    01090000 00000000                      *...............................0*

CUB    1879C    002D

       00000000 00A80000 008103F0 00000000    00000000 00000000 C2018B0C 302DA141    *...........0............B.......*
       00800000 04000000 00000000 00000100    00010000 00000000 00000000 00000000    *................................*
       00A80000 1E810AD0 00000000 00000300    01050000 00000000                      *...............................0*

CUB    18830    002F

       00000000 00A80000 008103F0 00000000    00000000 00000000 C5018B0C 302F0001    *...........0............E.......*
       00800002 04000000 88440000 00000700    440C0000 04000000 000A0000 00000000    *................................*
       00A80000 1E810AD0 00000000 80800300    01050000 00000000                      *...............................0*

CUB    18A84    0038

       00000000 00A80000 008103F0 00000000    00000000 00000000 C3018B0C 3038A001    *...........0............C.......*
       00800000 02000000 00000000 00000100    00010000 00000000 00000000 00000000    *................................*
       00A80000 1E810AD0 00000000 00000300    01090000 00000000                      *...............................0*

CUB    18B40    003B

       00000000 00A80000 008103F0 00000000    00000000 00000000 FF018BE8 303BA001    *...........0...............Y....*
       00800000 24000000 00000000 00000000    00010000 00000000 00000000 00000000    *................................*
       00A80000 1E810AD0 00000000 00000000    00000000 14018B98                      *...............................0*

    LUVT    18B98

       00000000 00000000 00000000 00000000    00000000 00000000 00000000 00000000    *................................*
       00000000 00000000 00000000 00000000    00000000 00000000 00000000 00000000    *................................*
       00000000 00000000 00000000 00800000                                           *...............................0*

CUB    18C1C    003D

       00000000 00A80000 008103F0 00000000    00000000 00000000 C4018CC4 303D0001    *...........0............D..D....*
       00810002 22000000 44440000 00140700    44070000 00000000 00000000 00000000    *................................*
       00A80000 1E810AD0 00000000 80000300    01090000 14018C74                      *...............................0*

    LUVT    18C74

       01418CEC 00000000 00000000 00000000    00000000 00000000 00000000 00000000    *................................*
       00000000 00000000 00000000 00000000    00000000 00000000 00000000 00000000    *................................*
       00000000 00000000 00000000 00800000                                           *...............................0*
```

```
LUB     183C0     001A

        00000000 00A80000 00810A00 00000000    00000000 00A80000 08810760 00000000   *................................*
        0001836C 301A0000 00000000 00000202    00010000 00000000 00A80000 00810A00   *................................*

LUB     183F4     001B

        00000000 00A80000 00810A00 00000000    00000000 00A80000 08810760 00000000   *................................*
        0001836C 301B0000 00000000 00000101    00020000 00000000 00A80000 00810A00   *................................*

LUB     18428     001C

        00000000 00A80000 00810A00 00000000    00000000 00A80000 08810760 00000000   *................................*
        0001836C 301C0000 00000000 00000707    00030000 00000000 00A80000 00810A00   *................................*

LUB     1845C     001D

        00000000 00A80000 00810A00 00000000    00000000 00A80000 08810760 00000000   *................................*
        0001836C 301D0000 00000000 00000101    000400A2 00000000 00A80000 00810A00   *................................*

LUB     18490     001E

        00000000 00A80000 00810A00 00000000    00000000 00A80000 08810760 00000000   *................................*
        0001836C 301E0000 00000000 00000101    00052000 00000000 00A80000 00810A00   *................................*

LUB     184C4     001F

        00000000 00A80000 00810A00 00000000    00000000 00A80000 08810760 00000000   *................................*
        0001836C 301F0000 00000000 00000101    00060000 00000000 00A80000 00810A00   *................................*

LUB     184F8     0020

        00000000 00A80000 00810A00 00000000    00000000 00A80000 08810760 00000000   *................................*
        0001836C 30200000 00000000 00000101    00070000 00000000 00A80000 00810A00   *................................*

LUB     1852C     0021

        00000000 00A80000 00810A00 00000000    00000000 00A80000 08810760 00000000   *................................*
        0001836C 30210000 00000000 00000101    00080000 00000000 00A80000 00810A00   *................................*

LUB     18560     0022

        00000000 00A80000 00810A00 00000000    00000000 00A80000 08810760 00000000   *................................*
        0001836C 30220000 00000000 00000101    00090000 00000000 00A80000 00810A00   *................................*

LUB     18594     0023

        00000000 00A80000 00810A00 00000000    00000000 00A80000 08810760 00000000   *................................*
        0001836C 30230000 00000000 00000101    000A0000 00000000 00A80000 00810A00   *................................*

LUB     185C8     0024
```

```
         00000000 00A80000 00810A00 00000000    00000000 00A80000 08810760 00000000   *................................*
         0001836C 30240000 00000000 00000101    000B0000 00000000 00A80000 00810A00   *................................*

LUB    185FC    0025

         00000000 00A80000 00810A00 00000000    00000000 00A80000 08810760 00000000   *................................*
         0001836C 30250000 00000000 00000101    000C0000 00000000 00A80000 00810A00   *................................*

LUB    18630    0026

         00000000 00A80000 00810A00 00000000    00000000 00A80000 08810760 00000000   *................................*
         0001836C 30260000 00000000 00000101    000D0000 00000000 00A80000 00810A00   *................................*

LUB    18664    0027

         00000000 00A80000 00810A00 00000000    00000000 00A80000 08810760 00000000   *................................*
         0001836C 30270000 00000000 00000101    000E0000 00000000 00A80000 00810A00   *................................*

LUB    18698    0028

         00000000 00A80000 00810A00 00000000    00000000 00A80000 08810760 00000000   *................................*
         0001836C 30280000 00000000 00000101    000F0000 00000000 00A80000 00810A00   *................................*

LUB    186CC    0029

         00000000 00A80000 00810A00 00000000    00000000 00A80000 08810760 00000000   *................................*
         0001836C 30290000 00000000 00000101    00100000 00000000 00A80000 00810A00   *................................*

LUB    18700    002A

         00000000 00A80000 00810A00 00000000    00000000 00A80000 08810760 00000000   *................................*
         0001836C 302A0000 00000000 00000101    00110000 00000000 00A80000 00810A00   *................................*

LUB    18734    002B

         00000000 00A80000 00810A00 00000000    00000000 00A80000 08810760 00000000   *................................*
         0001836C 302B0000 00000000 00000101    00120000 00000000 00A80000 00810A00   *................................*

LUB    18768    002C

         00000000 00A80000 00810A00 00000000    00000000 00A80000 08810760 00000000   *................................*
         0001836C 302C0000 00000000 00000101    00130000 00000000 00A80000 008103F0   *...............................0*

LUB    187F0    002E

         00000000 00A80000 00810A00 00000000    00000000 00A80000 08810760 00000000   *................................*
         0001879C 302E0000 00000000 00000101    00010000 00000000 00000000 00000000   *................................*

LUB    18884    0030

         00000000 00A80000 00810A00 00000000    00000000 00A80000 08810760 00000000   *................................*
         00018830 30300000 80001001 80090101    00010001 00000001 00020001 00010002   *................................*
```

```
LUB     188C4     0031

        00000000 00A80000 00810A00 00000000    00000000 00A80000 08810760 00000000    *................................*
        00018830 30310000 80000000 00000101    00020001 00000000 00000000 00000000    *................................*

LUB     18904     0032

        00000000 00A80000 00810A00 00000000    00000000 00A80000 08810760 00000000    *................................*
        00018830 30320000 80000000 00000101    00030001 00000000 00000000 00000000    *................................*

LUB     18944     0033

        00000000 00A80000 00810A00 00000000    00000000 00A80000 08810760 00000000    *................................*
        00018830 30330000 80000000 00000101    00040001 00000000 00000000 00000000    *................................*

LUB     18984     0034

        00000000 00A80000 00810A00 00000000    00000000 00A80000 08810760 00000000    *................................*
        00018830 30340000 80000000 00000101    00050001 00000000 00000000 00000000    *................................*

LUB     189C4     0035

        00000000 00A80000 00810A00 00000000    00000000 00A80000 08810760 00000000    *................................*
        00018830 30350000 80000000 00000101    00060001 00000000 00000000 00000000    *................................*

LUB     18A04     0036

        00000000 00A80000 00810A00 00000000    00000000 00A80000 08810760 00000000    *................................*
        00018830 30360000 80000000 00000101    00070001 00000000 00000000 00000000    *................................*

LUB     18A44     0037

        00000000 00A80000 00810A00 00000000    00000000 00A80000 08810760 00000000    *................................*
        00018830 30370000 80000000 00000101    00080001 00000000 00000000 00000000    *................................*

LUB     18AD8     0039

        00000000 00A80000 00010A00 00000000    00000000 00A80000 08010760 00000000    *................................*
        00018A84 30390000 00000000 00000101    00010000 00000000 00A80000 00412088    *................................*

LUB     18CEC     003E

        00000000 00A80000 00810A00 00000000    00000000 00A80000 08010760 00000000    *................................*
        00018C1C 303E0000 80000000 00000101    00010000 00000000 00000000 00000000    *................................*

LUB     18D2C     003F

        00000000 00A80000 00810A00 00000000    00000000 00A80000 08810760 00000000    *................................*
        00000000 303F0000 00000000 00000000    00010000 00000000 00000000 00000000    *................................*

LUB     18D6C     0040
```

```
          00000000 00A80000 00810A00 00000000   00000000 00A80000 08810760 00000000   *.....  .........................*
          00000000 30400000 00000000 00000000   00010000 00000000 00000000 00000000   *..... ..........................*

LUB    18DAC    0041

          00000000 00A80000 00810A00 00000000   00000000 00A80000 08810760 00000000   *................................*
          00000000 30410000 00000000 00000000   00010000 00000000 00000000 00000000   *................................*

LUB    18DEC    0042

          00000000 00A80000 00810A00 00000000   00000000 00A80000 08810760 00000000   *................................*
          00000000 30420000 00000000 00000000   00010000 00000000 00000000 00000000   *................................*

LUB    18E2C    0043

          00000000 00A80000 00810A00 00000000   00000000 00A80000 08810760 00000000   *................................*
          00000000 30430000 00000000 00000000   00010000 00000000 00000000 00000000   *................................*

LUB    18E6C    0044

          00000000 00A80000 00810A00 00000000   00000000 00A80000 08810760 00000000   *................................*
          00000000 30440000 00000000 00000000   00010000 00000000 00000000 00000000   *................................*

LUB    18EAC    0045

          00000000 00A80000 00810A00 00000000   00000000 00A80000 08810760 00000000   *................................*
          00000000 30450000 00000000 00000000   00010000 00000000 00000000 00000000   *................................*

LUB    18EEC    0046

          00000000 00A80000 00810A00 00000000   00000000 00A80000 08810760 00000000   *................................*
          00000000 30460000 00000000 00000000   00010000 00000000 00000000 00000000   *................................*

LUB    18F2C    0047

          00000000 00A80000 00810A00 00000000   00000000 00A80000 08810760 00000000   *................................*
          00000000 30470000 00000000 00000000   00010000 00000000 00000000 00000000   *................................*

LUB    18F6C    0048

          00000000 00A80000 00810A00 00000000   00000000 00A80000 08810760 00000000   *................................*
          00000000 30480000 00000000 00000000   00010000 00000000 00000000 00000000   *................................*

LUB    18FAC    0049

          00000000 00A80000 00810A00 00000000   00000000 00A80000 08810760 00000000   *................................*
          00000000 30490000 00000000 00000000   00010000 00000000 00000000 00000000   *................................*

LUB    18FEC    004A

          00000000 00A80000 00810A00 00000000   00000000 00A80000 08810760 00000000   *................................*
          00000000 304A0000 00000000 00000000   00010000 00000000 00000000 00000000   *................................*
```

```
LUB    1902C    004B

       00000000 00A80000 00810A00 00000000   00000000 00A80000 08810760 00000000   *................................*
       00000000 304B0000 00000000 00000000   00010000 00000000 00000000 00000000   *................................*

LUB    1906C    004C

       00000000 00A80000 00810A00 00000000   00000000 00A80000 08810760 00000000   *................................*
       00000000 304C0000 00000000 00000000   00010000 00000000 00000000 00000000   *................................*

LUB    190AC    004D

       00000000 00A80000 00810A00 00000000   00000000 00A80000 08810760 00000000   *................................*
       00000000 304D0000 00000000 00000000   00010000 00000000 00000000 00000000   *................................*

LUB    190EC    004E

       00000000 00A80000 00810A00 00000000   00000000 00A80000 08810760 00000000   *................................*
       00000000 304E0000 00000000 00000000   00010000 00000000 00000000 00000000   *................................*

LUB    1912C    004F

       00000000 00A80000 00810A00 00000000   00000000 00A80000 08810760 00000000   *................................*
       00000000 304F0000 00000000 00000000   00010000 00000000 00000000 00000000   *................................*

LUB    1916C    0050

       00000000 00A80000 00810A00 00000000   00000000 00A80000 08810760 00000000   *................................*
       00000000 30500000 00000000 00000000   00010000 00000000 00000000 00000000   *................................*

LUB    191AC    0051

       00000000 00A80000 00810A00 00000000   00000000 00A80000 08810760 00000000   *................................*
       00000000 30510000 00000000 00000000   00010000 00000000 00000000 00000000   *................................*

LUB    191EC    0052

       00000000 00A80000 00810A00 00000000   00000000 00A80000 08810760 00000000   *................................*
       00000000 30520000 00000000 00000000   00010000 00000000 00000000 00000000   *................................*

LUB    1922C    0053

       00000000 00A80000 00810A00 00000000   00000000 00A80000 08810760 00000000   *................................*
       00000000 30530000 00000000 00000000   00010000 00000000 00000000 00000000   *................................*

LUB    1926C    0054

       00000000 00A80000 00810A00 00000000   00000000 00A80000 08810760 00000000   *................................*
       00000000 30540000 00000000 00000000   00010000 00000000 00000000 00000000   *................................*

LUB    192AC    0055
```

```
         00000000 00A80000 00810A00 00000000    00000000 00A80000 08810760 00000000   *................................*
         00000000 30550000 00000000 00000000    00010000 00000000 00000000 00000000   *................................*

LUB      192EC     0056

         00000000 00A80000 00810A00 00000000    00000000 00A80000 08810760 00000000   *................................*
         00000000 30560000 00000000 00000000    00010000 00000000 00000000 00000000   *................................*

LUB      1932C     0057

         00000000 00A80000 00810A00 00000000    00000000 00A80000 08810760 00000000   *................................*
         00000000 30570000 00000000 00000000    00010000 00000000 00000000 00000000   *................................*

LUB      1936C     0058

         00000000 00A80000 00810A00 00000000    00000000 00A80000 08810760 00000000   *................................*
         00000000 30580000 00000000 00000000    00010000 00000000 00000000 00000000   *................................*

LUB      193AC     0059

         00000000 00A80000 00810A00 00000000    00000000 00A80000 08810760 00000000   *................................*
         00000000 30590000 00000000 00000000    00010000 00000000 00000000 00000000   *................................*

LUB      193EC     005A

         00000000 00A80000 00810A00 00000000    00000000 00A80000 08810760 00000000   *................................*
         00000000 305A0000 00000000 00000000    00010000 00000000 00000000 00000000   *................................*

LUB      1942C     005B

         00000000 00A80000 00810A00 00000000    00000000 00A80000 08810760 00000000   *................................*
         00000000 305B0000 00000000 00000000    00010000 00000000 00000000 00000000   *................................*

LUB      1946C     005C

         00000000 00A80000 00810A00 00000000    00000000 00A80000 08810760 00000000   *................................*
         00000000 305C0000 00000000 00000000    00010000 00000000 00000000 00000000   *................................*

LUB      194AC     005D

         00000000 00A80000 00810A00 00000000    00000000 00A80000 08810760 00000000   *................................*
         00000000 305D0000 00000000 00000000    00010000 00000000 00000000 00000000   *................................*

LUB      194EC     005E

         00000000 00A80000 00810A00 00000000    00000000 00A80000 08810760 00000000   *................................*
         00000000 305E0000 00000000 00000000    00010000 00000000 00000000 00000000   *................................*

LUB      1952C     005F

         00000000 00A80000 00810A00 00000000    00000000 00A80000 08810760 00000000   *................................*
         00000000 305F0000 00000000 00000000    00010000 00000000 00000000 00000000   *................................*
```

```
LUB     1956C     0060

        00000000 00A80000 00810A00 00000000    00000000 00A80000 08810760 00000000   *................................*
        00000000 30600000 00000000 00000000    00010000 00000000 00000000 00000000   *................................*

LUB     195AC     0061

        00000000 00A80000 00810A00 00000000    00000000 00A80000 08810760 00000000   *................................*
        00000000 30610000 00000000 00000000    00010000 00000000 00000000 00000000   *................................*

LUB     195EC     0062

        00000000 00A80000 00810A00 00000000    00000000 00A80000 08810760 00000000   *................................*
        00000000 30620000 00000000 00000000    00010000 00000000 00000000 00000000   *................................*

LUB     1962C     0063

        00000000 00A80000 00810A00 00000000    00000000 00A80000 08810760 00000000   *................................*
        00000000 30630000 00000000 00000000    00010000 00000000 00000000 00000000   *................................*

LUB     1966C     0064

        00000000 00A80000 00810A00 00000000    00000000 00A80000 08810760 00000000   *................................*
        00000000 30640000 00000000 00000000    00010000 00000000 00000000 00000000   *................................*

LUB     196AC     0065

        00000000 00A80000 00810A00 00000000    00000000 00A80000 08810760 00000000   *................................*
        00000000 30650000 00000000 00000000    00010000 00000000 00000000 00000000   *................................*
```

GENERAL REGISTERS

GROUP 0	01A0A	0C485	076EC	0457E	01ACC	0001D	00846	01781
GROUP 1	0B360	005BB	076EC	08080	07982	00140	00020	0FD00
GROUP 2	0A6A2	00000	00000	00004	00070	005B0	07794	00070
GROUP 3	0D97A	1B598	17F58	1B598	17F0C	02800	073F8	02850

STORAGE KEYS

00000	0	00800	0	01000	0	01800	0	02000	0	02800	0	03000	0	03800	0
04000	0	04800	0	05000	0	05800	0	06000	0	06800	0	07000	0	07800	0
08000	0	08800	0	09000	0	09800	0	0A000	0	0A800	0	0B000	0	0B800	0
0C000	0	0C800	0	0D000	0	0D800	0	0E000	0	0E800	0	0F000	0	0F800	0
10000	0	10800	0	11000	0	11800	0	12000	0	12800	0	13000	0	13800	0
14000	0	14800	0	15000	0	15800	0	16000	0	16800	0	17000	0	17800	0
18000	0	18800	0	19000	0	19800	0	1A000	0	1A800	0	1B000	0	1B800	0

PROTECTION KEYS

KEY0	7	KEY1	7	KEY2	0	KEY3	3	KEY4	7	KEY5	7	KEY6	7	KEY7	7

```
00200   5174A819 0301D204 D001D136 5174A8B1    53CCFBE4 D059D132 5174A869 0301EA84   *......K...J.........U..J..........*
00220   DAACFAC2 E91E8201 84028508 55740381    51748203 83FC5304 82048302 3381D110   *...BZ.........................J.*
00240   5174A891 82108402 85005574 A821759C    8484058B FD0CE915 84588518 55748402   *...................Z..........*
00260   55748201 A839E902 A83D8458 85105574    84025574 8210A84B 532C92FC 84FF85FF   *......Z.........................*
00280   53C88404 85025501 950153C8 895233C8    03818201 5344A885 77C8078B 83086374   *.H.........H...H..........H......*
002A0   637CEB16 33C88220 A9630301 058BA977    050BA8C2 A800A800 A8008602 8706737C   *.....H..............B............*
002C0   EB048360 637433C8 A983820F 617CE9BA    6764617C 61346324 A8318612 657C8400   *.......H......Z..................*
002E0   EDA88520 6574A92D 610CF8E6 651C637C    85008300 53C89812 8206C8B0 F82DE8B6   *..........8W.........H....H.8.Y.*
00300   D8C8C80C 87068612 A802870E D208A841    611C80FF 91F69836 9101980C 9103982E   *QHH.........K.........6..........*
00320   91019874 9101983C 8602A823 611C91FB    F1FF889C A80FD888 611CF1FF 8808A84C   *...............1.....Q...1......*
00340   86228702 A83BD208 A8798622 A87D8682    A8490501 F4108804 94300581 86028110   *......K.............4............*
00360   6174A9B1 0501EC82 FC886744 D2808301    A8A1870D A86B8202 612CF001 98B5C9FD   *...........K.............0...I.*
00380   D9BDE890 C90AF008 98B9C8AE 870CA885    8622A88B C8BAA871 0101F001 88068058   *R.Y.I.0...H..........H.....0.....*
003A0   81105174 11C88002 51748010 01818404    85005583 D2408302 A8E9CC27 EC08614C   *.....H..............K ...Z......*
003C0   51819502 A81377C8 07818602 870FA8C5    80048102 11019004 51C89817 80126124   *.......H.......E..........H......*
003E0   11C88080 71740101 77C8F882 8708719C    F1028802 D7208004 8104001C 8FF80400   *.H.......H8.....1...P.........8..*
00400   0000B360 000005BB 000076EC 00008080    00007982 00000140 00000020 0000FD00   *......................... ........*
00420   0000A6A2 00000000 00000000 00000004    00000070 000005B0 00007794 00000070   *.................................*
00440   0000D97A 0001B598 00017F58 0001B598    00017F0C 00002800 000073F8 00002850   *..R.......................8....*
00460   00000000 00000000 00000000 00000000    00000000 00000000 00000000 00000000   *.................................*
00480   00000000 00000000 00000000 00000000    00000000 00000000 07070003 07070707   *.................................*
004A0   03020601 04060507 00070001 00030707    07040707 03060307 03070405 05030707   *.................................*
004C0   03010307 00070004 01070202 06060507    06070705 02020704 07030507 03070707   *.................................*
004E0   00000003 00000000 00426602 6212651E    6722600A 00000000 00000000 00000000   *.................................*
00500   00A80000 0020050C 00000000 B8400F40    33E88806 B8402508 A80FB840 35805000   *............ . .Y... ..... ....*
00520   00000000 D6202000 C3E7C1E2 E4D7F47B    63966606 77A82488 44285498 036253A8   *....O...CXASUP4.................*
00540   970143B8 981244F8 44F82481 24014498    44985498 5298A819 44A82481 02D202F2   *.......8.8....................K.2*
00560   045A4781 B9200014 17B89828 77F80557    B5018828 73F8B920 002813B8 981E3788   *..............8.......8...........*
00580   B502881C 73F8B920 005013B8 98123788    8112A80E B9200321 B80097B0 8150A802   *.....8............................*
005A0   81254301 73A003D5 9703DF31 738005CC    77F81E72 43800800 33A87604 73B1B384   *.......N.........8...............*
005C0   0F906F48 0B9032C4 05E49198 BB2005A8    238005F0 2B9CF866 2A9C2F00 29A1B5E4   *.......D.U..........0..8.........U*
```

```
005E0  6315B598 618C6F18 06341081 610C0022  B92005CC 61880614 81909CE0 95280103  *................................*
00600  06357F14 BA21B598 22057A90 3088300B  00180000 900005F0 91000638 8804A856  *.......................0........*
00620  90008042 B9217E14 7134B920 04087134  B800A740 00800000 00000614 B920065C  *................... ............*
00640  B80097B0 00000000 00000000 00000000  00000000 00000000 00000000 00000638  *................................*
00660  0003DF30 00000000 00000000 00000000  00000000 00000000 00000000 00000000  *................................*
00680  F0F00000 00004B48 47002651 01800049  4C7700F0 0FC28C00 00000000 0505860A  *00.................0.B..........*
006A0  02C8C8CC C6C80A0A 0000FFFF FF0A0A0A  000A0A0A 0A0A4080 80808000 00000000  *.HH.FH................ .........*
006C0  00C80000 00C80000 00C80000 00C80000  00C80000 00C80000 00C80000 00C80000  *.H...H...H...H...H...H...H...H..*
006E0  00C80000 13011503 8E133581 9104A80D  00000000 00008006 81C0A819 A8090000  *.H..............................*
00700  10000000 00000002 03880000 00000130  00000000 00000000 00000000 00000000  *................................*
00720  00000000 00000000 00000000 00000000  00000000 00000000 00000000 76EC748C  *................................*
00740  76EC0000 00000000 00000000 00000000  00000000 0033003C 000A0000 67D50001  *.............................N..*
00760  00000877 0000A8C0 00000000 00000000  0C146F48 5E200000 00000000 00000000  *................................*
00780  00001A0A 0000C485 000076EC 0000457E  00001ACC 0000001D 00000846 00001781  *......D.........................*
007A0  00000000 00000000 00000000 00000000  00000000 00000000 00000000 00000000  *................................*
007C0  00000000 0001B6C8 000197C4 000197CC  0001BFB0 00019CA8 00019738 00000000  *.......H...D....................*
007E0  0001BFFF 00019770 00017A62 00000000  0001B384 00000000 00000000 00000000  *................................*
00800  00DB00DB 00DB00DB 00DB00DB 00DB00DB  00DB00DB 00DB00DB 00DB00DB 00DB00DB  *................................*
      LINE 00820 SAME AS ABOVE
00840  75A87604 767876EC 72107270 00DB7364  73F8748C 72D000DB 00DB00DB 00DB00DB  *.................8..............*
00860  00DB00DB 00DB00DB 00DB00DB 00DB00DB  00DB00DB 00DB00DB 00DB00DB 00DB00DB  *................................*
00880  00DB00DB 00DB00DB 751C00DB 00DB00DB  00DB00DB 00DB00DB 00DB00DB 00DB00DB  *................................*
008A0  00DB00DB 00DB00DB 00DB00DB 00DB00DB  00DB00DB 00DB00DB 00DB00DB 00DB00DB  *................................*
008C0  0002040A 00000000 00000000 00000000  06000000 00000000 00000000 00000014  *................................*
008E0  00000000 00000800 00000000 00120000  00001000 0000000C 00000000 000E0000  *................................*
00900  60047C00 F8008800 F4008400 14002400  F2008200 D000E000 9600A600 360C060E  *....8...4.......2...............*
00920  F1008100 9900A900 9500A500 35000514  9300A300 7B084B02 F7008700 17002700  *1.......................7.......*
00940  40005000 9800A800 9400A400 34000400  9200A200 F000C000 F6008600 16002606  * ...................0...6.......*
00960  91006100 F9008900 F5008500 15122500  F3008300 5B006B00 9700A700 370A0710  *....9...5.......3...............*
00980  6D044A00 5C00C800 7A00C400 14002400  5F00C200 3F003F00 D600E600 360C060E  *......H...D.......B.....O.W.....*
009A0  7E00C100 D900E900 D500E500 35000514  D300E300 4F084B02 7F00C700 17002700  *..A.R.Z.N.V.....L.T.......G.....*
009C0  40004E00 D800E800 D400E400 34000400  D200E200 5D003F00 7D00C600 16002606  * ...Q.Y.M.U.....K.S.......F.....*
009E0  D1006F00 4D00C900 6C00C500 15122500  5E00C300 5A006B00 D700E700 370A0710  *J.....I...E.......C.....P.X.....*
00A00  60047C00 F8008800 F4008400 14002400  F2008200 D000E000 9600A600 360C060E  *....8...4.......2...............*
00A20  F1008100 9900A900 9500A500 35000514  9300A300 7B084B02 F7008700 17002700  *1.......................7.......*
00A40  40005000 9800A800 9400A400 34000400  9200A200 F000C000 F6008600 16002606  * ...................0...6.......*
00A60  91006100 F9008900 F5008500 15122500  F3008300 5B006B00 9700A700 370A0710  *....9...5.......3...............*
00A80  6D044A00 5C00C800 7A00C400 14002400  4C00C200 3F003F00 D600E600 360C060E  *......H...D.......B.....O.W.....*
00AA0  7E00C100 D900E900 D500E500 35000514  D300E300 7F085F02 6E00C700 17002700  *..A.R.Z.N.V.....L.T.......G.....*
00AC0  40004E00 D800E800 D400E400 34000400  D200E200 5D003F00 7D00C600 16002606  * ...Q.Y.M.U.....K.S.......F.....*
00AE0  D1006F00 4D00C900 6C00C500 15122500  5E00C300 5A004F00 D700E700 370A0710  *J.....I...E.......C.....P.X.....*
00B00  5E005E00 5E005E00 37022D08 2E0A2F00  5E000500 15000B00 0C000D06 0E000F00  *................................*
00B20  5E001104 34003C06 04005E00 5E005E00  18065E00 5E005E00 5E005E00 5E005E00  *................................*
00B40  40005A00 7F007B00 5B006C00 50007D00  4D005D00 5C004E00 6B006000 4B006100  * ...............................*
00B60  F000F100 F200F300 F400F500 F600F700  F800F900 7A005E00 4C007E00 6E006F00  *0.1.2.3.4.5.6.7.8.9.............*
00B80  7C00C100 C200C300 C400C500 C600C700  C800C900 D100D200 D300D400 D500D600  *..A.B.C.D.E.F.G.H.I.J.K.L.M.N.O.*
00BA0  D700D800 D900E200 E300E400 E500E600  E700E800 E9007900 E1004900 4F001600  *P.Q.R.S.T.U.V.W.X.Y.Z...........*
00BC0  5E005E00 5E005E00 5E005E00 5E005E00  5E005E00 5E005E00 5E005E00 5E005E00  *................................*
00BE0  5E005E00 5E005E00 5E005E00 5E005E00  5E005E00 5E005E00 5E005E00 5E005E0C  *................................*
00C00  5A04A300 F4006100 F5009700 14002400  F2007E00 3F003F00 89009200 360C060E  *....4...5.......2...............*
00C20  F1008700 A2008800 99008400 35000514  A500A400 F9086002 F8006B00 17002700  *1...................9...8.......*
00C40  40009100 96009300 7D008500 34003F00  4B009500 A9003F00 F6009800 16002606  * .......................6.......*
```

```
00C60   9400A700 F000A800 F7005E00 15122500   F3008600 A6008200 81008300 370A0710   *....0...7.......3...............*
00C80   6E00E300 5B006F00 6C00D700 14002400   7C004E00 3F003F00 C900D200 360C060E   *..T.......P.............I.K.....*
00CA0   4F00C700 E200C800 D900C400 3F000514   E500E400 4D086D00 5C001200 3F002700   *..G.S.H.R.D.....V.U.............*
00CC0   4000D100 D600D300 7F00C500 3F003F00   1300D500 E9003F00 4C00D800 16003F00   * .J.O.L...E.......N.Z.....Q.....*
00CE0   D400E700 5D00E800 50007A00 15122500   7B00C600 E600C200 C100C300 370A3F00   *M.X...Y...........F.W.B.A.C.....*
00D00   0002040A 00000000 00000000 00000000   06000000 00000000 00000000 00000012   *................................*
00D20   00000000 00000800 00000000 00100000   00001400 0000000C 00000000 000E0000   *................................*
00D40   00000000 00000000 00000000 00000000   00000000 00000000 00000000 00000000   *................................*
        LINES 00D60-00DE0 SAME AS ABOVE
00E00   17763400 21091412 88888824 88061E0F   88888888 0F061117 88888888 88888805   *................................*
00E20   88888888 1E1D000A 88888888 88883788   88881788 220C1B03 88888888 88018888   *................................*
00E40   18888888 88888888 88888237 88E4C3B4   43888888 88888888 8888F575 84D4F090   *.............UC...........5..MO.*
00E60   01628888 88888888 88888876 E88188E2   88888888 88888888 88888834 02D8A0B8   *............Y..S.............Q..*
00E80   88231373 0B6B5B3B 07678888 88888888   88615131 49291979 45258888 88888888   *................................*
00EA0   88885232 4A2A1A7A 46268888 88888888   88888888 88888888 88888888 88888888   *................................*
00EC0   57A393F3 8BEBDBBB 87E78888 88888888   15E1D1B1 C9A999F9 C5A58888 88888805   *...3.....X........J.I..9E.......*
00EE0   1688D2B2 CAAA9AFA C6A68888 88888888   54201070 08685838 04648888 88888888   *..K.....F.......................*
00F00   17763400 21091412 88888824 88061E0F   88888888 0F061117 88888888 88888805   *................................*
00F20   88888888 1E1D000A 88888888 88883788   88881788 220C1B03 88888888 88018888   *................................*
00F40   18888888 88888888 88888237 90E4C3F6   43888888 88888888 8888F575 84D4F0B7   *.............UC6..........5..MO.*
00F60   01628888 88888888 88888876 E881B8E2   88888888 88888888 88888834 02D8A0B4   *............Y..S.............Q..*
00F80   88231373 0B6B5B3B 07678888 88888888   88615131 49291979 45258888 88888888   *................................*
00FA0   88885232 4A2A1A7A 46268888 88888888   88888888 88888888 88888888 88888888   *................................*
00FC0   57A393F3 8BEBDBBB 87E78888 88888888   15E1D1B1 C9A999F9 C5A58888 88888805   *...3.....X........J.I..9E.......*
00FE0   1688D2B2 CAAA9AFA C6A68888 88888888   54201070 08685838 04648888 88888888   *..K.....F.......................*
01000   8EBABA83 9487BA8E BABABA88 8C840E8F   BA91BABA 808DBA8E BABABABA BABABABA   *................................*
01020   BABABABA 808D84BA BABABABA BA858607   BABA8EBA 92BABA81 8BBABABA 13BABABA   *................................*
01040   20BABABA BABABABA BA5DBAAE BCA8AB5E   26BABABA BABABABA BABAA1A4 2A293BBA   *................................*
01060   AD2FBABA BABABABA BABABA2C 25DF3EBF   BABABABA BABABABA BA5BBA23 40A73DA2   *............................ ...*
01080   BAC1C243 C44546C7 C849BABA BABABABA   BA4ACB4C CDCE4FD0 5152BABA BABABABA   *.AB.D..GH.......................*
010A0   BABAD354 D5D65758 D9DABABA BABABABA   BABABABA BABABABA BABABABA BABABABA   *..L.NO..R.......................*
010C0   BAC1C243 C44546C7 C849BABA BABABABA   BA4ACB4C CDCE4FD0 5152BABA BABABA82   *.AB.D..GH.......................*
010E0   BABAD354 D5D65758 D9DABABA BABABABA   B03132B3 34B5B637 38B9BABA BABABABA   *..L.NO..R.......................*
01100   17763400 4F09147F EBEBEB24 EB06EBEB   EBEBBBD1 0F061117 EBEBEBEB EBEBEB05   *...................J............*
01120   EBEBEBEB 1E1D000A EBEBEBEB EBEB37EB   EBEB3DEB 4C2C1B03 EBEBEBEB EB01EBEB   *................................*
01140   18EBEBEB EBEBEBEB EBEBEB51 D8B493A0   E8EBEBEB EBEBEBEB EBEB0184 B8E46BEB   *............Q...Y............U..*
01160   3707EBEB EBEBEBEB EBEBEB3B 88B78187   EBEBEBEB EBEBEBEB EBEBEBF0 904913C9   *...........................0...I*
01180   EB79767A 2A4A7323 2619EBEB EBEBEBEB   EB431A46 6152450B 5B29EBEB EBEBEBEB   *................................*
011A0   EBEB2502 32317562 6754EBEB EBEBEBEB   EBEBEBEB EBEBEBEB EBEBEBEB EBEBEBEB   *................................*
011C0   EBF9F6FA AACAF3A3 A699EBEB EBEBEBEB   EBC39AC6 E1D2C58B DBA9EBEB EBEBEB05   *.96...3..........C.F.KE.........*
011E0   EBEBA582 B2B1F5E2 E7D4EBEB EBEBEBEB   64201070 04085868 3834EBEB EBEBEBEB   *......5SXM......................*
01200   65800140 0B401740 1F40EC40 59422D41   00C000C0 00C000C0 00C000C0 00C000C0   *... . . . . ....................*
01220   15800140 03400540 07403040 13420A41   00C000C0 00C000C0 00C000C0 00C000C0   *... . . . . ....................*
01240   01000200 01010206 01030102 02020201   01040203 07000600 06010500 05010503   *................................*
01260   05020504 020B020E 020A0209 01050207   02080701 05050702 07030300 03010302   *................................*
01280   03030304 03050306 0307FFFF 00480060   00480078 00480048 009C0060 00C800E4   *.............................H.U*
012A0   0100010C 01180124 01240124 01240130   01540160 016C0178 00C800E4 01780100   *.........................H.U....*
012C0   01300184 018401D0 01CC01E0 01DC01D0   01D001F0 01F001A4 0000D798 0000D098   *...................0.0....P.....*
012E0   800012EC 00000000 0000CEA4 0000CCF8   0000E028 0000E260 0000CCFC 0000D798   *...............8......S.......P.*
01300   0000D098 0000CCF8 0000E028 0000E260   80001320 0000D798 0000D098 0000CCF8   *.......8......S.......P........8*
01320   0000CE38 0000CE88 800012D8 0000E028   0000E260 80001344 0000D798 0000D098   *...........Q......S.......P.....*
01340   0000CCF8 0000CE38 0000CE88 0000CCFC   0000CE38 0000CCFC 0000D798 0000D098   *...8......................P.....*
```

```
01360   8000136C 00000000 0000CEA4 0000CFF8   0000CCF8 0000E028 0000E260 80001390   *...............8...8......S.....*
01380   0000D798 0000D098 0000CFF8 0000CCF8   0000CE38 0000CFF8 0000CCFC 00014AF0   *..P........8...8.......8.......0*
013A0   00015040 0000CCFC 00014AF0 00015040   0000CCF8 00014AF0 00015040 800012D8   *... .......0... ...8...0... ...Q*
013C0   00014AF0 00015040 0000D798 0000D098   800013DC 00000000 0000CEA4 0000CFF8   *...0... ..P....................8*
013E0   0000CCF8 00014AF0 00015040 80001374   00014AF0 00015040 80001308 00014AF0   *...8...0... .......0... .......0*
01400   00015040 8000132C 00014AF0 00015040   800012F0 0000CE38 00014C50 00014D80   *... .......0... ...0............*
01420   0000CCFC 0000DC86 0000E8D8 00013E88   00014D80 0000D120 000174B8 000174F8   *..........YQ..........J........8*
01440   000171B8 00017218 00016810 00016BD8   00000000 00014AF0 00015040 0001525A   *...............Q.......0... ....*
01460   00012A50 00012FB4 0000CCF8 0001525A   00012A50 00012FB4 00014D80 0000CCF8   *...........8...................8*
01480   00012A50 00012FB4 0000CFF8 0000CCF8   00500068 00500080 00500050 00A40068   *...........8...8................*
014A0   00D000EC 01080114 01140050 00500050   005000D0 00EC0080 00A40068 00D000EC   *................................*
014C0   00680108 00D00108 01080154 01540160   01600154 01540160 0160012C 00015818   *................................*
014E0   00015860 0000D798 0000D098 800014F8   00000000 0000CEA4 0000CCF8 0000E028   *......P........8...........8....*
01500   0000E260 0000CCFC 0000D798 0000D098   0000CCF8 0000E028 0000E260 8000152C   *..S.......P........8......S.....*
01520   0000D798 0000D098 0000CCF8 0000CE38   0000CE88 800014E4 0000E028 0000E260   *..P........8...........U......S.*
01540   80001550 0000D798 0000D098 0000CCF8   0000CE38 0000CE88 0000CCFC 0000CE38   *......P........8................*
01560   0000CCFC 0000D798 0000D098 80001578   00000000 0000CEA4 0000CFF8 0000CCF8   *......P....................8...8*
01580   0000E028 0000E260 8000159C 0000D798   0000D098 0000CFF8 0000CCF8 0000CE38   *......S.......P........8...8....*
015A0   0000CFF8 0000CCFC 00000000 0000D560   000149E8 0000DC86 0000E8D8 00014190   *...8..........N....Y......YQ....*
015C0   0000D120 000174B8 000174F8 000171B8   00017218 00016810 00016BD8 00000000   *..J........8...............Q....*
015E0   00014AF0 00015040 00012A50 00012FB4   0000CCF8 00012A50 00012FB4 0000CFF8   *...0... ...........8...........8*
01600   0000CCF8 00000000 00000000 00000000   00000000 00000000 00000000 00000000   *...8............................*
01620   00000000 00000000 00000000 00000000   00000000 00000000 00000000 00000000   *................................*
01640   2F862FFC 302C309A 30D22E76 2F863116   31CC31C2 32DA330A 2D503326 31CC3366   *.........K.........B............*
01660   31C24C90 2FDC4C3E 316E31C2 36003624   448531C2 33DE369A 33B231C2 363031CC   *.B.........B.......B.......B....*
01680   387439BA 39023874 39E62E76 36D039E6   3D6639E6 3D363D9E 3E263D9E 3A4F3E26   *.........W.....W...W............*
016A0   39E64C90 547E4C3E 39E639F8 394E396C   44853914 3CD939E6 3D1939E8 3CA854AE   *.W.......W.8.........R.W...Y....*
016C0   386039BA 39143860 39E62E76 36FC39E6   3D6639E6 3D5C3D9E 3E263D9E 3A4F3E26   *.........W.....W...W............*
016E0   39E64C90 547E4C3E 39E639F8 394E396C   44853914 3CD939E6 3D1939E8 3CA854AE   *.W.......W.8.........R.W...Y....*
01700   3FB639BA 39E63FB6 2E762E76 3F163FAC   3D6639E6 39E639E6 3E26406A 3FDF3E26   *.....W.............W.W.W.. .....*
01720   39E64C90 39E64C3E 409839F8 394E396C   44853914 3CD939E6 3D1939E8 3CA854AE   *.W...W.. ..8.........R.W...Y....*
01740   1ACC1D96 1D961D96 1D961D96 1D961AA2   1D961D96 1D961D96 1D961D96 1D961AA2   *................................*
01760   1D964C90 1D964C3E 1D961D96 1D961AA2   1D961D96 1D961D96 1D961D96 1D961AA2   *................................*
01780   B8008A3A B80089FE B8008A5C B8000000   B8008AA8 B8008B98 B8008B60 B8008BC8   *...............................H*
017A0   B8008C48 B8008C22 B8000000 B8000000   B80089E8 B8008034 B8008DAA B8008A96   *...................Y............*
017C0   B8008B10 B8008C38 B8008D08 B800C2B2   B800C2A0 B800C2C6 B8007C58 B8000000   *..............B...B...BF........*
017E0   B8000000 B8000000 17D80000 00000B2B   00000000 00000000 48000000 14000000   *.........Q......................*
01800   00000000 00000000 00040000 17D80000   00000B2B 00000000 00000000 48000000   *.............Q..................*
01820   14000000 00000000 00000000 00040000   A800837E E2FBBC20 191CA9C6 A8982F53   *....................S......F....*
01840   EA1A292E D14029AE 254A55F8 55F8258F   20CAFF08 2539D5C1 25B9AC82 EADAC3FF   *....J .....8.8........N.......C.*
01860   983C457C F4389836 2D329508 2DB2B510   99982D41 CD2C253B 982A254A 55F855F8   *....4........................8.8*
01880   258F20CA FF062539 D50125B9 BC001A88   282FE080 C0C028AE F7028C42 AA5C8700   *........N...............7.......*
018A0   2FB2A966 2539D408 FF02D501 25B980C2   292F0148 29AEA81B 273B981F 2539BC20   *......M...N....B................*
018C0   108054C8 8829254A 55F855F8 258F20CA   BC001A88 A9F6CA02 A83DC3FE 88418707   *...H.....8.8.........6....C.....*
018E0   2FB2A926 A80083FF D201BC20 18F2A912   A8002F53 FF14819D 837E4154 BC001A88   *........K....2..................*
01900   FF02A8F2 BC201ACC A8F8819C A815A800   837ED201 BC20191C A8E8ACC2 B920FFFF   *...2.....8........K......Y.B....*
01920   21B3E2FA 2B58BC20 192EA820 ACB02B59   DB8A2F36 8812BC20 195CA810 2F53DF82   *..S.............................*
01940   A811819A 4154A817 BC201992 43442733   77CC27B3 24A524D7 B840AC82 253E5310   *.......................P. ......*
01960   2836B894 27427501 881C5598 559825C2   58035F02 95047518 28B625BE 43442733   *...............B................*
01980   77CC27B3 B840BC20 199224A5 24D7A819   AC4C2B33 C3FFBC20 199EA866 AC402B32   *..... .......P......C........ ..*
019A0   C3FF8199 4154BC20 19AEA856 AC30837E   D201BC20 19E024A5 24D74344 2859D882   *C...............K........P....Q.*
019C0   B8402753 FF02CF82 B840221F 26314604   85854554 BC201ACC 24A524D7 B840A800   *. ....... .................P. ..*
```

```
019E0   E2FB2859 2753CFD8 D8A48598 2DB9819D   4154BC00 1A88282F E080C0C0 28AEBC20   *S......QQ.......................*
01A00   1D964344 24A524D7 B8404344 A807D608   FF02E6BF 2ED22C38 88148598 2DB9BC00   *.......P. ....O...W..K..........*
01A20   1A882950 E93683FF BC201A5C A82DFF0F   EE82A802 FE15241E 44024929 49B0A81F   *....Z...........................*
01A40   D882A85B 221F2941 D18029C1 24354808   292F0148 29AE2223 A871A800 E2FB819C   *Q.......J..A................S...*
01A60   41542F53 F7409873 BC201A70 A86DA800   2727E7EF 27A72F41 D7802FC1 24354808   *....7 ..............X.....P..A..*
01A80   292F0148 29AEA872 0139880E 12AD02B9   20AD2539 25BB20B9 408802B7 71C4A813   *........................ ....D..*
01AA0   A8202557 25A5415C E80E2F41 E77F2FC1   292EE1BF 29AE5088 212FD080 104828AE   *........Y...X..A................*
01AC0   50882557 25A5A502 A825A82E 2F53FF06   85808410 25B9BC20 1ADEA8DB A81CA80E   *................................*
01AE0   2BD8B920 FFFF21B3 BC201B06 A9A32F0C   37488815 2F0CB7FF 881B8185 4154BC20   *.Q..............................*
01B00   1ACCA903 A80DEABD 2BD94344 273377CC   27B3FBC4 85342DCF E5E12DB9 254A982A   *.........R.........D....V.......*
01B20   BC001D54 25CA25C2 2B403518 25BEA305   30282948 21B72F53 FF06292E E1BF29AE   *.......B. ......................*
01B40   BC201C10 24A524D7 B8400807 5701882B   84208534 25B9AA56 FB34E30C 880CB304   *.......P. ................T.....*
01B60   8824B308 882485A2 A802851C 2DCFE5E1   2DB9BC20 1BD824A5 24D72F53 FF06292E   *..............V......Q...P......*
01B80   E1BF29AE B840851E A81F850E A8232F53   FF2AB373 8812B3BF 8812B317 8812B397   *..... ..........................*
01BA0   8816B31F 880EA843 85BCA841 85BEA89B   85ACA849 85B6A84D 8562A8A7 B353880A   *................................*
01BC0   B393880A B317880A A86585A8 A86385B2   A86785AC A86BA9C8 EA94BC20 1BE2AA95   *.......................H.....S..*
01BE0   A9BEEA8A BC201BEC AA9FA9B4 EA9A2539   D4402D4F 273B980C 25B9BC00 1A888410   *................M ..............*
01C00   8580A9AA D408A9A6 273B98DC A856A990   EAB84344 273377CC 27B3253E 2137B88C   *....M...........................*
01C20   B9922539 E5E1D504 25B9A982 533025BE   28B6B840 29B7BC00 1D542742 548844F8   *....V.N............ ...........8*
01C40   44F87481 25C29504 A81F2542 0F0F2E36   67285F83 273B989E 244A8808 44F844F8   *.8...B.......................8.8*
01C60   248F20CA 295929C7 25392D4F 2133BF20   F0B817C0 8814D410 25B9BC00 1A888410   *.......G........0.....M.........*
01C80   858025B9 BC201ADE AA89E4EF 2959D982   A81BD501 25B9BC00 1A882153 F91A292F   *..........U...R...N.........9...*
01CA0   E180C1C0 29AE2953 C982A832 2D0DFD82   A82CBC20 1D9CAAB7 C9B7A822 D4082D4F   *..A.....I...............I...M...*
01CC0   2133BF20 F0B817C0 98E4E4EF 2959D982   A8DCD501 25B980C2 292F0148 29AE8185   *....0....UU...R...N....B........*
01CE0   4154BC20 1D96AAE7 2753F614 9833BC00   1D545083 A80A2753 F6149841 254A5F82   *.......X..6.............6.......*
01D00   50875788 55F855F8 24179804 2595A806   44984498 45872597 20CA2959 798A2539   *.....8.8........................*
01D20   2D4F2133 BC20F0B8 41C0880A 80108180   21B97589 A8B320B9 E4EF2858 290C1048   *......0.................U.......*
01D40   8806B1FF 8802858E 2959D982 A823D501   7589A8BB 0755B708 9802BFA0 66689807   *..........R...N.................*
01D60   0D09CD2A BF96D580 0D890757 07D5BD20   0446BF20 01FC7582 75D4A802 07D50546   *......N......N...........M...N..*
01D80   08075701 77987798 07C65081 40882539   8584A81A A8004344 AB93A800 4344AB99   *.........F.. ...................*
01DA0   2539D4A0 CA02E4DF DA02E47F 2D4F25B9   2F53FF0A BC20183E 81974154 ABBD274A   *..M...U...U.....................*
01DC0   980420B9 AACD213B 980E77F8 77F8278F   20CABC00 1A88AADF D40825B9 A82B2539   *...........8.8..........M.......*
01DE0   D48025B9 20575000 00000000 D6202000   C3E7C2E2 C4D3C340 CF84251E A804251F   *M...........O...CXBSDLC ........*
01E00   551EA802 25225502 2959D984 E6BFA80A   D608FF06 E6BF5829 58B0F992 53239301   *..........R.W...O...W.....9.....*
01E20   53A35315 88085B29 9322E3EE 5BA92ED2   B8002580 2959D984 E6BFA806 D608FF02   *..........T....K......R.W...O...*
01E40   E6BF2ED2 B8002580 FD82A804 E6F72ED2   251E5502 2947F982 A85AF104 98065B21   *W..K........W7.K......9...1.....*
01E60   E3DD5BA1 D982A806 5928E1FE 59A8BC00   20162753 51339838 5938B140 980C2904   *T...R...................... ....*
01E80   D1012984 810059B8 ADC6592D C902A80A   EE0880B0 28BBB800 255E5123 F0808810   *J........F..I...............0...*
01EA0   EE0EFF02 A802CE88 80B028BB B800255E   B8002594 5821D982 A810E0DD 5F24EF82   *......................R.........*
01EC0   A806D020 D6202ED2 A802E0FD 58A15828   1048E00E 98CC77C8 230F3398 33982840   *....O..K...............H....... *
01EE0   A0040907 3401980C 3903A102 01283183   1708A852 01283183 17184498 44980048   *................................*
01F00   09073688 43883401 880A3183 17984498   4498A813 3903A102 98088810 31831718   *................................*
01F20   A81E3083 6903A101 6983A701 6081BE20   05A8618E B9201F40 618A8120 B800A49A   *....................... ........*
01F40   230F3398 33983789 BE2005A8 5F24FFA6   0909D902 A812618E B9201F64 618A8120   *..................R.............*
01F60   B800A49A 11C8A80C EF86B901 0B88A804   B9011A98 A8085488 B900F708 45881108   *.....H....................7.....*
01F80   8812B106 8806B104 8802A808 59389101   59B8A80C 810059B8 59289122 E1EE59A8   *................................*
01FA0   A818BC00 249A5938 910159B8 5B21EB82   A8085A28 FA84CE86 A81C208F A9512423   *................................*
01FC0   4B59FB86 BB201FCC 43CDA813 BC20200A   221F2753 A804BC20 2010251E 55025928   *................................*
01FE0   D10159A8 5C188509 E1E01558 B9002B58   11C829B6 BD202010 244D45C8 980A221F   *J................H.........H....*
02000   251E5502 2F53A84F B8408100 29D9AA0D   810129D9 AA13648A 66062947 E1E0285A   *......... ...R.....R............*
02020   10488862 5E30E6E0 5F29E7E0 53153398   339888DE 380AE0E0 7138883C 61388838   *......W...X.....................*
02040   01388888 0738981A 88D40138 98D01738   98CC1638 9822618E 50B3BC00 208A610E   *.........M......................*
```

```
02060   A86A1038 98067138 9808A8B2 6738981F   A81D6738 9802A827 29DA77C8 50B350AB   *.........................H....*
02080   5FACBC00 208A6602 600A648A 62926606   5F2F1038 88203207 22982298 618EB920   *..............................*
020A0   20AA618A 8120B800 A49AA701 23888816   380AE0E0 A8253188 11F811F8 51955FAF   *.........................8.8....*
020C0   66026212 600A5095 5097A80F 285A29DA   E0019804 6602600A 5F21E77F 5FA177C8   *.........................X....H*
020E0   5FAF3B0A 5BA92488 53889310 95145288   618EB920 20FE618A 8100B800 A11EA514   *..............................*
02100   4288253B E5E1D50C 25BB2753 BC00232E   A88D1748 980850B3 50AB5BAC A8992753   *....V.N.......................*
02120   293BF101 D1A429BB AB26E6F7 2ED2AC2E   E6F72ED2 230F3398 33982840 A0043903   *....J.....W7.K..W7.K....... ....*
02140   A1020128 31833401 8802A810 B1068802   A80A33F8 33F82393 208FA804 B80021DA   *..................8.8..........*
02160   BC0024E8 29585998 ABF4E6F7 2ED2BC00   24E877C8 50B350AB 5FAC2753 AC16221E   *...Y.....4W7.K...Y.H...........*
02180   22602276 21BE21BE 21BE227C 223C21BE   21BE228A 22902296 21BE21E0 21EA221E   *..............................*
021A0   22602276 21BE21BE 21BE227C 223C21BE   21BE228A 22902296 21BE21C8 21C6253B   *.........................H.F..*
021C0   20BBB800 625EA800 BC002490 F4FF9958   291CE140 8804B5BD 8B84D440 2CBAA948   *............4...... ......M ....*
021E0   BC002490 F4FF9940 A811BC00 2490F4FF   9936B5BF 881DBC00 24E85921 D12059A1   *....4.. ......4.........Y..J...*
02200   C102F902 ABBF59A1 D6202ED2 233BFB82   A804E6F7 2ED2BC00 20162753 AB62DC82   *A.9.....O..K......W7.K..........*
02220   A814B5A0 8802A802 8560B580 8802A802   85A0E4EF 25BBE6F7 2ED2A8EC BC002490   *..................U...W7.K......*
02240   F4FF98E4 E5FEB58E 88DEBC00 24E85B21   EB8A253B E501D5A2 25BBA810 253BAC19   *4..UV........Y......V.N.........*
02260   BC002490 F4FF98C0 B5638802 A9E2230F   2393208F A9DABC00 2490A8AC BC002490   *....4.......S...................*
02280   85AD25BB A9C6B800 97B0BC00 2490A898   BC002490 A9B6E6BF 2ED22B59 FBBA291C   *.....F...............W..K......*
022A0   F982A808 251E2920 1518A81A 214DBB20   1DF831B0 8802A80C CF84251E A804251F   *9.....................8.........*
022C0   551EA802 25225502 5315880C 5B299322   E3EE5BA9 81FE29C6 2F53FF2A 2B59F301   *................T......F.......3.*
022E0   8824F740 8802221F 21351808 292F0148   29AEB920 1D9621A5 21D7F740 88022223   *..7 ......................P7 ....*
02300   2E52D608 2ED22A09 92012A89 CA16233B   E2716108 E1061258 D288238B 2A04D280   *..O..K..........S.......K......K.*
02320   2A88A802 A9EAAA58 BC00232E AA52648A   BC00249A CC36E5FE B5348802 A82EF470   *......................V.......4.*
02340   882ABC00 24E85838 8802A804 BC0024B8   58389001 58B8B040 98102804 D0012884   *.....Y................ .........*
02360   800058B8 BC202450 648AA89A BC0024E8   BC0024B8 5A2D9201 5AAD2A02 F2409880   *...............Y............2 ..*
02380   EE02A816 2B3BC32C 9804B800 2580BC20   240824CD BC2000FF 24D52B4E 90010338   *......C..................N......*
023A0   981858B2 DA82A810 2B1CFB86 D6202ED2   A8062B20 A3042BA0 A8448000 58B2233B   *............O..K...............*
023C0   DA92E3FE B30E880C B30C8808 B32C8804   F31F9824 5B345933 910159B3 1338980C   *..T...............3............*
023E0   5921D110 59A10163 51B7A80A 810059B3   BC202450 648AA806 BC202450 648AA806   *..J............................*
02400   BC202450 648A600A BC00249A FD84F51F   9812E6F7 2ED2C51F 980ABC00 24E85921   *.............5...W7.KE......Y..*
02420   D12059A1 A95ABC00 249AFD98 F51F8814   F6488810 812071E4 2838D004 28B820BB   *J............5...6.......U.......*
02440   71F4B840 E006818C 21BBA912 F4FF9929   EE02A818 BB20246E 23CDBB20 00FF23D5   *.4. ........4..................N*
02460   233B238B 2B042B88 20BBB840 A8AABC00   249AFD84 F51F9814 E6F7FF02 A802E6BF   *........... ........5...W7....W.*
02480   2ED2230B 23BB2B08 2B84A88C 20BBB840   FD82A804 E6F72ED2 4088230F 88186606   *.K............ ....W7.K .......*
024A0   33983398 618EB920 24B2618A 8120B800   A49A6602 208F4088 5133982A 273BE651   *.................... ........W.*
024C0   2A045AAC 8802D680 23272A52 E206DB82   A80ED608 2B59FB84 D60AA802 2658A802   *......O.....S.....O.....O.......*
024E0   265857AB 27534088 251E291C F982A804   29201518 55024088 E6B72097 2095E6EE   *...... .....9......... .W.....W.*
02500   D6062ED2 BF2024FA 26CDBE20 05A8A8DA   6008E006 E471A816 6008E006 253BE451   *O..K..................U.........U.*
02520   2327DB82 A80A2A59 FA84800A A802D008   04582804 8802D480 25BBCF82 A81AD610   *.........................M.......O.*
02540   DF08E6F7 21231ED2 A808E6BF 2ED2221F   2F53F648 898CA802 A9882ED2 B84C8000   *..W7...K..W..K....6........K. ..*
02560   28BA2884 CF82A97A D6102ED2 DF062123   1ED2A806 221F2ED2 2F53F648 8964B840   *........O..K.....K.....K..6.... *
02580   F7408810 DF02A80C 208520BB 221F2ED2   2F53A856 20858320 73E42415 883C4498   *7 ..............K.........U......*
025A0   44984107 98022097 219573F4 490A29C7   450925BB 41039816 618EB920 25C8618A   *............4...G..............H..*
025C0   14828100 B8009560 00000000 A80644F8   44F8248F B8005E6A A80420BB 73F4DF04   *..............8.8............4..*
025E0   21231ED2 A804B840 20BBDEB2 CEAECE02   A80EBC00 2CFE9806 BC002CD4 A802A824   *...K... ....................M....*
02600   EE02A804 CF9EB840 231E3101 E1FC1188   88083502 5821E0FE 58A1A980 A804F648   *....... .......................6.*
02620   88C0B840 CF82A804 22232F53 2322E6FE   35029856 3101E1FC 13A8C601 FEC8CE44   *... ..........W...........F..H..*
02640   241F481C 8802A83C 453B9838 4539B520   8802A830 431E3502 882A5821 E882A824   *..............................Y...*
02660   0B09CB20 5A285C18 85E1D21F 25682159   E1EF51C0 880EBC20 1DF8B900 2B588100   *...........K..............8.....*
02680   29B6A800 B8409304 35025821 F0B18834   D8A2F001 881423A2 29465D31 51389802   *..... ......O...Q.O..............*
026A0   A804F0A0 8802A802 B8409304 810029C6   A883A810 BC002C96 F0B18808 93048100   *..O...... ......F.........O.....*
026C0   29C6A895 BC002AAC CE9411C8 29468808   5D315138 8802B840 28C69304 A8AF23A2   *.F.........H........... .F......*
```

```
026E0   B840E6E9 2904253B CF82A83A 2423BB20   61F043CD 40D55588 980E4904 4D844089   *. WZ.............O.. N......... .*
02700   453B40BB 4ED2A80E 20BB4ED2 433B8806   283DD080 28BDB5E0 9802A808 4A2FE280   *.. ..K.....K.................S.*
02720   C2C04AAE A80220BB 29842587 2ED22315   88143407 618EB920 2742618A 8120B800   *B...........K...................*
02740   A49A4388 9815B5E0 9802A82C 282FE080   C0C028AE EC22F4FF 881CBC00 24E8512D   *......................4......Y..*
02760   2189512B 218B2947 29852107 B1848806   8102BC00 2BDAA816 231E3501 E5FC53A8   *...........................V...*
02780   35069304 8102BC00 2BDA3506 980DBD20   61F025CD 20D5BC00 4338B840 DE029304   *.................O...N..... ....*
027A0   E6DF3502 98303101 13A8239E FEC0D601   2FD22844 B88428C4 A83428C4 BC002CE8   *W............O..K.....D...D...Y*
027C0   9802A806 D6802ED2 AA4BBC00 2CD4231E   93043502 239E511F C83F5821 D882A80A   *....O..K.....M..........H...Q...*
027E0   BC002C96 D882A802 A84FA956 B840231E   29209104 29A01318 35029870 2DA0FE84   *....Q....... ...................*
02800   A815A866 28448848 26318320 73E44604   81854154 B9201D96 21A521D7 73F42D9C   *.............U..............P.4..*
02820   2435490B 282F1048 28AEB920 25E821CD   B92000FF 21D5CF82 A8122223 E6FE2ED2   *.............Y.......N.......W..K*
02840   B9202518 21CDB920 00FF21D5 B840A81A   294529C4 BC002CE8 9802A806 D6802ED2   *............N. .....D...Y....O..K*
02860   AAE3BC00 2CD4231E A8CFA880 511FC802   A885D808 C882A802 A874A88F 54179804   *.T...M.......H....Q.H...........*
02880   54138808 8102BC00 2BDA511F F040985E   F882A8A7 D606E6FE 2ED2299C 58352882   *............O ..8....O.W..K......*
028A0   5E182A45 2AC48200 F1409852 F1809860   B103886C B1058878 231EA921 5824288D   *.....D..1 ..1...................*
028C0   F88AE884 8112A802 8116A802 810E29C0   294829B7 75882753 2C8CCF82 A804BC00   *8. Y.............................*
028E0   2C60BC20 1E34B900 2B582AB6 B840299C   B9200096 21BB2085 2ED2AA1B B840B920   *........... ..........K... ..*
02900   216A21CD B920FF80 21D550A9 8793A855   B920212A 21CDB920 FFBD21D5 8753A865   *.........N.................N....*
02920   B9202130 21CDB920 FFBF21D5 87BFA875   B920212A 21CDB920 FFBD21D5 50A98717   *............N..................N....*
02940   A887E6FE 2ED2239E 5921F104 98B8CF82   A8222423 44224402 54B88818 5B315A2E   *..W..K....1......................*
02960   323898A2 88A0F1A0 989C5B2F 32388896   231EA9D9 F1A09878 11C8299C CF82A806   *......1...........R1....H......*
02980   22232F53 2ED2BC00 2AACCECE 59215B2F   5A2E2338 881CCF82 A8142322 93043102   *......K..........................*
029A0   98063101 13A89304 23A2221F 2F53231E   AA172B46 5A312338 8810D620 CF82A806   *.........................O.....*
029C0   2ED2221F 2F532ED2 A80ECF82 A806221F   2F53A804 800028C6 A82CD620 B9201DF8   *.K.....K...............F..O....8*
029E0   21CDCF82 A8062ED2 221F2F53 2ED2A814   CF82A80A DF02A804 221F2F53 A8C48000   *.......K.....K...................*
02A00   28C6A802 B840581E 289C5835 28825824   288DF88A E8848012 A8028016 A802800E   *.F... ............8.Y...........*
02A20   28C0E984 D10159A1 214A882A 62926396   649A659E 67A26606 1388618E B9202A48   *..Z.J............................*
02A40   618A8120 B800A49A 20CA6602 62126316   641A651E 6722CF82 A804BC00 2C605921   *.................................*
02A60   BB201E48 23CD2A5A D2012ADA 5A285C18   2C8CE6F9 0B09CB02 A816D902 A808C910   *.........K.........W9......R...I.*
02A80   C3100B89 DB8AD604 B920FE1C 85F5A808   D602B920 D61485F1 21D5D21F 2568BC20   *C.....O......5..O...O..1.NK.....*
02AA0   1DF8B900 2B588100 29B6B840 648A512F   01389802 A8A02946 91015831 01389808   *.8......... ...................*
02AC0   88068100 29C6A88E 29C6592F 910159AF   E6FE5935 29825411 44984498 4107980C   *.....F...F......W...............*
02AE0   50915093 5921D180 59A1A804 51914087   4805F882 A8065821 D02058A1 11C8299C   *......J....... ...8..........H..*
02B00   44F844F8 51179804 5495A806 11981198   14875497 44984498 5129649A 57887C18   *.8.8.............................*
02B20   850E1568 E0E00558 498A2753 CF8EB920   1E0421CD B920FF98 21D5A804 BC201E04   *............................N......*
02B40   B9002B58 641A4103 29B624C2 01089104   80001498 24BE600A 2F53D640 CF82A818   *............B...............O ....*
02B60   DF0A2ED2 22232F53 24CDA806 24CD241F   4ED2BC20 FF9824D5 2ED22431 25D98520   *...K......................K.....N.K....R..*
02B80   75E44404 2527D510 25A7455C EC302D49   ED92BD20 191025A5 25D755C8 45548481   *.U....N......................P.H....*
02BA0   4564A812 BD20191C 25A525D7 55C84554   85034564 857E84E5 45448598 A80ABD20   *............P.H...........V.........*
02BC0   191C25A5 25D78599 45548520 75F42435   4D0A2C2F 54482CAE 10886292 63966606   *.....P.......4...................*
02BE0   50AB50B3 800058AF 58AC5821 E0CCD0C0   58A15388 95143215 98063211 982AA856   *.................................*
02C00   22982298 280A38A9 A8042298 2298298D   2207980B 618E5288 B9202C24 618A8180   *.................................*
02C20   B800A11E 3211881A 22982298 298D2207   980BA504 5288B920 2C42618A 8180B800   *.................................*
02C40   A11E3288 618EB920 2C56618A 629267A2   8100B800 981E3588 66026212 63164088   *............................... .*
02C60   BE201D96 212561C8 98262631 812071E4   460411C8 41548185 4154B920 1ACC21A5   *.......H.......U...H.............*
02C80   21D78120 71F42135 1808292F 014829AE   BE2005A8 4088648A 63965939 53370463   *.P...4..................... ........*
02CA0   34B09810 13189340 92579808 A340A257   43B09818 533734B0 9802A814 13189340   *....... ..... ................. *
02CC0   92579802 A80634B0 98068804 E0EF58A1   631660CA E67FB920 54ABCF84 2191A806   *...................W.............*
02CE0   22232191 221F4088 B92054AB DF062323   3311A802 231131A0 2B5B3128 4088648A   *...... .......................  ...*
02D00   BC002CE8 9802A836 6292D680 DF062ED2   2223A808 CF82A804 231F3ED2 2ED2BB20   *...Y.......O....K............K.K..*
02D20   258023CD BB2000FF 23D5910A 88029804   81C4A802 81C2282F 104828AE 6212600A   *..........N........D...B..........*
02D40   50000000 D6202000 C3E7C5D3 D5D24040   28368852 455C4508 E5F0D509 455483FF   *....O...CXELNK  .........VON.....*
```

```
02D60   43440028 28B628C7 B8402C37 BC9E2142   15018810 55985598 25C25103 95040518   *.......G. ................B.....*
02D80   25BEA80A 2F482FB7 11A0A822 41082435   481321B7 112829B9 2127D11A 43442C41   *..........................J.....*
02DA0   E4DF2CC1 AEA0455C ECBC2C41 EC452D51   455428BC 43442753 FE262742 8820253E   *U..A............................*
02DC0   75A8A504 09071528 88021518 2D8D77F8   77F82791 20C28104 29C02948 29B7B840   *...............8.8...B......... *
02DE0   2937880B B8404344 2127C11A 150125A5   2F41DF22 21A78501 2DB6CF0C 24354D08   *..... ....A.....................*
02E00   2C2F5448 2CAEB840 E77F2FC1 292FE180   C1C029AE B840E7DF 2FC1E1FE 21A7E2FD   *....... X..A....A.... X..A....S.*
02E20   4344273B 98A22539 25BB2D47 2DBC20B9   2FC70539 880652AD 02B9B840 02B771C4   *.................G......... ...D*
02E40   A80B2435 4D0D4554 A82D2127 C106E1DF   E99C1501 25A52948 A1012539 D51C25B9   *............A...Z...........N...*
02E60   2E3DD680 2EBD2753 D6012ED2 A86E2539   D50425B9 A859283D E07F28BD 213B9842   *..O.....O..K....N...............*
02E80   253925BB 415CE806 E5E125B9 A80820B9   2941E1DF 29C12D47 2DBC0139 881E12AD   *......Y.V............A..........*
02EA0   02B91148 29C72753 EF0A212F E0BFD080   104828AE 21271501 25A55088 02B773C4   *.....G.........................D*
02EC0   A8232539 858A25B9 2941E1DF 29C12127   E1C0D120 21A71501 25A5B840 0755B708   *.............A....J........ ....*
02EE0   9802BFA0 66689807 0D09CD5C BF96D580   0D890757 07D5BD20 0446BF20 01FC7582   *..............N......N..........*
02F00   75D4A802 07D50546 57017798 779807C6   50812442 980625CA 0810A80A 578877F8   *.M...N.........F...............8*
02F20   77F84781 080725C2 2F408810 70287518   77282FC0 21B75330 25BEB840 950421B7   *.8.....B. ................. ....*
02F40   53304344 25BEB840 25398584 25B92753   EF082127 E1C11503 25A5A93F 253E21B7   *....... .............A..........*
02F60   533025BE B840254A 25C21518 08101028   880A1148 29C02948 A101A81F 28C02948   *..... ...B......................*
02F80   B982A93B A8AB2733 434477BC CB26CBA4   25453518 5D004448 5090A814 AC50AC6E   *................................*
02FA0   ACBEAD16 AD3EACD8 AD06AD44 AD52AD62   2127D904 FA14B840 E9A0E1C1 21A71501   *.......Q..........R.... Z..A....*
02FC0   25A52539 D50125B9 A81727B3 2137B8F5   B9862940 898DA873 A8FFE929 27334344   *....N..........5... ......Z.....*
02FE0   77BCCB0C CB8A2545 35185D00 8802A85B   2127C128 21A71501 25A5A849 43442435   *..................A.............*
03000   4C163438 880A490D 415411A0 4164AA33   2127C103 21A71507 25A52D3D F5F09808   *..................A.........50..*
03020   85C42C2F 54482CAE B840A9EB 43442127   F98C2BC7 D10121A7 2C41EC36 B8402539   *.D....... ......9..GJ........ ..*
03040   30082947 273317C0 8802C410 2127E1C0   D10821A7 2A52FA92 110121A5 C4102303   *..........D.....J...........D...*
03060   DA9225B9 2C41EC0A B8402A3D E27F2ABD   A81BA8A9 43082F41 E390CB0C E7907458   *......... ..S...........T...X...*
03080   25B92759 9806A8BD C3A0A811 3658253E   A5015630 730820D9 A8CF4344 CB22CBA0   *........C..............R........*
030A0   27453718 7D004448 5090A814 AB40AB5E   ABAEAC06 AC2EABC8 ABF6AC34 AC42AC52   *............. .........H.6......*
030C0   21272539 D50125B9 E1FE21A7 FA02B840   A9074344 2127F99C 3508E50F C50F8830   *....N.......... ......9...V.E...*
030E0   2C2EE43F 88242539 E5E1D440 33A04344   25B9AB30 E1C0D102 21A71501 25A52435   *..U.....V.M ..........J.........*
03100   490B282F 104828AE AAC98780 860827B9   D10121A7 B8404344 2127F98E 2BC7D101   *.........I......J.... ....9..GJ.*
03120   434421A7 2C41EC28 B8403008 29472539   273317C0 8804D410 25B92127 E1FC21A7   *......... ............M.........*
03140   110121A5 20B32303 DA882C41 EC02B840   A9874308 2F41E390 8808E46F 25B9CB0A   *............... ......T...U.....*
03160   37582FC1 275998DD A99FC3A0 A80D4344   2127CB06 CB82A9E9 DB142127 E1C121A7   *...A......C............Z.....A..*
03180   150125A5 2539D402 D50125B9 A9DB3508   9819E1DE BF2031B2 E50F5718 7F00CF02   *......M.N...............V.......*
031A0   A80AE77F 2553EC02 C710C710 25397558   AA929C8C 0A0A0A0A 0A0A0A0A 0A1E1A0E   *..X.....G.G.....................*
031C0   0A0A4344 2435490D 4154ABEF 2B472733   434475BC 25B3CB24 CBA22435 21272547   *................................*
031E0   5D004448 5090A814 AB36AB36 AB72AB90   AB8EABA4 ABE4ABF8 ABFCAC00 2137B8A0   *.....................U.8........*
03200   21421501 88265598 559825C2 51039504   05181008 881728B6 571025BE 2FC7B840   *...........B.................G. *
03220   253E28B6 571025BE 2FC7B840 2435F9C8   2139E0FE 21B92435 2503EC12 2E41EE2A   *.........G. ..9H................*
03240   DD064F19 2FC7B840 4F2B2FC7 B840BD20   00D225C2 2127C10A 21A71501 25A58590   *.....G. ...G. ...K.B..A.........*
03260   2DB92753 D6012ED2 AC49BF20 010127B7   2127E1C0 D118A9CE 2753FE04 CE1CA804   *....O..K............J...........*
03280   2303EB28 254A25C2 2F405103 01187128   75189504 10088899 A808E67F 2ED22516   *.......B. ................W..K..*
032A0   281421B7 56102EC7 25BEB840 4588CE14   DE04DE9A A5029522 11A0DB84 2948A81F   *.......G... ....................*
032C0   8101A823 CE829504 9524A815 A8174D27   20C22DC7 E6EF2ED2 B8402127 F9982B33   *.................B.GW..K. ..9...*
032E0   D1012E41 EE064344 21A7B840 2F477348   434421A7 A8FB2B32 C10D2E41 EE044344   *J.......... ............A.......*
03300   AADC2F47 73484344 AAE02127 F9922435   4B16D101 252FD480 54482CAE A8394B16   *............9.....J...M.........*
03320   C1014344 A9202137 B002881C B8AE2E52   CE84CE02 DE2C29B6 253E5710 2FC725BE   *A............................G..*
03340   2127E1F1 4344A8FE 24354B16 2C53DC82   A827455C 4508C503 4554A831 434421B7   *...1..................E.........*
03360   B84081FF A8312127 F9962B33 D1012E41   EE0C4344 21A72303 DA82B840 A983A895   *. ......9...J.............. ....*
03380   2B3220B3 2503ED90 E1FC21A7 150125A5   2E41EE08 4344A99D FC0AA815 2F477348   *................................*
033A0   4344A9A9 E1C0D116 21A71501 25A54344   AD912B47 27334344 75BCCB14 CB8425B3   *......J.........................*
033C0   A9E9DB02 A80A3308 98062127 E1DFAA0E   2127E1D7 21A727B3 150125A5 A9E3B302   *.Z.................P.........T..*
```

```
033E0    8A172127 C12821A7 150125A5 AA232127    2539F986 E994D440 A822D904 D560A838    *....A..............9.Z.M ..R.N...*
03400    D440D560 C12577A0 A812E1DF A8142127    2539F9A0 D916E990 D440D10C 33A04344    *M N.A..............9.R.Z.M J.....*
03420    25B921A7 150125A5 FA2CB840 D12C2503    DCA6A813 D918D520 C10D20B3 232FD280    *........... J.......R.N.A.....K.*
03440    32482AAE 25B921A7 150125A5 B840D540    C10520D9 A81DAC8F 25599501 25D9A83F    *............ N A..R.........R..*
03460    2127F998 27B3D90C C128E982 A8292503    DC9BA853 E1FD2503 DCA3A85B D128A83B    *..9...R.A.Z.................J...*
03480    2127E9A8 2539D508 D90CE1FE 21A7E1C0    D10825B9 A84FF982 A8262F49 CF02A820    *..Z...N.R.......J.....9.........*
034A0    858820D5 BF204D96 27CDA823 27B3A889    2127E989 2539D50E A8312539 2127E988    *...N..............Z...N.......Z.*
034C0    D440E2FD 4344A885 D514E1C4 27B3D410    25B92553 FC862459 98B9A897 2C3DD480    *M S.....N..D..M...............M.*
034E0    2CBDA80F 21272539 E982A82D D512A827    2127E982 B840212F D0801048 28AEB840    *.........Z...N.....Z.. ......... *
03500    2127E1FE 21A72539 D506E1C0 D10825B9    A8CB2127 2539E982 A85BE1C0 D10EA8FF    *.........N...J.........Z.....J...*
03520    E1DFE990 20B3D11C 21A71501 25A52C41    EC06AABD D911AB3D 2836B896 21421501    *..Z...J.............R...........*
03540    8AD95598 559825C2 51039504 05181008    A802253E 57102FC7 25BE4344 28B6B840    *.R......B...............G....... *
03560    F912C128 21A71501 25A52753 FE02AB75    253EAB51 E1FD21A7 150125A5 2836A8C0    *9.A.............................*
03580    E1D4252F D4805448 2CAE2E41 EE02A94B    21A71501 25A5AB9D E9A42C41 2E52E63F    *.M..M....................Z.....W.*
035A0    EC302ED2 DC1AD420 2CC18401 25B7E1C0    D1182539 D9048598 A977859C A97BABC5    *...K..M..A.......J...R...........E*
035C0    C4202CC1 2C52E43F 2CD28401 2CB6D118    A98D2D36 E6D72ED2 A835E98C D1182C41    *D..A..U..K....J.....WP.K..Z.J...*
035E0    EC088401 2CB6A9A3 ABEF2D36 2DB7A80F    E1C0D118 A819E1C0 D11EA87B 27B3AC05    *................J.....J.......*
03600    27334344 77BC8510 35388812 FA02B840    2503DC82 AE4D2559 950125D9 AE552127    *............. ............R....*
03620    D106A9DF 2127E1ED 21A71501 25A5AEAB    2B472733 434477BC 81103138 884027B3    *J........................... ..*
03640    2836B8D2 23032142 15018806 55985598    AC492739 E6FE27B9 2E41EE20 87102FC7    *...K...............W...........G*
03660    2535DB02 A512952B 57102FB6 2127D101    21A7212F D0801048 28AEB840 AC312127    *..............J............ ....*
03680    D1061501 25A5F984 21A7B840 E1FE21A7    2F362FC7 B840253E AC792435 2127F988    *J.....9.... .......G. .........9.*
036A0    4B202753 CE04AB97 AB8DC6C0 2ED2C12A    253E5310 434425BE A92B5000 00000000    *..........F..KA....................*
036C0    00000000 D6202000 C3E7C2C2 E2C3E240    3308990E 27333648 73582145 31181101    *....O...CXBBSCS ...............*
036E0    03088000 1090A83E A83CA83A A8A8A836    A8CCA896 A89CA894 A8F2A91A 330898E2    *.........................2.....S*
03700    27337358 21453118 11010308 80001090    A814A812 A810A8CA A80CA8A2 A86CA872    *................................*
03720    A86AA8C8 A8F02EB2 4344FA02 B8402137    B8D0B988 29408804 B8002F66 27428820    *...H.O....... ....... ..........*
03740    254A75B8 882A0D07 2C5A8804 A4034528    95015578 2C5B5418 98242CDB 84002CDA    *................................*
03760    2937B9A2 212FD0C0 104828AE B8002E4A    0D077C02 2903D982 2C0C4528 A83784FF    *...................R..........*
03780    A829B800 2F5CB800 2EDCD780 434427B3    B840E77F A80B2127 E1C11505 25A52435    *..........P...... X......A......*
037A0    4808292F 014829AE 21531580 E406B406    8808D010 28D227B3 A81CD80B A8092539    *............U.........K....Q.....*
037C0    D50825B9 2127E1C1 21A72435 4900B11C    8804E77F 2FB32840 88422127 E982A934    *N.......A............X.... ....Z...*
037E0    AE862539 D41025B9 833FA8C7 295B29A0    810029DB 294088C4 29DAA8D7 213E2542    *....M.......G.......... .....P....*
03800    51A8244A 45B88802 A8135C02 2D03DD82    2C0C4128 A81F817F 29DBA8F7 2142253E    *...........................7....*
03820    15A8A504 274A71B8 882A2C5A 8808A403    45285508 88142C5B 44189814 54189810    *................................*
03840    2D594538 980A2CA0 A8714518 2C20A819    2C59A80F 1C022703 DF822C0C 4528A837    *................................*
03860    33089890 24354E1D 36388858 4E2C3638    887CA82A 3308987C 27453718 77018600    *................................*
03880    7090A81A A838A82E A814A838 A860A80E    A80CA80A A808A806 2127E1C1 100D2539    *..........................A....*
038A0    D44025B9 2841E811 24354808 292F0148    29AE4344 A98B2539 D50E25B9 A8562539    *M ....Y.................N.......*
038C0    D51CA80B 2127E9B4 D10C21A7 150125A5    20B38000 28C72539 D52025B9 2800E81A    *N.....Z.J.............G..N.....Y.*
038E0    D8980816 2503DC84 24354809 A8432539    D508A83B 2539D410 A85BA910 2C41EC39    *Q..............N.....M.........*
03900    A8652539 D5142F32 37488802 D41025B9    2841E838 46042153 F8AA415C 85674554    *....N........M.....Y......8........*
03920    84CA2D2F 45482DAE 2C5CA401 2CDD2539    D40825B9 B1008826 2127E1C1 152D4344    *..................M...........A....*
03940    25A5B840 283DD080 28BDA833 A85C4604    2C5D8804 A4012CDD 415CC100 98ADB920    *... ......................A.....*
03960    03004164 2127E1C1 152FA82F 2C5D8806    A4012CDD A819B3FF 880C4604 A800415C    *.......A..........................*
03980    B1008827 A84F4604 A800415C D1009859    2539E4F7 25B92435 490D4154 2153F882    *.............J.....U7...........8.*
039A0    A86A283D E07F28BD A8622127 E1C11533    25A5B920 03C04164 AA932435 49243138    *.............A....................*
039C0    881E2539 3308980C 85082145 31181101    B0378802 858A25B9 2127E1C1 1521A8A3    *...........................A....*
039E0    A931BC00 3D2CA937 808A292F 014829AE    21271501 25A55088 24354931 3138894F    *................................*
03A00    212FD080 1048E0BF 28AEA81D 2539213B    88064344 B8002EC8 25BB2D47 2DBC0139    *......................H.......*
03A20    882212AD 02B920B9 20AD292F E180C1C0    29AE2941 E1DF29C1 2127E1C1 15034344    *.............A.........A...A....*
03A40    25A5B840 02B771C4 A827BC00 3D2C2147    1B002733 7348CB3E 330898DE 364827B3    *... ...D.........................*
```

```
03A60   2836B8B4 27427501 883C5598 559825C2   59038811 29B69101 1178283C 10189812   *...............B................*
03A80   28BC5F02 75189504 57102FC7 434425BE   B84080FF A817A88C 28B6253E 511029C7   *...........G..... .............G*
03AA0   434425BE B8402C41 EC2A2435 FFDA2103   E8364D19 2DC72C3C 44189814 2D594538   *..... ..........Y....G..........*
03AC0   980E2CA0 20B72539 E4FE4344 25B9B840   2C59A813 28B6212F D0C01048 28AE2127   *........U...... ................*
03AE0   E1C11119 21A5ABE8 212FD0C0 104828AE   2127E1C1 150B25A5 D13C21A7 2539D590   *.A.....Y...........A....J.....N.*
03B00   25B98400 2CC7A853 2801D882 A85D254A   25C22F40 51030118 712888B9 29B67518   *.....G....Q......B. ............*
03B20   9504A889 33089804 E37FA80E 24354B1A   CF024B18 3648C780 ABAF2435 21273508   *........T.............G.........*
03B40   8400E5FE 5090A824 A842A870 A88AA8DE   A900A902 A904A906 A908A90A A90EA910   *..V.............................*
03B60   A926A92A A936A938 A93AA8D4 CF43E1C1   151525A5 212FD0C0 104828AE 4B2B3648   *...........M...A................*
03B80   2EB22E41 EE044344 AC5FA92D CF632C41   EC264B1C E1C11519 25A5D11A 21A7212F   *.....................A....J.....*
03BA0   D0C01048 28AE2841 D020E0EF 28C18598   2DB92E41 EE2DAA8E 837CA829 83FFD201   *.............A................K.*
03BC0   E1C11539 2841D88C 212FD0C0 104828AE   25A5A975 A504A811 4B212503 ECCE2C01   *.A....Q.........................*
03BE0   DC4A3648 2EB22E3C 87002FBC 2F369701   77787628 882A2F59 6618982C 67389828   *................................*
03C00   2F586738 98027618 2791E1C1 15352841   D8924344 25A5212F D0C01048 28AEB840   *...........A....Q.............. *
03C20   8602A860 A504A817 7608A82D A9D34B1F   2503EC89 36482EB2 86FF2EBC 2E59A841   *.............L..................*
03C40   4B273648 2EB2D101 21A74E33 2EC74344   AD274B27 A9FB4B2A A9FF4B29 AA034B23   *......J......G..................*
03C60   AA074B31 AA0B4B1A E77FAA11 4B25AA15   4B22F982 AA1BE1FE 21A72503 ECD33648   *........X.........9..........L..*
03C80   2EB22E57 8701A881 4B18D780 AA334B20   2C01DC0A 36482EB2 8602A819 4B2DAA45   *..........P.....................*
03CA0   4B2FAA49 4B30AA4D 24354B00 B3228806   83FFD201 A8064B24 B380880D 2127E1C1   *..................K............A*
03CC0   15219501 25A5D11C 21A72753 D60127D3   80C0AC29 BC003D2C 83FFD201 21111028   *......J.....O..L..........K.....*
03CE0   98088806 43442191 B8402127 E1C1D138   15012841 D89A25A5 20912836 B882AA9D   *......... ...AJ.....Q...........*
03D00   28B62C3C 8802AA6F 90010478 2CBCAA77   A504A81F BC003D2C E2FE2127 150125A5   *........................S.......*
03D20   212FE0BF D0801048 28AE5088 2841E0EF   28C124A5 40882127 C1041501 25A52B32   *.................A.. ...A.......*
03D40   2C41EC04 4344AE1D 2D475348 2836B002   8802AAF5 800128B6 8698A911 2841E804   *...................5..........Y.*
03D60   801728C7 A84D2836 B8A02539 D59825B9   21271509 25A5C10A 21A72841 D02028C1   *...G........N.........A........A*
03D80   212FD0C0 104828AE A8A02435 4C1D3438   88064344 28B6B840 83FFD201 A80D2836   *....................... ..K.....*
03DA0   B89A2841 E8282127 E1C11519 25A5212F   D0C01048 28AE8700 2FB6A86A 25472E41   *....Y....A......................*
03DC0   EE3C5B00 9802AB31 CB052733 AA952542   55015598 55988833 2127F988 D10121A7   *..........................9.J...*
03DE0   8001A829 E1FE21A7 25C25903 882129B6   59021518 95045110 29C725BE A8615B00   *.........B...............G......*
03E00   981E28B6 24354E1D 36388802 AB752127   E1C1D11C 21A71501 25A577A8 27B3AB87   *.................AJ.............*
03E20   CB212733 AAED2841 E84C415C E8E62951   2E53DEB8 4154E2FE 800028C7 2841D882   *........Y...YW........S....G..Q.*
03E40   D8262753 FE1E2742 253E75A8 77F877F8   2791A504 0F077528 88027518 2D8D20C2   *Q............8.8...............B*
03E60   85042DC0 2841D890 4344AF41 B37C883D   E1F0D10D A843A858 E0CF28C1 2127C11A   *......Q..........0J........A..A.*
03E80   21A7E1C1 153325A5 4344212F D0C01048   28AEAF69 2127C11A 21A71501 25A52841   *...A..................A.........*
03EA0   D8202435 4800881C 08162503 DC824809   E9024808 292F0148 29AE8701 43442FB6   *Q...............Z...............*
03EC0   B840ACB9 2800E804 D882A825 80C4A81D   2841D8C0 415CE8C5 28368826 B001880C   *. ....Y.Q....D....Q...YE........*
03EE0   2841E0DF 28C18000 28B9ACFD 21421101   11981198 8802A819 808828C7 2901F997   *.....A.....................G..9.*
03F00   A82320C2 800428C0 86012F48 27B72739   E6FE27B9 A8EDBC00 3F2C2435 1090A81E   *...B............W...............*
03F20   A830A85A A860A838 A83CA87C 31081118   13082145 31181101 03080048 4088482E   *............................ ...*
03F40   880C0338 8848482F 88040338 8840B800   37262539 8588B920 4D9621CD 20D5A80A   *............. ...............N..*
03F60   25398516 A8042539 851C2840 8802A802   950125B9 2127E1C1 21A7B800 3914482D   *........... ...........A........*
03F80   C80CB800 3726482D C884B800 37262127   E1C1D10E 21A71501 25A5B920 03C04164   *H.......H........AJ.............*
03FA0   2139D008 21B9A85B B80038B2 2539D508   25B9B800 39142435 2539D520 25B92127   *..............N...........N.....*
03FC0   E1C1D10C 21A71501 25A50816 2503DC82   4809292F 014829AE A8C5BC00 3D2C2435   *.AJ......................E......*
03FE0   21471B00 33089818 2836B884 B8003A64   253E28B6 511025BE D2EE4344 29C7B840   *........................K....G. *
04000   24352127 E37F3508 4448E5FE 5090A88C   A80CA816 A80CA80E A828A812 A820B800   *....T.....V.....................*
04020   3BBCB800 3C2EB800 3C40B800 3BD82545   5C318806 4B20B800 3A5CB800 3C8E83FF   *......... ...Q..................*
04040   A85B2C01 DC3883FF D2012539 E4FED598   25B92435 2127E1C1 151925A5 2841D020   *........K...U.N........A........*
04060   28C1B3FF 8802A871 50882836 B8942127   E1C11519 25A57748 2FB6B800 3E264B2C   *.A...............A..............*
04080   A8392547 5B00980E 28B6253E 511029C7   434425BE B840A899 B8003914 83FFD201   *...............G..... ........K.*
040A0   B8003B94 50000000 00000000 D6202000   C3E7C2E2 E2C3E240 BC00434E 21012087   *............O...CXBSSCS ........*
040C0   209B2753 F606987C 2A802085 2089208B   209373E4 2C3DCC34 E40F2CBD 4604FFC6   *....6..............U....U......F*
```

```
040E0   253B99F6 253999AC CFBEF9EC F1308A3C   E10FFF9A FEDC2DCF 45111518 11C84154   *...6......9.1................H..*
04100   82FE4344 20C273F4 23035001 A8E8FF02   A81D2503 CD084511 151811C8 A81BBD20   *.....B.4.....Y.............H....*
04120   1D9625A5 A82FA860 22232181 253B8808   B90043A0 20BBA83A 25399834 221FA857   *................................*
04140   8103A804 FE90811D BE2005A8 8000B800   97B0F95D A861A90C 2DCFE10F BD0040FA   *..................9........... .*
04160   432C4B0E 432C4FA2 456A43D4 4CFA432C   20B9BB20 002073E4 21314104 11C84144   *...........M...........U.....H..*
04180   221F25BB 4604A952 BE2005A8 BC00249A   BB200020 24352631 253B9806 25399816   *................................*
041A0   A8BBB900 43A02139 880AB1E0 98061588   2101A806 2101B5E0 980ECF82 A9462223   *................................*
041C0   20BB20B9 221FA93C 55C820BB 20B9A8E9   2101E10F 2435BB20 002073E4 253B880C   *.........H.....Z...........U....*
041E0   B90043A0 2101E10F 73E420BB 20B9E6F9   2ED24604 A8FFCFAC F9922802 C80E2ACF   *.........U....W9.K......9...H...*
04200   D6062ED2 213B891E B1E1980E E40F2CBD   BD20424C 25CD253B 8898B900 43A020BB   *O..K........U...................*
04220   11C8204D E40F2CBD 2123153B 10BB1105   2301B383 88C2B5E0 980A2587 21858320   *.H..U................B..........*
04240   73F4A8F4 2A02CA02 A811A915 2753E6F9   2ED2BB20 0020B5E0 999FB920 5E8A21CD   *.4.4..........W9.K..............*
04260   25BBA9A9 2A802A88 2089208B 73E42C3D   CC10213B 8806B900 43A073E4 2303B800   *.............U.............U....*
04280   59E0253B 9811BD00 432425BB BB200020   A819858A B183882A F51E9868 2A02CA20   *........................5.......*
042A0   EF10FF8E B92003C0 41642127 E1C11133   21A580C8 292F0148 29AED606 2ED2A866   *.............A.....H......O..K..*
042C0   A8B7B800 4B0EDF0C 21012223 21812F53   213B9806 221F2F53 A840B900 43A02101   *......................... ......*
042E0   73E44604 B1838810 B5E09802 A8162139   8812B59C 88142101 20BB2539 8A17B5E0   *.U..............................*
04300   9871A871 20B92A02 CA19D606 2ED2B58C   880EE4FB 55888808 CFD573F4 B8005E58   *..........O..K....U......N.4....*
04320   20B9A833 25CD8330 73F4B840 852075F4   20858582 84062587 BE2005A8 22192298   *.........4. ...4................*
04340   2298B920 439C618A 8100B800 981E2227   BB204360 03F573C4 01378802 73C4B840   *.....................5.D.....D. *
04360   122C2631 630123C8 9812BB20 00207374   BC205E20 04F52435 2753104C 31F88817   *.......H.............5.......8..*
04380   23C8BC20 17C543C8 8821BC20 41401404   BB200020 73740137 880273C4 B8408320   *.H...E.H..... .............D. ..*
043A0   73F40537 88265488 25C8981C 73E4242D   04B7A806 73E4252D 45AD9802 04B973F4   *.4.......H...U.......U.........4*
043C0   A80A25B8 88135488 452D980B 20AD253B   24351088 2841E802 A8AF8006 28D2B920   *......................Y......K..*
043E0   444421CD 2127E1C1 EB1A250F 55985598   57019810 5503DB84 8400A804 54182D0C   *.......A........................*
04400   54488818 D12A21A7 2753E6EF 2ED2DA02   A8062941 D12029C1 B800584A DA261731   *....J.....W..K......J..A........*
04420   E7FE27A5 4F177158 21A78104 29C0490D   41542753 2948A101 800121B7 D6202ED2   *X...........................O..K*
04440   80C8AF00 E4FEB581 9808B590 8820B800   5E8A2127 1401EF04 E1C11403 24A5B530   *.H..U....................A......*
04460   881A8598 DA088501 28408802 85808100   CC062984 B80064F2 D180A80B 8511A813   *......... .............2J.......*
04480   BC003D2C 07F09820 475CCE12 212FD080   104828AE 43448520 2DB9B800 2FB4B3FF   *.....0..........................*
044A0   880FE3FF 981BA815 2753DEB0 818C282F   104828AE 2B47E2FE 43442137 B89A2142   *..T...................S.........*
044C0   15015598 5598884C 25C25103 95040518   10088817 B8003222 B8003220 E6EF2ED2   *.........B..................W..K*
044E0   D201BD20 44EC4344 25A5B840 4344A800   B8402951 415485F2 2DB92742 253E75A8   *K.......... ..... .....2........*
04500   A5042D8D 77F877F8 2791274A 77F877F8   278FB840 2703EE38 475CEE2B 2127E1C1   *.....8.8.....8.8... ...........A*
04520   1731E7FE 27A52435 4F177158 21A781C8   282F1048 28AE8500 2DB92E41 DE0E20C2   *..X............H...............B*
04540   20B98104 29C08520 2DB9B840 B8002E22   2753D611 2ED2292F E180C1C0 29AE8590   *........... ......O..K....A.....*
04560   2DB98400 2CC7B800 2E762C41 EC02AA45   D4202CC1 85802DB9 8112ABAB BC00434E   *.....G..........M..A............*
04580   119C8100 1194B01B 98048102 A814BB20   45A60318 0318F884 15DC3001 F6068809   *......................8.....6...*
045A0   81041194 AA7D458A 458A458A 458A4636   460446D0 462245DC 46C245E2 46E845F0   *.........................B.S.Y.0*
045C0   46C845E8 46DA45FA 458A46F4 458A46F0   458A46F8 458A4702 458A4708 EF552DD9   *.H.Y.......4...0...8...........R*
045E0   A8F0EF5B 2DD8A8EA 85FBEF63 5768A806   8404EF6B 47582FD3 A8D8E5FF 88759501   *.0...Q.................L.QV.....*
04600   2DC8A8CE 2C50E474 4558BF20 788C2331   E2032718 27182718 47187701 88B42DD0   *.H....U.........S...............*
04620   A8B0BF20 717C5598 55985598 55987598   BC00463C A8AD4D00 15D4A896 5707E7FC   *.........................M....X.*
04640   B920788C 6388E203 22182218 22182118   53018604 160163B0 88089102 9701BE8D   *......S.........................*
04660   40888120 71E42631 460411C8 41542FD0   812071F4 570527C5 57072EC6 570B2ECE   * ....U.....H.......4...E...F....*
04680   2FC8570D 2ED82FD9 57097108 2853E10F   E0F01058 28D3E7F0 550325B5 590CE1F0   *.H...Q.R.........0...LX0.......0*
046A0   2851E00F 105828D1 59174588 95021758   27A77101 21A520B9 293DE10F 29BD2631   *.......J........................*
046C0   50882D50 D5402DD0 2D41D508 2DC1A802   2DCE178C 97021784 ABB52DCE 2D41E5F7   *....N ....N..A................V7*
046E0   2DC12D50 D520A802 2D50E5BF 2DD0A81F   22C855C8 B8007B00 178C9702 1784B800   *.A..N.....V......H.H............*
04700   7F0E5821 E0BFA804 5821D040 58A1A83F   B90043A0 293629B7 480A292F 014829AE   *........... ....................*
04720   BD200020 75E44604 33C84354 B9200003   4164A800 434CD2EC E2FE83FF 4344490C   *.....U...H............K.S.......*
04740   415420D5 B92047AA 21CDB920 475421A5   75F4AA14 810329B6 2127E1C1 D11021A7   *...N.............4.........AJ...*
```

```
04760   150125A5 83004344 810A4154 AD4A2940   8894EF04 2901D902 A88C2139 F1209871   *................ ......R.....1...*
04780   48008802 A877283D C84C20D5 B92047A4   21CDDF8C 80C4292F 014829AE 73F4A9C8   *........H..N..........D.......4.H*
047A0   80CAA80F B5E09899 AB062B53 DB908320   73E44604 A800414C F81A73F4 AAE0B920   *..................U......8..4....*
047C0   47CE21CD 80C2292F 014829AE B840B920   47AEA813 A91CE07F 28BDB920 47E221CD   *.....B....... ..................S..*
047E0   A9868308 B8005E8E 25392101 B18D8830   C1289812 4107BB20 6E4831C8 881C6108   *................A...........H....*
04800   E106C106 88068000 2880A978 F5609806   29408802 A89EEF05 A8158301 2B94A94F   *..A.........5.... ...............*
04820   B5E0981F A8CCBC00 434E73E4 4604119C   81001194 F606880E 2880C81C FF8CD88C   *...........U.........6.....H...Q.*
04840   E80CC8DD D828C808 D810AD27 A8DDA8E3   2A3DE2CF 2ABDAD33 A85A2880 D6062ED2   *Y.H.Q.H.Q......T..S..........O..K*
04860   2841D040 28C1B920 61DA21CD A8FA2501   DCBCBD20 002075E4 253B880C 23398828   *... .A..................U........*
04880   D24023BB 20B9A806 2539D440 25B94604   A800434C E2FD4344 BD200020 75F4BC00   *K ........M .........S.........4..*
048A0   65768104 29C0A8C0 D44025BB A8212C40   8841A855 FF82A826 2801E0FD C030981E   *........M ..... .................*
048C0   253B9814 2539D404 25B9FF02 A89A80C8   292F0148 29AEA890 D40425BB A88AEF06   *......M.........H........M.......*
048E0   FF842841 C8B02841 E0BF28C1 FE942836   28B7253B 882CB900 439E73E4 460420BB   *....H......A...................U....*
04900   A822B920 643C254D 15C8881B 283DC823   E6FE2ED2 A829E0BF 28C1119C D1081194   *..........H....H.W..K......A..J...*
04920   A8352539 D40425B9 283DC85E E04FCE84   CF02E0BF 28BD20D5 2901FE84 F130894A   *....M.....H...............N....1...*
04940   B9204A9E 21CD2840 880680C2 2A00CA82   80C8292F 014829AE 415C33C8 FE7AFEA8   *....... ...B.....H..........H....*
04960   E82414C 80004144 174CBB20 482A73C8   9E4D13AC 332723C8 9E55D701 1744178C   *Y............H.......H..P.....*
04980   97021784 AE61A870 A884FE9A F6068865   E04F28BD B9204AB0 21CD20D5 80C8292F   *...........6..................N.H..*
049A0   014829AE A83F6108 E106B104 8883E6FE   2ED2E0CF A889DE16 BC006566 209B2093   *.............W..K..................*
049C0   24358120 71E44604 A800415C A80CF560   8808E6FB 2ED2A802 EEA5FE9A E82AEF14   *.....U.........5...W..K......Y...*
049E0   2127E1C1 1133BF20 03C04764 21A5414C   E0FDA88F A895A8E2 2342213E 31A8A104   *...A.......................S........*
04A00   298D33F8 33F82391 434CE2FD 43442127   EF22E1C1 111921A5 2841D020 28C1A82E   *...8.8....S.........A..........A..*
04A20   2EC0283D D08028BD E6F82ED2 B9204A52   21CDAF0F E1DF21A7 110121A5 B9200026   *........W8.K.......................*
04A40   419821BE 28B628B7 2133C0FF 21B3FEB1   A8EB2127 D9A62A3D E27F2ABD CD18F606   *.......................R...S.....6.*
04A60   880AB920 61F021CD B800424C BD004E14   BD2061F0 AF53E4FB 25BBA81F 832073E4   *.....O...............O..U.........U*
04A80   5388BD00 4E303588 A835E902 A927158C   95021584 852075F4 2F49858C AAF82127   *..........Z..............4......8..*
04AA0   D9A02A3D CA4F8306 63688841 B5E09804   B8005E8A 858CE4FB 01F89814 283728B6   *R......................U..8......*
04AC0   A8138320 73E45388 BD004E30 3588A82F   D30820C2 810429C0 A82BBD20 643C234D   *.....U..........L..B.............*
04AE0   53B08806 E6FE2ED2 A90FE6F8 2ED2414C   80004144 283DD080 28BD2840 8804B800   *....W..K..W8.K............. ....*
04B00   4326BC00 65768004 28C0B800 432620B9   86062ED2 20B3EF4C CFB4BD20 4B7E25CD   *...................K.............*
04B20   81F82F49 CF02819C 29B98320 73E44604   85FE4544 850F4554 2127E1C1 21A71527   *.8............U...............A....*
04B40   082125A5 292F0148 29AEB800 4326DF37   22232631 832073E4 460455C8 4554221F   *..........................U...H....*
04B60   2631A84B 2F49CF02 A8512C41 EC55BD20   4B1A25CD 4588951A 25BEB800 5574283D   *................................*
04B80   E00F28BD 25BB2832 C0898806 BC006566   2435CEC4 C59C9838 2901E960 C59C8600   *.....................DE.....Z.E...*
04BA0   BC204C04 2ED224CD CF82A820 DF1023D9   22232631 2ED22753 20BB20D5 A8A58600   *.....K..........R.....K.....N....*
04BC0   2ED2221F 26312ED2 27532359 B8006348   D4068306 6368A83D 2D32A812 D98E2103   *.K.....K.........M............R...*
04BE0   F1108808 210F1198 119821CA 25BB8406   F606880C 6308E306 CFDBA85F 20BBA912   *1...............6.....T.........*
04C00   BD004324 F6069804 25BBB840 2901F130   98372A41 EA0CB59C 8808A903 262360BB   *....6...... ..1..................*
04C20   A802CF89 26318000 28CF8606 2ED2E106   1090A806 A91DA8DA A800B800 432C05F8   *.............K..................8*
04C40   980C22F8 2298859C 2DB94344 A86A2539   2F337458 2D322435 4F0A2E2F 76482EAE   *...8.............................*
04C60   2753FF8C FE9A25B9 25275501 25A55088   BD2018E6 25A525D7 86808718 27B95088   *......................W...P........*
04C80   85902E3D E67F2EBD 2E2ED640 2EAEA82B   D2024344 27537108 2F492539 DDA0C99A   *....W.....O ....K...............I.*
04CA0   830285F4 25B981C0 282F1048 CF06212F   D0801048 435428AE B840D91D A816DF94   *...4...................... R.....*
04CC0   2D41ED10 2D51E50F B50D9808 CF06C610   2ED2DE98 55C84554 55C8292F E180C1C0   *......V.......F..K...H...H....A.*
04CE0   29AE4564 859E25B9 B8002E22 4554BD20   00034564 84F22CB9 B840CB10 85FFA820   *.....................2... ......*
04D00   28CF290C 299CE677 2ED2AAD0 2841E815   AA05E6DF 2ED22A41 E2082AC1 FB1F85E8   *......W..K....Y...W..K..S..A...Y*
04D20   2DB9BB20 4D5023CD D6062ED2 832073E4   46042D50 2841E810 45648501 08224554   *.........O..K...U......Y.........*
04D40   2527E5C1 5523AA07 21170568 1558A819   F4FF9842 B59E8806 B5FF983A 85E88120   *..VA.............4..............Y..*
04D60   71E44604 2127F304 98F24F17 715821A7   4F0DCF16 E1C11103 21A54754 812071F4   *.U....3..2.............A..........4*
04D80   FB068300 B8006262 AA86CF82 A840C701   110121A5 A81D2DB2 490DC90C D640F606   *............. G...........I.O 6.*
04DA0   8802D606 2ED2AA8F F7018811 F6208815   F7408819 E6DF2ED2 DF062223 2ED22DB2   *..O..K..7...6...7 ..W..K.....K..*
04DC0   221F2ED2 2DB22753 263120D5 A833E1C1   D12021A7 110121A5 2753DE22 CF8A2587   *...K........N...AJ.................*
```

```
04DE0    BD004E18 2507A867 D6202ED2 222320BB    26312ED2 2F53838D 2B818320 A8E1E6DF    *........O..K.......K..........W.*
04E00    2ED2DF02 A829221F 26314604 85F425B9    8502A8D9 24352753 812071E4 460411C8    *.K..........4.....R.......U...H*
04E20    41544A0D CA2C4164 80EE4144 490D4154    2127E1C1 4F177158 21A72F53 EF0EE1C1    *.................A...........A*
04E40    110321A5 20B98120 71F45088 C1011101    A811CAAF 2A49EAB3 8080A837 2435E6F9    *.........4..A.................W9*
04E60    F3089870 D6028304 2BC0BB20 4F6823CD    20C28302 820123B7 4B173158 21A71501    *3...O............B..............*
04E80    25A54B0D EF124809 4354292F 014829AE    812071F4 2ED2B840 E3FE4808 A817BC00    *.........................4.K. T.......*
04EA0    60D22435 B5E09804 B8005E94 EF165108    C1289806 D4009802 D518F51E 9802D406    *.K.............A...M...N.5...M.*
04EC0    B80064F2 F5E0886E CD02A802 A85E490F    BC006468 BB204E9E D60623CD 83042BC0    *...25..................O.......*
04EE0    25162914 EF24BB20 01FF9101 10082948    21B728BC 2127C11A 21A7E1C1 113921A5    *.....................A....A....*
04F00    511029C7 25BEB800 558A8812 83022BB7    25BED650 BD2000D3 25C2B800 55748102    *...G.............O....L.B......*
04F20    45889527 25BED640 B8005574 F4FF99AD    F57F8867 A9B3F4FF 880AF450 98712804    *.....O ....4...5.....4...4.....*
04F40    89BFA877 5108E11E 887DB104 8881B10C    8885B106 8889B11E 888DB10E 8806C608    *..............................F.*
04F60    B80064F2 D406A80B BC0060D2 24355108    E11E882A B1068816 B1048806 EF0CB800    *...2M......K...................*
04F80    64F2BD00 65AABC00 4E148440 A811D516    283DD050 28BDD640 2ED2B800 64F2D406    *.2......... ..N.......O .K...2M.*
04FA0    A827EF22 2814BB20 01FF2901 D9102527    FD0C4C00 B4228806 4B1D8200 E6EFBD20    *...........R...............W...*
04FC0    4FCAB800 5B4AB800 432C2901 D9082127    E1C1D106 21A7851C B8006262 BC0053D8    *...........R....AJ............Q*
04FE0    BC00463C AC742127 E1C121A7 2753EE06    D6082ED2 AAD9AAFD 800028C1 28CF28B2    *.........A......O..K.R.....A....*
05000    2753E606 2ED2280C 289C2631 B8004B1A    B92071CC 55C82D1C 8AC2A501 51181D00    *..W..K..............H...B......*
05020    55185090 A808A806 A94CA9AA A8B2BD20    504025CD BD20FF98 25D52753 B8005574    *................. .......N......*
05040    20C2BF20 509027CD 80C8BF20 71CC2D1C    A5015718 7D00B501 88087D01 B5018802    *.B.......H.....................*
05060    4808292F 014829AE 2127E1C1 152525A5    D10C21A7 86018702 27B78604 2EC020D5    *...........A....J..............N*
05080    872077E4 46048002 4144A800 77F4B840    B5E09802 AB5CE4DF 4708E7BF D700982A    *...U.........4. ......U...X.P...*
050A0    CCB25708 E71EB708 8AB4D700 981C2F40    88BBCE16 B92071CC 2F1C7118 1900B101    *....X.....P.... ...............*
050C0    8802A8E9 BC0053D8 A8EFBF00 5404BC20    5040AB70 2E32FE82 A811DE13 DE95AA90    *...Z...Q........ ...............*
050E0    BD2050F2 25CDBD20 FF9825D5 2753B800    5574B920 515821CA 81FF29BC B920511E    *...2.......N....................*
05100    21CDB920 FF9821D5 800128C0 2841D020    28C12127 243533C8 2753B800 58A620C2    *.......N.........A.....H.......B*
05120    BF20512A 27CD80C8 A8C9B5E0 9802AAC2    D4009818 5708E71E B7088A3A B7148A48    *.......H.I.....BM.....X.........*
05140    D7009808 2F408951 CE02A971 BF005404    BC20511E AAEE0000 00000119 40DFDFDF    *P.... ..................... ...*
05160    DFDFDFDF DFDFDFDF DFDFDFDF 82898440    406B96A5 0D3720C2 BB0055AE B920519A    *.............. ......B........*
05180    21CD2C41 D4202CC1 84802CB9 25359532    33C811C8 2753B800 57A6B5E0 9802AA52    *....M..A.........H.H............*
051A0    BF2051A6 A961B5E0 9802AA46 D400981C    5708E71E B70889E2 B71489F0 B70E8808    *............M.....X....S...O....*
051C0    D7009808 2F4089D1 CE02A9F1 BF005404    BC205176 AA6E8110 29CBB920 0000219B    *P.... .J...1....................*
051E0    11018A09 BD2051F0 275333C8 B8005554    BB0055AE 20D5B920 520E21CD 2C41D420    *.......O...H..........N........M.*
05200    2CC18480 2CB933C8 251BB800 6CB8B5E0    9802A9DE BF20521A A9D5B5E0 9802A9D2    *.A.....H...................N.....K*
05220    D4009822 5708E71E B70E882E B714898E    B7088A3D D700980E 2F408A45 CE08211B    *M.....X..............P.... ......*
05240    9102219B A867BF00 5404BC20 5250A9F4    801028CB 20C2211B A87B284B B88DAA69    *...............4.....B..........*
05260    2142880A 1F05B761 8808B788 88AC2631    30881F06 B74F889E B77F8802 A8114488    *................................*
05280    8A8B1F07 B70D8822 B715881E 1F087638    8802A827 B6F0982B B6FA9802 A8311E09    *.................O...........*
052A0    B60D8816 B6158812 A83D0F07 2E36A703    67388802 A8494788 A8140D07 2C36A505    *................................*
052C0    45388802 A8598600 E70F7718 47987501    8988258F 26318700 2F9CAAFD 209BBF00    *........X.......................*
052E0    541E8100 29C129CF 2753E677 2ED22435    4800288C E80C2631 8306BD20 009EB800    *.....A....W..K......Y..........*
05300    6262B920 531021CA B92052F6 AA0F0000    00000101 40376488 A89D1F06 B7D48802    *...........6........ .........M..*
05320    A8B55488 8B2F1F07 B70D8883 B7158887    1E087638 8802A8CB B67B880A B6F098D3    *..............................O.L*
05340    B6FA9804 A8D98700 E70FBD20 53547518    5F00A8B7 F9F1F2F3 F5F7F6F8 F4F0BC20    *.....R..X...........9123576840..*
05360    0000BE20 71E6BD20 71D2BB00 5260AAA7    BF2071FA A8A9BC20 0000BE20 0000BD20    *.....W...K......................*
05380    0000BB00 5260AA3D BC200000 BE200000    BD200000 BB005260 AA4FBC20 0000BE20    *................................*
053A0    0000BD20 0000BB00 5260A9E1 BC200000    BE200000 BD200000 BB005260 A9F3BC20    *.............................3..*
053C0    0000BE20 000055C8 231B3B00 2B9DBB00    52608300 2B9DA993 BB2071CC 291C1318    *.......H........................*
053E0    9101299C 11C83900 B1FF8BF5 BD20717C    4088BF00 541EBB20 00062753 20CA2631    *.....H.....5....................*
05400    B8005E94 2553CC08 D4802CD2 84002CCF    2C4F2435 4D0F4538 8C239401 2CCF2542    *.........M..K...................*
05420    881ABE20 05A8618E B9205436 618A1582    8100B800 95600000 000020C2 85012DC0    *..........................B.....*
05440    26317088 B9205450 21CA4188 AB4F0000    00000105 40360636 0637209B BF00541E    *................. ..............*
```

```
05460   810029C1 29CF299C 2753E677 2ED2208F   BD2000E0 BB200006 2631B800 62602435   *...A......W..K..................*
05480   48283038 8824481D 3038880C 2BB22539   D44025B9 B8003914 28B24809 292F0148   *..............M ...............*
054A0   29AE2127 150125A5 5088B800 38B6B800   02005000 00000000 00000000 D6202000   *............................O...*
054C0   C3E7C5C3 D4C4C340 293DD150 29BDA810   EF04CE24 DEA42920 117829DB 810029DA   *CXECMDC ..J.....................*
054E0   20C22941 E16F29C1 8626DB02 D610DBB8   294821B7 290CA83E AB02BD00 65AAB920   *.B.....A....O..................*
05500   41D021CD B920FF98 21D52127 E1C1D110   21A71501 25A58101 29B62941 D12029C1   *..........N...AJ.............J..A*
05520   E6EF33C8 4B1DA862 250F5598 559825CA   25C25103 01189104 29C0EF0E A810E2BF   *W..H..............B............S.*
05540   2AC111C8 2303B800 6C522A41 CA912248   BD206C52 25CD4588 951BB920 FF9825BE   *.A.H............................*
05560   21D52901 D982DB8A 2948A808 82EF2856   A8068101 285633C0 21B72127 4D0E4B12   *.N..R...........................*
05580   E1C15158 21A71501 25A5480A 292F0148   29AE8120 71E44604 BD200003 45644D0C   *.A..................U...........*
055A0   D2EE4344 A8004554 2ED271F4 B8408520   75E44604 11A84154 A80075F4 30802D3D   *K........K.4. ...U..........4....*
055C0   D5502DBD F606980A EF02E6EF FBA6FB14   EB9CB920 633A21CD B9209934 21D52941   *N...6.....W.....................N..*
055E0   E16FA814 E6BFD680 EB82A81B EF02E67F   D640A823 C620A82B 29C1E6F9 D6022901   *....W.O.......W.O ..F....AW9O...*
05600   D988DBEA 290C9104 29C02948 EB7A2248   EF30CE28 4B2C2D20 55782DDB 85002DDA   *R...............................*
05620   BD200020 25B921B7 D2EE2127 C11A21A7   E1C11519 25A55548 2DB2A8B3 CEAB4B28   *..........K...A....A.............*
05640   A82D2D3D D5502DBD 4588BB20 6DE6244D   34B08812 CE0EDE08 952025BE 2435A8ED   *....N........W...................*
05660   9522A80B CE849528 A8119524 A815B920   010121B7 250F5598 559825CA 25C25503   *............................B..*
05680   45189504 2DC0A87D 251625BE BD2000D3   25C22914 2248EF0C 4C00B422 8933B424   *...............L.B...............*
056A0   8937A895 A933293D D15029BD 8102CEC4   CE428001 21B7BD20 572225CD B920FF06   *........J.......D.................*
056C0   21D58626 85042DC0 2127E1C0 D10221A7   150125A5 2849C80A 292FE180 C1C029AE   *.N..........J..........H.....A...*
056E0   A8084809 292F0148 29AE8120 71E44D0D   4604A955 BD20FF98 25D5BD20 41D025CD   *.............U...........N......*
05700   86068504 2DC04588 951B25BE 481321B7   2127E1C0 4D0E5158 21A71501 25A54B12   *................................*
05720   A999E65F D648208B 84002C88 2CCFBD00   65AAA963 CE86CE04 8606A81A BD205756   *..W.O...........................*
05740   25CDBD20 FF0025D5 86064588 951B2B41   D3202BC1 A9F9BD20 57EE25CD 85042DC0   *........N.........L..A.9..........*
05760   8606BD00 65AABD20 FF1C25D5 81024588   952725BE AA03EF04 CE16DE92 2C41CC88   *...........N......................*
05780   BD205792 8606AA35 E4BF2CC1 A804AA97   A86ABD00 65AABD20 57EEB920 FF1C21D5   *.........U..A....................N*
057A0   860625CD 2522EF3C 20B321D5 210F1198   11981803 90010078 29201178 10189820   *............N....................*
057C0   28BC2127 C11A21A7 110121A5 481428B6   51102846 1B005110 29C725BE 8200AA4F   *....A....................G......*
057E0   80FFA825 810429C0 25BE1148 AA7BBD00   65AAC608 2ED28112 B80041D2 E67FD606   *.................F..K.....KW.O.*
05800   2ED280C8 292F0148 29AEB920 41D021CD   20D5B840 293DD160 29BDF606 980EEF02   *.K.H.............N. ..J...6.....*
05820   E6EFD640 CE02A802 C6A0FB8A E6F9D604   2941E16F A804C608 A80F29C1 BD206404   *W.O ....F...W9O.......F....A....*
05840   25CDBD20 FF1C25D5 D6C0EB04 E67FA806   B92000D3 21C22ED2 250F5598 55988808   *.......NO...W.......L.B.K........*
05860   25CADB8C 5802A80A BD2000D2 25C2A811   280C28C0 2139D001 21B9EF3E 004828B2   *............K.B...................*
05880   210F1198 11988802 18039001 00782920   11781018 982028BC 2127F920 2A41EA1C   *..........................9......*
058A0   4A00B222 880A33A8 4B1DE1C1 C11CA812   BB2001FF A80D80FF A825A85A BB2001FF   *............AA....................*
058C0   C11A21A7 E1C11539 25A52C3D E43F2CBD   2503FD02 E6F7ED20 254A25C2 2F405103   *A....A.......U........W7......B. ..*
058E0   01187128 1158980A 810187DF 2FC729B6   AB697518 9504A808 D6802516 291429BC   *.............G...........O.......*
05900   29B65110 29C725BE AB818644 BD205BC6   25CD55C8 A8D1293D D16029BD 2841E80A   *.....G..........F...H.J...J.....Y.*
05920   4588FB08 EB8A951D A80CA80E 9529A806   951C25BE ABC325BE ABC725C2 2F405103   *...................C...G.B. ..*
05940   01187128 75189504 2F3DE73F 2FBD2753   E6F71108 882225BE 2801B09B 8802ABED   *..........X.....W7...............*
05960   29B65110 29C725BE 2127C11A 21A71501   25A533C8 83FFABEF 80012948 21B78104   *.....G....A.........H............*
05980   29C020C2 2139E0FE 21B92127 E1C0D102   21A71501 25A54908 282F1048 28AE8120   *...B.............J...............*
059A0   71E44D0D 4604AC09 BD206404 2941E16F   29C125CD 8604AA57 EF04DEA0 A8062C41   *.U.....................A..........*
059C0   D4402CC1 BD206262 D60625CD 4588951B   25BEB920 FF9821D5 4813AC67 B80054FA   *M .A....O..............N........*
059E0   28018120 FE08B019 8832B800 432CB025   88B42C41 EC02A80F B09B8802 A815BD20   *................................*
05A00   444425CD 84002C8C 253B98CE 46042539   475CF60F 88C471F4 B840A86E 71F4EB4C   *...................6..D.4. ...4..*
05A20   250F5598 559825CA 25C2280C DB825802   28C00208 51030118 212829B6 95042518   *..........B.......................*
05A40   2A41EA2B 5110EF04 81DFA501 29C72127   25BEEF30 150125A5 253B981E 2539D401   *.............G...................M.*
05A60   25B9BF20 6404BD20 FF1CA854 2753E67F   2ED22516 291429B6 A83B8306 6368D308   *...............W..K............L.*
05A80   B8006262 C10A21A7 A8372127 D910C10A   21A75110 29C725BE 253B9823 A83D2753   *....A.......R.A.......G..........*
05AA0   C6C02ED2 A8118500 2D8C253B 98202539   CD14F51E 981071F4 BF20633A BD209934   *F..K..............5....4.......*
05AC0   25D527CD B84025BB BD004E14 253BBF20   633A27CD B9209934 21D520BB 275371F4   *.N... ..................N.....4*
```

```
05AE0   B8005E44 293DD160 29BDEF06 CE18DE98   A8042C41 CC88BD20 5B0C8606 A935E4BF   *......J......................U.*
05B00   2CC111C8 A806AB0D B80054FA BD0065AA   BD20642C B920FF1C 21D58606 AB7D293D   *.A.H..................N......*
05B20   D16029BD CE86CE04 8606A806 BD205B32   ABF3BD20 642CABDF CE2A2127 F93C4816   *J................3.........9...*
05B40   8838BD20 5B6633C8 4B1D25CD 28B6E6F9   D6042127 E1C1D110 21A71501 25A520D5   *.......H......W90....AJ........N*
05B60   B800558A AB6BB598 8802A86E E4DFD400   98682127 E1C1D106 21A7E6F9 D604BD20   *............U.M.......AJ...W90...*
05B80   5BC625CD 55C8AB43 852075E4 4604490D   4154A800 75F4BD20 0098B800 6262BD00   *.F...H.....U........4...........*
05BA0   5C008200 4B2CCE82 4B28B800 5628CE4D   E6EF4816 9001BD20 5BC62327 FB02A87B   *................W........F......*
05BC0   BB2001FF A87DB920 FF9821D5 2801D82A   B9206404 21CDB598 8804B800 5E8AE4DF   *............N..Q..............U.*
05BE0   D400980B 851C2127 E1C1D106 21A72801   D804B800 6404B800 6262B920 6262A82D   *M.........AJ.....Q..............*
05C00   2127E1C1 EB5A21A7 FB32EBB6 29201178   29DB8100 29DAB920 633A21CD B9209934   *...A............................*
05C20   21D5E6F9 D6262801 B0288802 C624DB98   290C9104 29C02948 21B75088 E6BFD680   *.NW90.......F...............W.O.*
05C40   A839E67F D640A83D 210F1198 119821CA   21C21103 01189104 29C0B920 0101A829   *..W.O ..........B...............*
05C60   E6F9D604 D10621A7 BD205C82 25CDBD20   FF9825D5 BD2000D2 25CABD20 00D325C2   *W90.J..............N...K......L.B*
05C80   AC0FBD00 5C082ED2 A884CE18 2127F912   BD205B38 25CDBD20 FF9825D5 D606B800   *.......K......9.............NO...*
05CA0   5574A92B ACABCE05 A931CE09 DE86BD20   5CB8A821 B80054FA 2127E1C1 21A7BD00   *...........................A....*
05CC0   5C082535 9532B800 6C98CE12 DE9BBD20   5CD4A841 4816881E BD205CE2 A999B800   *................M.........S....*
05CE0   57FCB598 8802A90F E4DFD400 99152127   E1C1D106 21A7E6E9 D604ACC1 CE21DE86   *.........U.M.......AJ...WZO..A....*
05D00   BD205D0A A873B800 54FABD00 5C000816   DA824809 292F0148 29AE2127 E1C121A7   *..............................A..*
05D20   150125A5 800128B6 800028B2 812071E4   A8004604 82EE4344 B8006242 CE61DEBB   *................U...............*
05D40   BD205CF6 A8B321A7 110121A5 25BE4813   810221B7 810429C0 4B12480A 292F0148   *...6............................*
05D60   29AE8120 71E44604 BD200003 45644D0C   82EC4344 2ED24554 A80071F4 B840CE24   *.....U..............K.....4. ..*
05D80   55C825D5 BD0065AA 23032127 E1C121A7   D6042C41 D4202CC1 BD205BC6 25CD2555   *.H.N..........A..O...M..A...F....*
05DA0   B8005846 B80057FC 23032545 5C318802   E3F7BD00 5C002ED2 25455C31 8A1DA8B3   *...............T7.....K.........*
05DC0   BD20001C B8006262 CE26BD20 5DF44816   28B225CD 2127E1C1 4D0E5158 21A71501   *...............4.........A.........*
05DE0   25A511C8 21D533C8 4B1D28B3 B8005592   B80057FC B5988879 B8005E8A 2303BD00   *...H.N.H........................*
05E00   5C002ED2 0816B800 5D145000 00000000   00000000 D6202000 C3E7C5C3 D4C4C940   *...K.................O...CXECMDI *
05E20   BB200020 73E40237 8832212D 98047374   00B901B7 20AD2753 253BFFA6 20BB73F4   *.....U.........................4*
05E40   2155880A F4FF9842 51481068 983C2435   230311C8 2631204D 20BBA81D 737473F4   *....4................H...........4*
05E60   B8402901 E1FDC130 982F2155 8833BE20   05A873F4 F4FF9872 51481068 9874B5E0   *. ....A..............44...........*
05E80   9802A86E 230311C8 204D8306 63682631   B5E098E6 BC0060D2 D3082127 D982E3F7   *.......H...........W....KL...R.T7*
05EA0   E6FE2ED2 283DE00F 28BDFCB0 2801D884   208F2091 209B2093 28408828 FE2A2142   *W..K...........Q.......... ......*
05EC0   8B9E273E 17A811F8 11F82191 A7040907   17288802 17182F8D 20C2AB84 2802F835   *.......8.8..................B....8.*
05EE0   E4FEA839 BC006566 AB76FF02 EC84F0FF   88758306 6368B5E0 9880FF02 A804E6B7   *U.............0.................W.*
05F00   2ED2234A 8810618E B9205F14 618A8120   B800A49A 20CABC00 249ABC00 60D6B5E0   *.K..............................O..*
05F20   984CCF84 E6B7A846 F6488842 DF10E6F7   CE82A83A D6102ED2 22232ED2 B840E6BF   *....W...6.....W7....O..K...K. W.*
05F40   2ED2EE02 A828221F 20B920BB 2ED2234A   8810618E B9205F60 618A8120 B800A49A   *.K............K.................*
05F60   20CA2135 1808E0BF 292F0148 29AEB800   2450E501 D58CB800 24264008 8808FC9E   *...................V.N..... .....*
05F80   BC0060D6 ECACFE94 CD2C2435 82003490   4401B920 001E5168 14904001 A988A8CE   *...O......................... .....*
05FA0   CD8EDD1B B598881F B58F8823 B58E8827   A8B1FFC3 858CF51E 8831FF9D 283DE00F   *.....................C..5.........*
05FC0   28BDB584 8832B598 8814B58C 8830B594   882CFE08 2810880A D406AD16 AB56D308   *......................M......L.*
05FE0   A811240F 2491290C 2703DF86 44984498   4902298D 2753A821 BC006566 AA622840   *............................... *
06000   8802AB30 EF42244A 11C82848 A0014301   33983398 88229101 01388804 3488A813   *..........H.....................*
06020   408124BE BC00658E 243E24C2 80000910   149824BE 800128B6 83066368 E6FE2801   * ..........B..................W...*
06040   D882AAF0 D406ACAA 24354800 E00FB00A   8802A84F 2801B028 8802A857 DE02A85B   *Q..0M...........................*
06060   BC006576 800428C0 8306D680 AAC6EF02   A80A2135 9128243E 41B88838 5108E11E   *..........O..F..................*
06080   B1108804 E6FE2ED2 24114498 44984101   88321198 11982A0D 8802A80A 1A022A8D   *....W..K........................*
060A0   11F811F8 21912A02 FA0AE4FE 992F2155   8933AA6D F4FE9939 2155893D 51481068   *.8.8......U.........4...........*
060C0   8A75A945 41031018 290D8823 10288827   A82D8306 636881A0 CC02E17F FF8AEC38   *................................*
060E0   FC02E1DF 29844088 C122DC02 E1FDE4DF   EC042984 4088D108 29842859 28C73188   *...... .A.....U..... .J......G..*
06100   234A8810 618EB920 6112618A 8120B800   A49A20CA 13884088 EF0AD140 E4F72A3D   *..................... ....J U7..*
06120   E27F2ABD A847B590 8ADDCD30 6108E106   B1068844 B5288838 D4009822 F51E881E   *S.......................M...5...*
06140   FE18C606 283DE0DF D01028BD B9209934   21D5B920 633A21CD AB98A9E4 A9A3D406   *..F..............N..........U..M.*
```

```
06160   D0102884 D680E6BF 2A3DE27F 2ABDA831   D400983D D518A841 DE3EB920 002071E4   *....O.W...S.....M...N..........U*
06180   4604A800 4144A800 71F42940 8802A808   BC006576 810429C0 5108E11E B1108808   *.........4. ....................*
061A0   D440E6FE 2ED2AB1F 2539E51E 880881C8   282F1048 28AEB840 EF02A812 24354800   *M W..K....V....H....... ........*
061C0   E00FB00A 8802A806 2801B028 8855CD08   F56088A1 E6F9D602 A8A7CD10 B51A880C   *................5...W9O.........*
061E0   F6C0880C B5088802 A806E63F 8308A870   2A3DCAAC 8308E606 9866D500 9802858A   *6.........W...........W...N.....*
06200   25BB292F E180C1C0 29AEEF02 B8408120   71E44604 33C8475C F60F983E 4354A82E   *......A...... ...U...H..6.......*
06220   2435B5E0 9BB625EB E20F2ABD EE8A292F   E180C1C0 29AEAA04 FE84B800 424CB800   *........S.........A.............*
06240   4252BD00 65AA8120 71E44604 A800434C   E2EF4344 4B0D4354 A80071F4 B84085FF   *.........U......S..........4. ..*
06260   D4062753 FF82FE82 E6F92ED2 B92061F0   21CD20D5 FF82FE96 800428C0 B5E09802   *M.......W9.K...0...N............*
06280   A80C283D C888292F E180C1C0 29AE2904   8802D480 F4FE8804 E4F13458 2587294F   *....H.....A.......M.4...U1......*
062A0   2989293C 2985EF1E 2841E0BF 28C1FF82   FEA2BF20 002077E4 4604A800 4744A800   *.............A.........U........*
062C0   77F4B800 43382435 4800B04E 8827B06E   882BA825 B5908804 21398808 B920643C   *.4..............................*
062E0   21CDA823 5180E11E B110883A B58A8824   D4009804 E63FC660 E6F82ED2 800428C0   *................M...W.F.W8.K....*
06300   B5E09802 A855283D C8D9292F E180C1C0   29AEA863 E7BFD680 2ED2BC00 6576209B   *........HR....A.....X.O..K......*
06320   208F2091 A82F213B 8802A841 5180E1E1   21BBA859 D406E6F9 A806FE86 E639C660   *....................M.W9....W.F.*
06340   2ED2B920 61F021CD 34802587 23032E01   DE82DB8E 2F40880A DE02A890 208F2091   *.K...0............... ..........*
06360   A88A274A 77F877F8 278F2742 213E71A8   77F877F8 2791A104 0F077128 88027118   *.....8.8.........8.8............*
06380   298D264A 8866DB90 280C0907 012833C8   55C82C48 A401A810 61032B40 8815A84C   *...............H.H......... ....*
063A0   BD2061F0 25CDA81F 1318BC9E 2707E71E   C7109828 2D8D6183 61011198 119821CA   *...0..........X.G...............*
063C0   608166F8 66F82691 A8206701 77987798   880A6183 80007688 0907A835 2F367128   *...8.8..........................*
063E0   91016183 7328980E 9301239B 25074380   27532631 A9854380 BC006566 209B2507   *................................*
06400   25BBA9A7 FA9EFC9C 210F1198 11988814   86001E83 13013398 33988808 1081BC00   *................................*
06420   658E2631 2A03CA0A 2753FE84 C608E67F   A9CFE606 81942087 B80041D2 872077E4   *............F.W...W........K...U*
06440   213B8812 B130881A 21B92127 E1C0D120   21A71501 25A525BB 77F42A3D E27F2ABD   *..............J..........4..S...*
06460   B840818A A81F294E 2801B019 8858D406   EEEA2802 C8EA284F 90010138 986228CF   *. ............M.....H...........*
06480   C001980E 29042988 8802D480 E4F93458   258B4188 BC006568 EF02A812 FC82A80E   *..........M.U9..................*
064A0   15888320 73E42139 D00121B9 A8061588   832073E4 460411C8 29844154 208773F4   *.....U.............U...H.......4*
064C0   24352303 50882616 66F866F8 268F2631   2814288C 2803D010 2883A86F FE69A86F   *.........8.8....................*
064E0   293DE10F 29BDEE8A 2801D886 E6F9A9B1   C608264A 294088C8 209B2093 2631AA9D   *..........Q.W9..F.... ..........*
06500   FDB62801 D82866F8 66F82693 66986698   25878000 3480FE82 E6F9F560 8806C608   *....Q..8.8..............W95...F.*
06520   FE82C620 D4009802 E67F2ED2 A98FDE02   A82D2103 D9B1AA05 2103D802 A83DD440   *..F.M...W..K........R.....Q...M *
06540   A8412139 880A20B9 B1E09804 1580AEBD   11C8BF20 002077E4 4604A800 4154A800   *.................H.....U........*
06560   77F42753 AA333188 2A408802 A8368204   2AC02A01 DA04234A A8142303 DB82A80B   *.4....... ......................*
06580   234A3688 33013398 33988818 6081BE20   05A86606 618EB920 65A2618A 8120B800   *................................*
065A0   A49A20C2 26311388 40888120 71E44604   213B980C 415420B9 812071F4 11C85088   *...B.... ....U.............4.H..*
065C0   20D5B1E0 980CB920 5E8A21CD 812071F4   B84025CD 20B911C8 4154A811 5108E11E   *.N.............4. .....H........*
065E0   B1088826 C280CA50 DA3EDA8A EEACA80C   CEAA80C0 A850B106 EE8E8838 D2804808   *....B.......................K...*
06600   292F0148 29AEA860 A868DA04 DA86A806   8508A802 85182DBB EE88ABF7 4588952C   *...........................7....*
06620   A8A0E20F 2ABDABEF EEBAB10E 883AB10C   8884A850 480BA80E 2ABD8520 75E420B9   *..S..........................U..*
06640   DA3CDAA8 4808E27F 292F0148 29AE2ABD   49172327 E3C11358 812071E4 23A73301   *......S.............TA.....U....*
06660   23A5AC23 A828E27F 80C6A825 B1008881   A80D8853 8308BC00 64662A3D A883EE9D   *......S..F......................*
06680   B1008832 D2802ABD 45889527 A834C510   B10C8818 B11C8802 C510B10E 887D8308   *....K.........E.........E.......*
066A0   294ED101 BC006468 2A3DA829 294ED101   8308BC00 64684588 951DB920 66CC21CA   *..J...........J.................*
066C0   21C22127 E1C1D11A B8005D46 00000401   00000000 2D0066F6 626266F6 676267A2   *.B...AJ................6...6....*
066E0   67C6679C 679C6752 67526752 67626262   679C679C 679CF560 8850E6AF D6802ED2   *.F....................5...W.O..K*
06700   BC006466 2303DB8C 2D0C9504 29488001   20C2A80C B9200101 274A7503 45189504   *.................B..............*
06720   2DC021B7 4808292F 014829AE 832073E4   460411A0 4164490D 41542127 73F4E1C0   *...............U.............4..*
06740   D10221A7 150125A5 B840CCCD FDCFD580   A853E6AF D6802ED2 BC006466 E3F7B800   *J........ ....N...W.O..K....T7..*
06760   55FEF560 8822CD97 2840881B A8002435   D516CE90 E6BFD680 2ED24915 BC006468   *..5...... ......N...W.O..K......*
06780   B80055FE D610A815 FD88BC00 64662303   A813D400 98062103 D802AC69 BC006466   *....O.............M.....Q.......*
067A0   B840FD89 CE8ADE84 E63FAC79 D406A802   D510E61F 2ED2292F E180C1C0 29AE293D   *. ......W...M...N.W..K....A.....*
067C0   E18F29BD AD65F4FF 8D69A831 67F26262   67EC6806 68106826 6832684E 68726872   *......4......2..................*
```

```
067E0   68726806 6262688E 688E68C2 F5608808   A8802840 8802D580 294EBC00 68F6283D   *...........B5...... ..N......6..*
06800   E07F28BD A8DAF560 88222840 88BDA8A3   FDD2292F E180C1C0 29AE293D E18F29BD   *......5.... .....K....A.........*
06820   E63F2ED2 ADC7F4FF 9824FDB8 BC006466   A8AE294F 880B280B B080881A 293DE1DF   *W..K.G4.........................*
06840   29BDBC00 6466293D D12029BD A892D680   E6AF2ED2 FD8E293D E1DF29BD BC006466   *........J.....O.W..K............*
06860   B800583C F4FF982D 2A02DA31 D406AB7F   AE11B920 993421D5 C6062ED2 B92064F2   *....4.......M..........NF..K...2*
06880   21CD293D E1CFD110 29BDB800 5E58F4FF   9857FD84 D406ABA9 2A02DA61 A80BBD20   *......J.......4.....M...........*
068A0   68AE25CD 11C84588 951BB800 555AB598   8802AE55 E5E1D512 AE592B3D E3DF2BBD   *.....H..............V.N.....T...*
068C0   AE61FDB7 C6082303 EA91CB2F 83042435   4914BC00 68F6283D E07F28BD C608E67F   *....F.................6......F.W.*
068E0   812071E4 45884604 952711A0 4154B920   FF1CB800 555E2A3D CA82AC95 D2802ABD   *...U.......................K...*
06900   82C2282F 204828AE ACA3692A 6262692A   6966695A 69CC69C4 69AE692A 69E669E6   *.B...................D.....W.W*
06920   62626262 69CC69DA 69C4EC16 2A01B228   88C0F560 881C2435 490FBC00 6468B800   *.........D........5.............*
06940   41D02840 8802A8C4 BC006576 800428C0   A8BA2940 8821D580 A8252901 B1288802   *... ...D........... ..N.........*
06960   A82DE6DF A89C2A01 B228882A FF02A83B   2303CB8E D5868306 2A3DE20F 2ABDB800   *..W..................N.....S.....*
06980   6260D680 20D5BC20 6A1424CD 2435BD00   65AAB800 56422A40 8802A866 B5078802   *..O..N................ .........*
069A0   A856D400 9852E65F D6482ED2 ACBDD680   2ED22A3D E20F2ABD FD84B800 6260DCE1   *..M...W.O..K..O..K..S...........*
069C0   D406ACD3 D6802ED2 FD8DA991 D6802ED2   FD95294E BC006468 A8FDD680 2ED2DC8F   *M..LO..K....O..K...........O..K..*
069E0   C688D406 ACF52801 B0288806 BC006568   A8B52940 8802A80A BC006576 800428C0   *F.M..5............. ...........*
06A00   83062435 490FD440 BC006468 B5808802   D680A8D7 5108E1E0 C1E089AD 490FBC00   *......M ........O..P....A.......*
06A20   64685108 E106C106 88A9A8EF 6A4C625E   625E6A82 6A5C625E 625E6A64 625E625E   *......A.........................*
06A40   6A80625E 625E625E 6A82625E 2941E824   F4FE9804 FD828580 B8006260 2941E920   *..............Y.4.............Z.*
06A60   B8006260 2841E808 BC006466 B800583C   FD90A80D B5208808 29408804 8580AD89   *......Y................. ......*
06A80   AD91B800 62606AA6 625E6542 625E6ABE   625E625E 625E6260 625E6AEE 625E625E   *................................*
06AA0   625E625E 625ED680 E6BF2801 B0288806   28408802 8580B800 6334B800 6334D400   *......O.W......... ...........M.*
06AC0   98082940 8824294F 8820D406 86002142   88042940 88102801 B0288802 E51F2091   *... ......M........ ........V...*
06AE0   208FB800 626AB800 6340D518 A823E6EF   2804C88C D680E6BF BC006466 B80055FE   *......... N...W...H.O.W.........*
06B00   AE236B22 625E0000 625E6B42 625E625E   62606260 625E6B4E 625E625E 625E6260   *................................*
06B20   625E2841 E818D680 E6BFD400 980AB520   8806D580 B8006334 8302B800 63348304   *....Y.O.W.M........N............*
06B40   A8CF2841 E8048302 A88D8304 AE5D2841   E8048302 A8698304 AE696B7A 625E6260   *....Y..........Y................*
06B60   625E6ABE 625E625E 625E6260 625E625E   6B90625E 625E6B90 625E2840 880ED580   *........................... ..N.*
06B80   2435490F BC006468 B80041D0 B8006334   D4009808 294088C6 294F8802 D406B800   *................M.... ......M...*
06BA0   6ACC6B7A 625E625E 625E6ABE 625E625E   625E625E 625E625E 6B90625E 625E6B90   *................................*
06BC0   625E6B7A 625E6260 625E6ABE 625E625E   625E6260 625E625E 6B90625E 625E6B90   *................................*
06BE0   625E5000 00000000 00000000 D6202000   C3E7C5C3 C5D5C440 D6202894 2516A898   *.............O...CXECEND O.......*
06C00   251E5101 E1FC15A8 C6802ED2 2814CE52   A504259E 208B2089 B9200096 2C3DE40F   *........F..K...................U.*
06C20   EF02A806 2D41D540 2DC12CBD 158028D2   B800626C 28578818 292F0148 29AE20D5   *.......N .A.....K................N*
06C40   BB206C48 23CDB840 B5E09804 A9D8EF1D   23032814 B8842894 A847DB65 251E9504   *....... .....Q..................*
06C60   2894259E 55028869 5900299C C91EE67F   5303C984 F984A865 A878950B 2B820B09   *.............I.W...I.9...........*
06C80   88142A1C D2802A9C 90012753 251EF50F   8884B8B7 A8412303 B9206CDE 21CD8120   *....K.........5..................*
06CA0   71E44604 11C84154 812071F4 D6282ED2   B9209934 EF2421D5 2127E1C1 D11A21A7   *.U...H.....4O..K........N...AJ...*
06CC0   110121A5 51102846 82001B00 25BEBD00   65AA253E 4915B800 5900B800 555EEF04   *................................*
06CE0   B534880A E601D64A 2ED2B800 633AE611   A80D2A82 23035908 1518B920 6E1621CD   *....W.O..K....W.................*
06D00   E6D72ED2 25BEBD00 65AA253E B920FF1C   21D5B800 57A68120 800071E4 03399816   *WP.K..............N..........U....*
06D20   02B771C4 02B9BB20 6C5023CD 20D529BB   71F42ED2 B84032AD A817E6FB 2155A8D2   *...D..........N...4.K. ....W....K*
06D40   DE09B5E0 9804B800 5E945180 E11E2435   DEB0DE10 B10E88CE B10888C8 490FBC00   *............................H....*
06D60   6468A850 D0009806 F51EFD8C 99212435   490FBC00 6468A828 880D881C EF02A931   *........5.......................*
06D80   A8B2DE0A B10E889E 8306DE8C A821D000   9806F11E FD9D994B 2435490F BC006468   *..................1.............*
06DA0   EF16DB0A DE82A80C 251EA504 259E2C14   94012C94 B80041D0 DE02A81B DB10251E   *................................*
06DC0   5502A52C 5C20E47F B44C880C A82D2519   55985598 552EA815 E3F720D5 BD206DE6   *......U.....................T7.N...W*
06DE0   25CDB800 55FEB5E0 9802A8A7 D4009804   B5808853 B9206CDE 21CDB920 993421D5   *............M...................N*
06E00   E6FB2ED2 B8005E44 B9206E16 21CDB920   E808B800 5E445180 E11EB11C 881CC108   *W..K..............Y..............A.*
06E20   9804A8B7 D5188306 FD84B800 6260EF04   B8006260 D406B800 64F2D608 293DE1EF   *....N..................M....2O.....*
06E40   D12029BD B8006264 6E686262 6E806EAC   6E8E6EB0 6EB06E9E 6EA86D40 6D406262   *J.......................... . ..*
```

```
06E60   62626EE0 6FB06ECA F560992D CCC62940   8842EF06 DE02A802 EF84D580 A836A8CD   *........5....F. ..........N.....*
06E80   DE02A8FD F5608901 8302B800 6542DE02   A925FDB2 F5608957 24354403 4009EF04   *....5...............5....... ...*
06EA0   FDCEA963 DE20A967 B8006260 F5609806   DE14FDAE A9752840 897BDE02 A97DE6DF   *............5.......... ......W.*
06EC0   D6402ED2 A98DD440 A989DE07 F4FF998F   FD9E2435 4914BC00 6468DE82 A92BA93F   *O .K..M ....4...................*
06EE0   DE0ADA1F D40099A7 D608A8C7 F4FF99AF   DA2DD400 99B5A8D3 D7E3C650 05040000   *....M...O..G4.....M....LPTF.....*
06F00   00000000 00000000 62930528 C3E7C5E2   E5E2D2F4 00000000 00000000 00A80000   *............CXESVSK4............*
06F20   0080F460 00000000 00000000 00000000   0001B3D0 0001B3D0 00800000 0001B598   *..4.............................*
06F40   E7E7C3E7 E3C3C8C2 00000008 00000000   00000000 00005251 716C6FD8 002A0000   *XXCXTCHB...................Q....*
06F60   040021E1 20000000 001A3198 02200000   00008FD2 00008FE8 00008FFC 0001B5E4   *...................K...Y.......U*
06F80   00000000 0001B5E4 0001B67C 0001B598   0001B598 7168716C 71747168 001400F9   *.......U.......................9*
06FA0   04040001 00000000 0001B3D0 000A0014   6FD06FD4 009C009C 00140013 001C0002   *...................M............*
06FC0   000004B0 00000000 C3E7C3C1 D6C3E6C1   10706FBD 4051B3DE 10706FBD 4051B216   *........CXCAOCWA.... ....... ...*
06FE0   00000000 00000000 00000000 00000000   00000000 00000000 00000000 00000000   *................................*
      LINES 07000-07140 SAME AS ABOVE
07160   C3E7C3C1 C9C3E6C1 90F9B5A6 90F9B5F2   9121B634 A121B680 00000000 00867760   *CXCAICWA.9...9.2................*
07180   09000E20 16800302 0A820000 00867456   0C001120 16C0002B 0A820000 012C73C2   *...............................B*
071A0   0C001120 16C0002B 0A820000 012C73C2   0A000F20 16C0002B 0A820000 012C74EA   *...............B................*
071C0   0B001020 1700002B 28480000 00FF0001   FF00719C 718C0000 00000000 00000000   *................................*
071E0   00000000 000071AC 00000000 00000000   00000000 00000000 000071BC 00000000   *................................*
07200   00000000 00000000 00000000 00004F00   008D0082 00000000 00000000 02000000   *................................*
07220   00000000 00000000 5F250000 03000000   FF000000 4C901680 79390980 0000C080   *................................*
07240   08480000 77600001 00F40000 00000000   04000000 09000E00 02800000 4D500300   *.........4......................*
07260   204D0E00 00000100 0A820000 01004E00   008D0082 00000000 00000000 00000000   *................................*
07280   00000000 00000000 5F4B0000 01000000   FF000000 4C901680 793F0980 0000C080   *................................*
072A0   084A0000 77600001 00F40000 00000000   04000000 09000E00 02800000 4D500300   *.........4......................*
072C0   204D0E00 00000100 0A820000 01007900   008D0000 000006F4 00000000 00000000   *.......................4........*
072E0   00000000 00000000 5F860000 00017D78   FF000000 39E61680 794501FF 00004800   *.....................W..........*
07300   0854F400 732E0001 0000009C 00000000   04000000 0A000F00 03000000 4C040800   *..4.............................*
07320   204B0004 00000100 0A820000 0100082A   6A866A2C 6E48C8C0 8AC04847 10057A08   *......................H.........*
07340   7C030302 00001C26 1F377C34 2F2F6E6D   405DFF3D 003E010D 2C5E370E 004F4C7F   *................ ...............*
07360   61408500 008D0080 00000000 00000000   00000000 00000000 00000000 5FB00000   *. ..............................*
07380   60000000 FF000000 4C9016C0 794B0380   0000C080 084E0000 73C20001 00F40000   *.........................B...4..*
073A0   00000000 04000000 0A000F00 2B800000   4D500200 214D0600 00000100 05820000   *................................*
073C0   0100002A 6B026B02 6B02C0C0 8AC04847   100679C8 7F010000 00001C37 1F373D34   *...................H............*
073E0   2F2F6E6D 405DFF3D 003E7C0D 2C3D7C0E   004F4C7F 61403F00 00282850 00000000   *.... ................ ..........*
07400   00000000 1E336D66 6CF40000 01000000   5FD60000 60000000 00000000 36FC16CC   *.........4.......O..............*
07420   79516680 0000C080 08500000 74560101   00200000 0001B407 2201B598 0C001100   *................................*
07440   2B81B598 633A0200 204D6E00 99340100   0A820000 0100002A 6B026B02 6B02C0C0   *................................*
07460   8AC04847 100679C8 7F010000 00001C37   1F373D34 2F2F6E6D 405DFF3D 003E7C0D   *.......H................ .......*
07480   2C3D7C0E 004F4C7F 61400000 008D0080   00000000 00000000 00000000 00000000   *......... ......................*
074A0   00000000 5FFC0000 31000000 FF000000   4C901700 72100680 0000C080 08520000   *................................*
074C0   74EA0001 00F40000 00000000 04000000   0B001000 2B800000 4D500200 217D0600   *.....4..........................*
074E0   00000100 0A500000 0100222A 6B5A6BA2   6BC2C0C0 8AC07877 110679D8 FF010000   *.................B.........Q....*
07500   00001C38 1F847C80 8B898A8D 405D803D   E085910D 93919140 B1003400 008D0000   *............ .......... ........*
07520   000006F4 00000000 00000000 00000000   00000000 60BE0000 0001803C 00000000   *...4............................*
07540   31C21640 793301FF 00004800 0888F400   75780001 0000009C 00000000 04000000   *.B. ..........4.................*
07560   08C00D00 06000000 4C040700 38CD001E   00000200 00000000 4C1666D6 67CC6E48   *...........................O....*
07580   C8D484C6 C8C51A07 79F8AA03 0F0F3202   10261037 1002101F 10701061 107C102D   *HM.FHE...8......................*
075A0   3D011003 106B8888 00300000 00000000   00000000 0E000000 54A40000 00000000   *................................*
075C0   62C30000 00007604 00018360 1D961770   751C3A80 00004000 08404B18 76600001   *.C.................... .. ......*
075E0   00000000 00000000 0401AD94 04040000   2B040000 1E340500 389D0E61 FF981D96   *................................*
07600   C9930001 00300000 00000000 00000000   C9020000 00000000 00000000 62C30000   *I...............I............C..*
```

```
07620   41018354 040075A8 1ACC1740 75A80440   0000C480 0842F0B8 7660302B 00000000   *........... ... ..D...0.........*
07640   5101AF79 1281AF5C 04040051 2B040000   216A051C 389C0E41 FF801ACC C5514101   *...........................E...*
07660   8C0E217E 217E219E C4C088C6 98842000   79E80000 00000000 008D0080 00000000   *........D..F....Y...............*
07680   00000000 0F000000 00000000 00000000   62FA0000 00018B34 00018B38 4C901740   *............................... *
076A0   76043880 00004000 08440000 76D40001   00F40000 00000000 04000000 01010000   *...... ......M...4...............*
076C0   2B800000 4D500500 389C0621 00000100   00000000 8C0E217E 217E219E C4C088C6   *.........................D..F*
076E0   98842000 79E80000 00000000 00300000   00000000 00000000 C4220000 54A70000   *.....Y...............D.......*
07700   00000000 63310000 00018C14 00018C14   1ACC1740 76780940 0000C480 08461E7E   *................. ... ..D.....*
07720   7748002B 00000000 5101B2BF 1281B2A0   01010051 2B840000 1E48051C 389C0A21   *................................*
07740   D6141ACC C4514100 8C0E217E 217E219E   C4C088C6 98842000 79E80000 00000000   *O...D..........D..F....Y......*
07760   1D2A6A86 6A2C6E48 CECA8AC0 4847100A   00007C03 02020000 1C261F37 7C342F2F   *................................*
07780   6E6D405D FF3D003E 010D2C5E 370E004F   4C7F6140 0003DF41 000077B8 00009520   *.. ............. ..............*
077A0   00000000 00017F14 00017F58 00000070   00000296 0000D7A2 00007794 000077DC   *...................P.........*
077C0   0000A856 060480C2 00017F58 0001B54C   0001B54C 0001B54C 00000000 000077B8   *.......B........................*
077E0   00007800 00009546 00000000 00000000   00000000 00000000 00000000 00000000   *................................*
07800   000077DC 00007824 00000000 00000000   00000000 0000A0C4 00000000 00000000   *......................D.........*
07820   00000000 00007800 00007848 00000000   00000000 00000000 00000000 00000000   *................................*
07840   00000000 00000000 00007824 0003DF40   00000000 00000000 00000000 00000000   *............. ..................*
07860   00000000 00000000 00000000 00000000   00000000 00000000 00000000 660166FE   *................................*
07880   66FE0000 00000000 020C4088 0086012C   04B00000 0000B28A 0000B36C 0000B28A   *......... .......................*
078A0   0000B28A 0000B28A 0000B28A 0F041004   0F080F0C 80108214 79107910 78C278C2   *..............................B.B*
078C0   80000400 0000FF05 00000000 00000000   00000000 00000000 00000000 04000000   *................................*
078E0   FF050000 00000000 00000000 00000000   00000000 00000480 0000FF05 00000000   *................................*
07900   00000000 00000000 00000000 00000000   04000000 FF050000 00000000 00000000   *................................*
07920   00000000 00000000 00000400 0000FF05   00000000 00000000 00000000 00000000   *................................*
07940   00000000 04800000 FF050000 00000000   00000000 00000000 00000000 0000748C   *................................*
07960   00910000 727000A2 000072D0 00A20000   736400A2 000073F8 00A20000 748C0086   *........................8.......*
07980   0000FD00 00000000 00000000 00000000   00000000 00000000 00002000 30F04010   *..............................0 .*
079A0   40204080 4CF05070 507050D0 60F08000   FFFFF0F3 61F0F161 F7F74BF0 F6F0F1F6   * . . 0.......0....03.01.77.06016*
079C0   4BF2F74B F2F4FF00 5B385B7A 5B885B7A   5B9E5B9E 5BAE432C 5D7E5D7E 5B885D7E   *.27.24..........................*
079E0   5DA85DA8 5DC0432C 24F824F8 432C432C   432C432C 432C432C 5776581A 59B859A8   *.........8.8.....................*
07A00   54C855C4 5AE4432C 5776581A 59B8581A   54D055C4 5AEA432C C3E7C2F6 F4D3D4E3   *.H.D.U.............D....CXB64LMT*
07A20   B8200000 3F20B701 8802A82E 3417BE20   000B64B0 8802A822 B4028802 A806BC00   *................................*
07A40   7A6EA814 B4038802 A806BC00 7A9CA808   B920300E B8400000 A812B701 8806BC00   *....................... .........*
07A60   7AECA808 B900F358 00001002 A84FBE20   17C46627 8802A81A 87123D21 7008B840   *......3..........D............ *
07A80   2803A804 8503A808 4688BC00 7AEC6488   A8084688 BC007ADC 64884088 BE2017C4   *......................... ....D*
07AA0   66278826 66196698 669826B8 8802A81A   871455A8 7008B840 2803A804 8503A808   *......................... .......*
07AC0   4688BC00 7AEC6488 A810B920 F3D01482   B900F358 40000816 55284088 B920F3D0   *............3.....3. ..... ...3.*
07AE0   1482B900 F3584000 08154088 B920F3D0   1482B900 F3584000 080C4088 00000000   *....3. ... ...3.....3. ... .....*
07B00   BC2017C4 26888812 463B9802 26316101   BE200020 F982A802 A8E0BE20 00204DB8   *...D...............9..........*
07B20   87024527 B9207BEA 41C642A7 5288990A   40AF4227 889476E4 453B980C 2531F501   *.........F...... ......U......5.*
07B40   88062588 A5025501 76F4BE20 05A845B1   4D384DAE 13BC618E B9207B66 618A8001   *.........4......................*
07B60   8182B800 952A610E 350A8892 618E67A2   8008649A 5488BF00 9A780000 641A5087   *................................*
07B80   51135711 51915793 11C85999 810159A3   590EE1FD 598E8183 599D45BE 45C25788   *.........H.................B..*
07BA0   49348020 051845B6 0128E1FC 49B2A016   91167183 482A48B3 40104531 BE200020   *......................... .......*
07BC0   76E45481 76F444F8 44982F53 11C8CF86   49C0B800 497ED180 DF0C49C0 4D38BC20   *.U...4.8.....H........J.........*
07BE0   17E82223 A8C9D140 A81B4940 C902A821   C9A3BC20 17E822C8 A8DD76F4 B8404227   *.Y...IJ ... I...I....Y.H...4. ..*
07C00   87032D53 CD86433E 3FA3A824 DD0C4388   9324333E 881A3FA3 A8164388 A324333E   *................................*
07C20   880E3C23 FC0AD403 3CA38401 4CAE4046   BE200020 76E440A7 A806BE20 002076E4   *......M...... ......U .........U*
07C40   40AF433E 40BE4E40 76583EA3 45315281   40B140BB 4F32A906 24F84498 42274733   * ... .. ....... . ......8......*
07C60   A604987A 45364EB2 950445B6 5383475C   4F2F5781 CA84B800 00882025 8600BF84   *................................*
07C80   87014FAE 47B30755 B7089802 BFA06668   98070D09 CD50BF96 D5800D89 075707D5   *.....................N......N*
```

```
07CA0   BD200446 BF2001FC 758275D4 A80207D5   05465701 77987798 07C65081 46429806   *...........M...N.........F......*
07CC0   45CA0810 A80A5788 77F877F8 67814F34   86005783 760845C2 4631A604 2088BA00   *.........8.8...........B........*
07CE0   7C7C4227 A881453E 86035EA3 86014EAE   4227A881 A8F941C6 433E3E23 FE0B0F09   *.....................9.F........*
07D00   CF0FBE20 05A8618E B9207D16 618A8001   8182B800 952A610E 370A891F 618E67A2   *................................*
07D20   8009649A 7488BF00 9A780000 641A4934   A10A800A BE200020 76E47183 708747BE   *.........................U......*
07D40   A1161008 492A8420 47C24718 47B64F32   41B34E38 4EAE4840 39231058 38A33288   *.........B......................*
07D60   76F48000 39038400 4E2BA80A 66986698   6D036288 5118BE82 A8382601 98132503   *.4..............................*
07D80   75282D83 7128A10A 31974E2F 3EA1BE20   05A8BA21 97F4618E B900962C 0002618E   *.....................4..........*
07DA0   B9207DB0 618A6292 67A28140 B800981E   40462501 88392081 A10A3197 4E2F3EA1   *................................*
07DC0   BE2005A8 BA2197F4 618EB900 962C0002   618EB920 7DE2618A 629267A2 8140B800   *.......4.............S..........*
07DE0   981E5288 7588433E 8842618E B9207DFA   618A8001 8182B800 952A610E 370A882C   *................................*
07E00   618E67A2 8009649A 7488BF00 9A780000   641A3103 81167388 31833281 26885788   *................................*
07E20   84004D34 80004E2B A601A8C1 22982298   618EB920 7E40618A 12828100 B8009560   *...........A....................*
07E40   00000000 33888899 AA4DD7E3 C6500504   00000000 00000000 63370584 C3E7C4D2   *..........PTF...............CXDK*
07E60   D3E3C7F2 00000000 26162301 63A13398   33989304 63A6811E 69A4B920 FFFE6199   *LTG2............................*
07E80   B9207E98 218A2511 B9201780 51A55841   D00458C1 50BB50B9 26166C0F E4FB6C8F   *...................A........U...*
07EA0   6117F982 A81E2301 33983398 3121B003   88563087 23012703 23832781 77987798   *..9.............................*
07EC0   7387A844 6117D9BA BA0081E8 9834B920   82246319 639F4708 B4409802 A80487C0   *......R....Y....................*
07EE0   A810B452 980C880A 7778E738 77787778   91A47118 71181002 B6018802 A83BB840   *..........X.....................*
07F00   3580B920 82E4A813 B92082EC A81916EC   62232298 22982411 4E2FC680 E6804EAE   *.....U..................F.W.....*
07F20   4713B920 179417B0 88D6BF20 178047A5   6117F101 98D8F110 98DCBA00 81E898D6   *.........O........1..Q1......Y.O*
07F40   6719679F 62232298 22982411 B4409802   A8CAB400 88C0B402 88C84316 3103B029   *.........................H......*
07F60   9802A8B8 03183581 5188BA00 81E898A6   E8043583 A802458B BA0081E8 9898E804   *.............Y..Y..........Y..Y.*
07F80   3585A802 659DBA00 81E8988A E8043587   A8024591 6D0FE5FD E80E8500 6D8F4716   *.........Y..Y.........V.Y.......*
07FA0   73A89308 7B82A83E F8864231 E5F7A812   4E49CE82 A8664388 A3023201 22F82298   *........8....V7..............8..*
07FC0   D5086D8F 852075E4 4204E882 A80A435C   82003398 3398A80C F802A806 435C2308   *N......U..Y.............8.......*
07FE0   A802434C 47111588 B9208224 41184118   E1FC1002 812071F4 B6018802 A8CFB840   *.......................4........*
08000   BF201784 47938601 B92082E8 A81D8601   B92082E8 A825B920 8224A82B B920822C   *...........Y.......Y............*
08020   A831BA00 81E8BA00 81E8BA00 81E8B920   8228A843 26166303 F301880A E3FE6383   *.....Y...Y...Y..........3...T...*
08040   260E8600 A8536703 260E6A0F E3F03258   6A8F6117 B501886A D0806197 23112537   *............TO..................*
08060   4318CF34 DF02A82E 6383231B 53188808   239B2642 6D83A81E BE2005A8 244A618E   *................................*
08080   B920808F 618A1482 8100B800 95600000   000020CA 260EA802 6381260E 6D0FED04   *................................*
080A0   2631A80A 2388A302 360166F8 66988320   73E44604 A800434C BD008A48 832073F4   *...........8.....U.............4*
080C0   4688E0C0 E1201180 8810611D 880C611F   619BBA00 81B8622A 22262516 B9200400   *................................*
080E0   51838600 A8F38700 6F8F6081 67237798   77986083 74118520 431675E4 3505BA00   *.....3.....................U....*
08100   83D08802 A80A6117 D1106197 8600A8A6   3109619D 42313107 4204418B DC4CDCAA   *........J.......................*
08120   310E41C2 910441BE 311141B7 310B4191   415CE0F0 C804D007 A802D005 01084154   *...B...............0H...........*
08140   BF201788 47938601 A81EFC1C 80103882   680FD002 688FBA20 17BC3103 E904BA20   *............................Z...*
08160   17904293 8601A800 A84CFC22 800C3882   310B474C 17084744 FC86475C E6F06058   *............................W0..*
08180   03084354 B920179C 41938601 A828310E   41C29104 41BE3111 41B7310B 4191B920   *.................B..............*
081A0   17A04193 B92017A4 41A5415C E0F0D005   01084154 8601A9C5 651DA502 65999520   *.............0.........E........*
081C0   63213398 33980F07 75289812 33013398   33983388 980F6717 D7106797 A8087518   *........................P.......*
081E0   6DA49304 63A62088 65199502 65996726   6D249502 0C074538 9820A704 75015598   *................................*
08200   5598880C 950465A6 55018600 6EA4A808   6117D110 61978601 A8085718 6DA47501   *..................J.............*
08220   86002088 000082F6 000080E6 000082F0   00008338 00008322 00008322 00008322   *.......6...W...0................*
08240   000082F0 000082F0 000082F0 00008346   000083B8 0000831E 0000831E 0000831E   *...0...0...0....................*
08260   000082F0 000082F0 000082F0 000083A2   000083C2 0000831A 0000831A 0000831A   *...0...0...0.....B..............*
08280   000082F0 000082F0 000082F0 000082F0   000082F0 00008316 00008316 00008316   *...0...0...0...0...0............*
082A0   000082F0 000083FC 0000840C 00008416   00008476 000084DC 000085B2 000086CC   *...0............................*
082C0   000086EA 0000871C 00008762 000087D0   000087E2 000087F6 00008802 0000881E   *...................S...6........*
082E0   0000881E 00008850 00007FF4 00008912   6117D110 61976223 22982298 BE2005A8   *...........4......J.............*
08300   618EB920 8312618A 629267A2 8100B800   981E8601 AB2373E0 A80A73D0 A80673C0   *................................*
```

```
08320   A8027380 FC8AFC04 4344A802 4354A802   4364BA00 83D0AB45 7303D320 7383B900   *..........................L.....*
08340   88908600 AB53BA00 81E89854 6126A104   41C29104 6D245118 41BE4716 82108388   *.........Y.......B..............*
08360   710BC802 E3F77383 E07F6319 13909301   E3FE639D 0C075428 41289804 4191A804   *..H.T7..........T...............*
08380   40911418 45B77488 BA0081B8 BA0081E8   458D4C04 FC82A806 BA0081E8 458F8600   * ..............Y...........Y....*
083A0   ABAF7103 D1407183 A0020718 7101FC84   E00F7880 8600ABC5 7103D120 71838600   *....J .................E..J.....*
083C0   ABCF7303 D3207383 B9008890 8600ABDD   B5008824 BF201784 4793BF20 17B047A5   *....L...........................*
083E0   BF2017B4 47CD4E2F 56484EAE 6717E61F   E7DF6797 8601A802 86002088 622A8016   *..............W.X...............*
08400   44A08601 B8402802 AD13AD15 6117D102   61978601 AD1F5308 BA0081E8 9854B840   *.... .........J............Y... *
08420   4BDEBD20 0000883E C802A83A 5426D902   A810FB82 A8084F53 CF82A802 44235812   *........H.....R.................*
08440   A8025828 B605881C F882A818 440E4523   55985598 4117F902 A80AE1FD 4197B840   *........8.............9........ *
08460   1D188609 A8028600 B6098806 6317D204   63978600 AD7F6089 82006A8A 6A16E2FC   *..............K...............S.*
08480   6A966423 44984498 43013398 33984411   8020818F 4181B920 03804183 8001B840   *............................... *
084A0   034AC902 A8E85008 350A9504 45A25488   40309001 0078BA00 81E89816 44304530   *..I..Y..... .............Y......*
084C0   B88D622A BF208996 278AB840 23008601   A8086717 D7106797 8600ADE5 62232298   *........... ........P......V....*
084E0   22982301 33983398 8002B840 034A340A   889C8009 B8405011 43013398 3398BF20   *........... ......... ..........*
08500   001C3783 9304840F 61881701 37819102   9302BC8B 6117E902 A806A302 612D3181   *......................Z.........*
08520   22118300 B5028802 A8202851 47017798   77982953 71A52131 71A12849 295071A3   *................................*
08540   800078A6 83237B83 83078020 48A2B500   8802A81E 251B8816 3518209B 214A20CA   *................................*
08560   42012298 229811F8 11F82181 A80255A0   A80255A0 6117E902 A80481E8 49A29528   *.......8.8............Z....Y....*
08580   35184597 86004388 BC008950 AE97631F   639DBA00 81B86223 22982298 B8400F00   *............................. ..*
085A0   3085BD20 0002B840 2C810058 8601B800   7EF8B501 98048802 A9046423 44984498   *....... .........8..............*
085C0   4211B920 7E68418A 234A8806 B8400508   20CAB840 0F103701 77987798 8806B840   *............. ..... ........... *
085E0   05283081 BF20000C 37978716 860A3783   8601B500 8802A8A0 3C21E47F B4068806   *..........................U.....*
08600   B4078802 A88A2F53 CF82A826 11A84908   880414A8 A8048118 14984501 55985598   *................................*
08620   8802A80C 46166F0F EF82A802 8600A802   86004616 662A6226 250EA504 B8400518   *............................. ..*
08640   2F53FF82 A80EBD21 2088658A 6D12E5FE   6D92A80C BD20CFC0 658A6D28 E5FE6DA8   *..............V.............V...*
08660   208E2131 1501E5FE 1581BD20 17B825A5   2841E0F3 28C1CF82 A8142223 208E25A5   *......V............3.A..........*
08680   21311501 E5FE1581 2841E0F3 28C1A808   86006117 D1106197 260EB601 8802A80A   *....V......3.A......J...........*
086A0   85623DA2 BC008950 A8126517 D5106597   64234498 4498B840 109100C2 A80CB502   *............N......... ....B....*
086C0   88066517 D5106597 8600AAC3 62232298   2298B840 0F003085 8400B840 2C810058   *....N......C....... ...... .....*
086E0   6C0FD404 6C8F8601 AAE1CD02 A80A5518   84006598 5101A808 84006598 11285800   *..M.............................*
08700   6317BA00 81E8980C 51B08804 D210A802   E2EFA802 D3106397 8600AB13 8600B920   *.....Y......K...S...L...........*
08720   00821900 B1628802 A808622A 24264731   E6038708 B6008806 7778A601 A80B0812   *................W...............*
08740   B5008802 A806C7FF 7068A812 70688802   A8060812 7058A806 6517D408 65970892   *......G...................M.....*
08760   AB594308 E30F6188 5118BA00 81E89856   65ADBA00 81E89846 622D8722 140354E0   *....T........Y.......Y..........*
08780   8802A80C 140124E0 8802A802 8744A812   54C08802 A80C1401 24E024C0 8802A802   *................................*
087A0   87882228 93086398 3D00F982 A806E70E   E5F1A804 E7E0E51F 75583D80 A8066517   *..........9...X.V1..X.V.........*
087C0   D5106597 A8066517 D5106597 8600ABC7   6788E40F 94084718 7C005458 7C808600   *N.......N......G..U.............*
087E0   ABD96788 E40F9408 47187C00 54585448   7C808600 ABED6788 E40F4718 7D808600   *.R..U...................U.......*
08800   ABF96788 E40F4718 7C006B0B 5358A401   88049802 53487C80 6B8B8600 AC154608   *.9..U...........................*
08820   6388E40F 43189308 3800DE82 A802C0FF   5108BA00 81E8980E 01688802 A806659D   *..U..................Y..........*
08840   BA0081B8 A8066509 D5106589 8600AC47   63233398 33983311 B9201780 31A56121   *........N.......................*
08860   11981198 910461A6 871E6FA4 7118BF20   FFFE6799 BF204801 1783BF20 4A011785   *................................*
08880   6717E7EF D7086797 631F63AD 8600AC87   454A8802 A8266323 33983398 33013398   *..X.P...........................*
088A0   3398BE20 05A8618E B92088B6 618A8001   81C2B800 952A610E 350A8834 45CA5288   *.................B..............*
088C0   47167B02 82063218 7A823718 7582A702   75010B07 82002383 35289806 75817B86   *................................*
088E0   A8087081 35187D86 2D837A87 460E1088   460E651F 659DBA00 81B84516 5303D301   *..............................L.*
08900   A2085383 85C64C2F 54484CAE 86019102   108880FE BC008946 8060BC00 89462411   *.....F..........................*
08920   B9201780 41A56117 E1FE6197 B9207E68   218A0909 D902A80A B8402170 000170E0   *....................R.... ......*
08940   00008601 AD3DB840 0F0033E8 883E38A2   A8160000 00000000 00000000 BC200000   *....... ...Y....................*
08960   BE200000 B8000000 B84020B6 0000F520   00002801 00300000 89540000 F524CF8C   *......... ....5.............5...*
08980   DF8ADF02 A804B840 0509A808 B9203005   B8400000 40882626 640E4117 6A07B280   *....... ........ .. ............*
```

```
089A0   880CB2FC 8804D110 A802D001 A802D002   41976122 1A03A201 4A8A1A01 1B024389   *......J.........................*
089C0   A1041788 B8400528 47237798 7798B840   1D68B840 35405001 00000000 61800325   *..... ........ ... . ...........*
089E0   C3E7C4D2 D3C9D7F4 22F82298 270B2668   76488808 240E4717 D6404797 20138003   *CXDKLIP4.8..............O ......*
08A00   F88A272F D6807648 2EAEA80C 2E2FC680   E6802EAE BD008A48 F802A81E 253B981A   *8...O.........F.W.......8.......*
08A20   850125BB 04399806 02B772C4 A80242AD   20AD02B9 BF2017B4 27CD475C EE02A802   *...........D....................*
08A40   E2FB4344 A800B840 240E4391 475C4793   477C4795 BF201780 27A55088 243E4330   *S..... .........................*
08A60   25379501 A401CE90 880825B7 24BE8000   A804BC00 8D7AA81C 240E2711 47184783   *................................*
08A80   27427D83 271B5718 279B2716 7103E1DF   71838003 A897BF20 17902793 475CE6F0   *..............................WO*
08AA0   D60A6708 4754A8C1 984AE2FE 273E2137   73109101 B8B629C0 08072511 881E8100   *O......A..S.....................*
08AC0   05289802 A8045018 55A02591 27427701   77987798 882A27C2 9704A810 BD2017C0   *......................B.........*
08AE0   25A5455C E4F0D409 45084554 21B727BE   8000A80A 25112737 65184581 8003A901   *....UOM.........................*
08B00   240E4717 D7104797 22F82298 8003A813   22F82298 2116130D 1505FCA2 1503E57F   *....P....8.......8...........V.*
08B20   1583CD88 BD201780 8003A810 BF008B4E   4C0FE4FD 4C8FBD20 17988000 A80CE4FE   *.................U...........U.*
08B40   1585150F 158D2525 800025A5 A94F4118   240E1503 258B1505 459D1507 25917088   *................................*
08B60   22F82298 27167503 41089408 75831718   7501282F 504828AE 21111308 FC86455C   *.8..............................*
08B80   E4F04058 01084154 B92017B0 21A5B920   179C2193 8000A999 982A240E 45172810   *UO .............................*
08BA0   3038880E 47079701 47879802 A802D540   A80C4705 97014785 9802A802 D5804597   *.............N ............N...*
08BC0   8000A802 8001A9C9 98542116 1503E5BF   1583DD04 8003A844 BF008B4E 15012E2F   *.......I......V.................*
08BE0   56482EAE B4168824 170A27C2 970427BE   170D27B7 B406880C BF2017A4 27A5BF20   *............B...................*
08C00   17A0A804 BF201788 8000A80E 27167D03   D5017D83 BF201794 80022793 A8028003   *................N...............*
08C20   AA2322F8 22988000 288CBD20 17C4EA82   A80225A5 8000AA39 BD2017B0 25A5BD20   *...8..........D.................*
08C40   FFFF25B3 E2FBAA61 22F82298 2537243E   290CCEEE EAAED904 9108298C 433073B4   *....S....8...............R.......*
08C60   213371CC 21B39501 A4018808 25B724BE   8000A80E BC008D7A 8808240E 4517D520   *..............................N.*
08C80   4597A83C D9185418 850025B7 2D8C2542   950425BE BD2017C4 25A58000 A8222442   *....R.....................D......*
08CA0   4D83211B 5118219B 2733BD20 F0B8240E   411757B0 8804D020 A802E0DF 41978003   *.............0..................*
08CC0   A842CA02 A824D922 54188500 25B72542   950425BE 85854554 BD2017A4 25A5240E   *.......R........................*
08CE0   4517E4BF 45978000 A81A4B80 9501A401   240E2711 47184783 27427D83 271B5718   *..U.............................*
08D00   279B8003 D204AB09 BC2089E8 27427501   55985598 8802A838 0755B708 9802BFA0   *....K......Y....................*
08D20   66689807 0D09CD42 BF96D580 0D890757   07D5BD20 0446BF20 01FC7582 75D4A802   *...........N......N...........M..*
08D40   C7D50546 08075701 77987798 07C65081   50835883 274225C2 51F811F8 71819504   *.N............F..........B.8.8....*
08D60   25BEB920 17B021A5 408822F8 2298240E   4717D704 47978003 AB7B211B 5118219B   *........ ..8......P.............*
08D80   08078100 27118818 07289802 A8047018   77A02791 21B7B920 17C821A5 8000A806   *...........................H......*
08DA0   21421D83 80034088 A8002951 E1F04154   B9201780 21A54344 A800B840 D7E3C650   *...... ......0............. PTF.*
08DC0   05040000 00000000 63170668 C3E7C4D2   D3C9D6F4 00000000 BE2005A8 BC206F48   *............CXDKLIO4............*
08DE0   45014587 41035174 535C439B DB92DCB2   FABEEA16 4503D512 45A15574 B8000124   *........................N........*
08E00   E4EF4581 4503D506 AD044501 CC02A80E   E47FD408 4581BD20 0200459D 55544503   *U.....N..........U.M.............*
08E20   ACECE46F D4084581 BF208400 4503ACDA   40970D33 0DAD57CC 47A5F620 9C58F642   *..U.M........ ..........6...6.*
08E40   989EF708 882855AC 45A3B493 8826B432   8ACEB452 8ACAB431 882AB451 8826BF20   *..7.............................*
08E60   80004797 5734BF20 06004503 AC8AB920   0010AD7A 87324F8E 87314F8F BF200400   *................................*
08E80   4503AC86 4236980C BF009082 22888842   42B640BE 40BA473E 72B8880A 42BEBF00   *................. . ............*
08EA0   90AABF00 90E64523 4F0F7438 8806415B   41DDA808 C7604F8F 40DB40DD 454F4591   *.....W...............G... . ......*
08EC0   5504BB20 2C00439D 5354BF20 04004503   AC3840BA 40BE40C2 BF200500 4503AC18   *................ . . B........*
08EE0   431BF240 980AF320 984CB920 0011ACFE   45428988 45BA5201 22982298 22889810   *..2 ..3..........................*
08F00   BF009082 27888820 453A77F8 77F85781   42BEBF00 90AA454F 45915504 BD202000   *...........8.8...................*
08F20   459D5554 4503ABE6 40BE40C2 40BABF20   0D004503 ABC2510C 4191A104 532C4395   *.......W . B ........B..........*
08F40   1701E60F 47D777F0 77F037A0 47D57788   9802A104 41D3434F 13B08808 980A433A   *..W..P.0.0...N.......L..........*
08F60   88FCA80A 433EA806 41531302 A3043388   890A43CA 47558802 3F834536 45C677A8   *..............................F..*
08F80   58030718 53B8880A 55015598 559888EC   A8134346 3789475D 881AA701 47DD40B9   *............................. .*
08FA0   4236473E 72B88874 42BEBF00 90AABF00   90E6A868 41539104 41CF4751 71B0982E   *.................W..............*
08FC0   882C434A 32012298 22982288 9810BF00   90822788 8896434A 77F877F8 378142B6   *..........................8.8....*
08FE0   42BE40BA BF0090AA BF0090E6 A80E1502   A50445B6 45BE40BA BF0090E6 434A3081   *.. ........W.......... .....W....*
09000   4346BC20 6F18B900 F708BC20 6F48B104   884CB106 8848415B 910141DB 4125F002   *........7......................0.*
```

```
09020   9814454F 45915504 B9202000 419D5154   BF200400 A8224101 C80EE80C C886BF20   *........................H.Y.H...*
09040   0400A814 BF00943A 4101E07F D0084181   BF204400 417B0187 4503D502 AAACBF20   *..........................N.....*
09060   08004797 5734BF20 0600A80A 40BE40C2   40BABF20 05004503 D502AA7C B9200020   *............ . B .......N.......*
09080   AB6C47AA 485848D9 BF206F38 618EB920   909E618A 1782680E 81D0B800 952A0000   *.......R........................*
090A0   6F38610E 72068800 402A47AE 4E59454D   45CFA504 433E883D 950411A8 09073183   *........ .......................*
090C0   11981198 D0905181 32889304 53822301   88063398 3398BEA1 42C25900 E10FD1A0   *.........................B....J.*
090E0   598045D1 402E47B2 42368871 414F33A8   0B07A30A 33983398 1501BF20 F00375E8   *...J .......................0..Y*
09100   35D81581 BD20000E 25981582 820A0B07   A30A2383 20852087 2089208B 208D4032   *.Q............................ .*
09120   45234F0E 74388826 BA206F30 23028816   43694393 5314BB20 1000439D 5354BF20   *................................*
09140   04004503 A9C4BF20 05004503 A9AA4101   E80CE0F7 4181BF20 05004503 A99ABA20   *.....D..........Y..7............*
09160   6F282302 89244F0E C7604F8E BA206F30   23028824 37C77798 77988812 350D5598   *........G.......................*
09180   5598890C 738877F8 77F85781 A81B2302   20822086 BF0092E8 416941EB 417141F3   *.......8.8.............Y.......3*
091A0   416D41EF BA206F28 230288B4 4573370B   75B098AC 75A045F3 457975A0 98C645F9   *.......................3.....F.9*
091C0   BA206F28 BF009316 BA206F30 BF009332   22064375 881A456F 35A045EF 33903390   *................................*
091E0   D210416E 13814788 97751782 910441EB   210348E5 49E74765 97042798 4367456F   *K..................V.X..........*
09200   35B09814 35A045EF 33903390 55809828   416D41EF D250A822 53A04BE7 43655318   *....................K......X....*
09220   43E55590 5590D450 416B1581 17829104   41EB416D 41EFA843 D210416B 13811782   *.V....M.................K.......*
09240   910441EB 2201880A 22982298 2F03880D   A863416B A1041C00 E40FD450 1C80A8C1   *........................U.M....A*
09260   416BA104 41EB1C00 E40FD440 1C804369   43935314 BF201000 479D5754 BF200400   *........U.M ....................*
09280   4503A886 B9200026 A964B920 0027A95E   B9200028 A958CAA6 DB12551C 4593A504   *................................*
092A0   476B75B0 881EB920 0024A942 BB200800   43975334 BF200600 4503D502 A84CB920   *..........................N.....*
092C0   0018A92A 00874301 E2F74381 BF0093B0   4301CA06 BF200500 A80AE27F D2084381   *........S7................S.K...*
092E0   BF208400 4503A822 618EB920 92F6618A   8120B800 A49A7088 4101C802 A80CE07F   *.............6............H.....*
09300   D0084181 D680417B 01875744 4799D510   557445A1 B8402302 88123507 55985598   *....O.........N...... ..........*
09320   55889802 25862582 30877088 B9200022   A8BC3087 25069806 23822386 70882386   *................................*
09340   33F833F8 53877088 6606BC20 6F483388   885243E2 41753509 1590426D 21B09806   *.8.8...............S............*
09360   B9200021 A8A477A8 970125A0 88049802   A80E378B 417171B0 9824BD20 001075E4   *...............................U*
09380   45797598 982445F9 BA206F28 BF009332   BF0093B0 BD200010 75F46602 600AB920   *.......9.................4......*
093A0   0005A866 B9200023 A860B920 0026A85A   4301F288 98364579 88324171 51B09818   *..................2.............*
093C0   8816DA9E CAA6417B 01874177 880A0183   D240E27F 43817088 DA88E2BF 0083417B   *................K S.......S.....*
093E0   0187D280 43814103 D1805174 7088BF20   40005734 4797860E 57444799 4303D316   *..K.....J....... .............L.*
09400   537443A1 BF200400 BF83B800 97B0618E   6292649A 659E6606 BC206F48 515C419B   *................................*
09420   516C419F 4103BD20 002051D0 51746602   610E6212 641A651E 600ABC20 6F484101   *................................*
09440   E0BFD080 41814103 D1805174 00837088   50000000 D6202000 C3E7C3C1 C9D6E2F4   *........J...........O...CXCAIOS4*
09460   002C0030 008600AC 00CC00D8 00E400E8   012E0180 0196021A 02920296 033A0366   *...........Q.U.Y................*
09480   039003B2 03BA002A 03CA03D2 048E04D2   04FE0544 05B00648 04800628 0638002A   *...........K...K................*
094A0   002A002A 002A002A 002A0504 03DA0454   058CC920 1784BD20 9520658A B0529804   *..................I.............*
094C0   8101AADA BD209460 0518179C 60085501   178C5098 79019702 C9271578 E51C5098   *........................I...V...*
094E0   14ACA831 14BCA835 14CCA839 14DCA83D   14ECA841 14FCA845 74029704 A84BA841   *................................*
09500   119CAAAC 2388F91A A3043F05 E77F3F85   C930BF20 951E678A 618EB800 A3581194   *......9.....X...I...............*
09520   B840BF00 9B2C0318 A8216292 6396649A   659E67A2 D982A833 650A5302 9504658A   *. ..................R...........*
09540   A83DBD00 95546602 62126316 641A651E   6722600A 6606658A A8412388 B800A49A   *................................*
09560   6396659E 650A5302 9504658A 6606BD20   9576658A A81B6602 610E6316 651E600A   *................................*
09580   2488BF00 9B2C0310 63964388 BF009B2C   03116316 34B88804 B800A33E 8102AA0A   *................................*
095A0   2388BF00 9B2C0312 B8009FD4 2388BF00   9B2C0314 B8009FCA B800A644 BB0095CC   *...........M....................*
095C0   C90413B4 B840178C 7382B840 638A618E   67A2B800 A8D06292 639667A2 670AE912   *I.... .... ...................Z.*
095E0   6606BB00 95CC6602 E990610E 62126722   600A7202 9704678A A81B670A 73826316   *........Z.......................*
09600   A81932B8 88463805 E0F8B0A8 980A055B   55985598 35B88838 3805E0F0 B0A09802   *.........8.................0....*
09620   A806BF00 9B2C0210 B800A784 62926396   67A21788 71019702 E806E88A 678AA819   *........................Y.Y.....*
09640   72029704 A80D7302 9704A811 8108A802   811BA952 23883805 E0F0B0A0 9802A806   *.........................0......*
09660   BF009B2C 0215B800 A0D03488 C9822388   C98E43B8 88463805 E0F0B0A0 9808A80C   *............I...I........0......*
09680   32B8883C A806BF00 9B2C0211 63964388   3805E0F8 B0A8980A 055B5598 559845B8   *...................8............*
```

```
096A0   88163805 E0F0B0A0 9802A806 BF009B2C   02126316 B800A85A 811AA806 8106A802   *.....0..........................*
096C0   8107A8E2 62926396 649A67A2 670AC994   E986F90A 678AA825 73029704 A80D7402   *...S..........I.Z.9.............*
096E0   9704A811 E982A817 72029704 A81DBC20   9712648A 618E32B8 880A3805 E0F0B0A0   *....Z........................0..*
09700   9806A80A 8103A89E BF009B2C 0213B800   A0E8C98A D90414C4 B84014B4 B840178C   *.................YI.R..D. ... ..*
09720   7482B840 62926396 649A67A2 670AE9A2   E9286606 BC009762 6602F90C 6316F98E   *... ..........Z.Z.........9...9.*
09740   610E6212 6722600A 4388641A A80F7482   A8097302 9704678A A82B7202 9704678A   *................................*
09760   A831648A A859B800 9C04B800 9DD46292   6396659E 650AD99A C91E658A BD00978C   *.............M........R.I.......*
09780   6602610E 62126316 651E600A 6606658A   A8295202 9504A821 53029504 A8258000   *................................*
097A0   A80E8001 A80A8002 A8068003 A8028004   01E17114 B0078804 712CF906 B9202000   *..........................9.....*
097C0   7194B920 08404104 B9208002 4134015A   1B38CB02 A834B920 09404104 B9208002   *..... ................... ......*
097E0   4134015A 1B3CCB02 A820B920 0A404104   B9208002 4134015A 1B40CB02 A80CB920   *............. ........... ......*
09800   0B404104 B9208002 41347004 A805B800   A16C6292 67A2670A 72029704 678A71D4   *. .............................M*
09820   A8156396 E90C610A 13029104 618AB820   9B90610A 13029304 A8110805 2805E0F8   *....Z..........................8*
09840   B0A89802 A804810E A8A9B800 9BC66292   67A2670A 72029704 678A2805 E0F8B0A8   *.............F...............8..*
09860   981DA81B C9923188 E982F984 E90EA812   46887402 9704A80A 71019702 BC200004   *....I...Z.9.Z...................*
09880   2498B800 A270BC00 98E6B800 40B82388   BF009B2C 0015B900 ABCCB840 3588BC00   *.........W.. .............. ....*
098A0   98E6B800 457CBC00 98E6B800 48266292   6396221A BC0098E6 62126316 BF009B2C   *.W.......W.............W........*
098C0   000FBC00 AC5A1194 B840649A 659E67A2   17019102 618A7188 BC00AC5A 641A651E   *......... ......................*
098E0   67221188 600A2327 33193398 339823B8   88048103 A9592B05 E3F8B3A8 980D4088   *........................T8.... .*
09900   62926396 13029104 618AA806 62926396   618A649A 659E67A2 6606B900 ABCC6602   *................................*
09920   610E6212 6316A84D 2388BF00 9B2C0016   B900AA58 BD200100 88028402 75941194   *................................*
09940   B8406292 649A659E 67A2BF00 9B2C0016   B800AA58 15DCBB20 17C414CC 34BBB800   *. .......................D......*
09960   7B00C9BA A3043805 E07F3885 3489BD20   A8C054B8 98048802 A81C22F8 22F8328B   *..I........................8.8..*
09980   22982298 2805E0F8 B0A8980E 3805D050   3885B800 03288108 A8028122 A9FDBF00   *.......8........................*
099A0   9B2C0021 A8412388 BF009B2C 0112B800   9F366396 659E650A 53889504 658ABD00   *................................*
099C0   99CA6602 6316651E 600A6606 658A3302   A825BC00 A9FEA806 BC00A952 7794178C   *................................*
099E0   980AF910 C9109702 1784B840 C90413B4   B8407382 B8409706 A813649A 659E67A2   *..9.I...... I.... ... ..........*
09A00   17889102 618A7101 BC00A952 610E641A   651E6722 3388600A 2488BF00 9B2C0114   *................................*
09A20   63964388 BF009B2C 01166316 B800A9D2   6396649A 659E650A D99AE91E 658ABD00   *...............K........R.Z.....*
09A40   9A4E6602 610E6316 641A651E 600A6606   658AA829 53029504 A8215402 9504A825   *................................*
09A60   2488BF00 9B2C0113 63964388 BF009B2C   01156316 B800A914 659E7901 9702678A   *................................*
09A80   B800A914 BF200070 77E4025B 22982298   0A05EA06 E23F0A85 00DB77F4 EA08230D   *.........U..........S......4....*
09AA0   8804810C AB050A05 EA2277E4 2B04DB02   A81AE3DE 2B8477F4 618EB920 9ACA618A   *...........U......T....4........*
09AC0   629267A2 8100B800 981EA82C 77F4C9A8   C914618E B9209AE4 618A6292 67A28100   *.............4I.I......U........*
09AE0   B800985A A812618E B9209AF8 618A6292   67A28180 B800985A B800A670 34882388   *...........8....................*
09B00   BF009B2C 04014388 B800ACF4 34882388   BF009B2C 04034388 B800ACF4 BB200070   *...........4...............4....*
09B20   73E40909 10480889 73F4B840 67A20756   73B8980C 075237B8 98066722 97027088   *.U.......4. ....................*
09B40   67227101 AB975000 00000000 D6202000   C3E7C1E2 E4D7E57B 618E6292 63966606   *............O...CXASUPV.........*
09B60   014A024E 02CA01CE 618EB900 962C0002   0263B920 A8C012A8 02E3024A 23013398   *.........................T......*
09B80   33983109 01E76602 610E6212 6316600A   62926606 3901C926 D1803981 C98A6602   *.....X................I.J...I...*
09BA0   610E6212 6316600A E1AF3981 32072298   2298A304 618EB900 962C0042 A821B920   *................................*
09BC0   0130B800 97B0BF20 007077E4 2804F0A0   9812E0EF 288477F4 C90A2101 11981198   *...........U..0........4I.......*
09BE0   11E89808 610E6212 6722600A 6606618E   B9209C00 618A6292 67A28100 B800981E   *.Y..............................*
09C00   6602A821 025B2298 2298260D 66986698   66E89808 B920012D B80097B0 BC200004   *.................Y..............*
09C20   630A1384 6E08FE8E FE14EE9A EE20DEA6   DE2CCEB2 A834630E 13944698 A817630E   *................................*
09C40   13A44698 A81D630E 13B44698 A823630E   13C44698 A829630E 13D44698 A82F630E   *.................D.......M......*
09C60   13E44698 A835630E 13F4260D 66986698   63028804 30853087 33F833F8 238D6388   *.U.......4...............8.8....*
09C80   BE207794 BF209C8E 678AB800 A5B2B800   A670618A 6396649A 6606B900 E5C03109   *............................V...*
09CA0   372171B0 884E31A3 37A5818F 399A11A8   81043983 31A13401 881A4498 44983081   *................................*
09CC0   618EB920 9CD0618A 14828140 B8009560   00000000 BA2004FC 618EB900 962C0042   *........... ....................*
09CE0   66026316 641A600A 819B399A A81B8108   399AA81D 3417618E 081481FF 14E0B921   *................................*
09D00   7A644498 44981498 610E308D 348E0F09   DF2B3093 309B4900 C986BA21 9794A849   *........................I.......*
```

```
09D20    41029108 1288311D B0089814 C982A859    618EB920 9D3E618A 8141B800 9DD4A826    *............I................M..*
09D40    B005880E B006880A B0028802 A877E902    A87B2501 987F618E B9209D64 618A8141    *..............Z.................*
09D60    B8009DD4 A88F2401 887D4498 44982503    55985598 8108599A 411DB008 9802C99A    *...M..........................I.*
09D80    3488618E B9209D98 618A6292 6396649A    67A28140 B800A85A A8BB4507 55985598    *................. ..............*
09DA0    88CB511D B0089802 C9A64107 11981198    88DB4188 34881388 618EB920 9DCE618A    *........I.......................*
09DC0    62926396 649A67A2 8100B800 A85AA8F1    5488A83B 6396649A 659E67A2 2805E0F8    *...............1...............8*
09DE0    B0A89802 A808B920 0129B800 97B0BD20    005075E4 C982238A F9282809 F98CE912    *...................UI...9...9.Z.*
09E00    E998F0E0 8920E01F A81AC816 E09FD080    A812D80E E03FD020 A80AC886 E05FD040    *Z.O.......H.......Q.......H.... *
09E20    A802A902 2F04CF02 A8FA2E09 2507240F    45B88802 A84ECE16 CEA6DE36 04534498    *................................*
09E40    449824B8 8802A8DC 00D100D3 A8B2044B    44984498 24B88802 A8CA00C9 00CBA8A0    *.........J.L...............I....*
09E60    04474498 449824B8 8802A8B8 00C500C7    A88E044F 44984498 24B88802 A8A600CD    *.............E.G................*
09E80    00CFA87C 44E8984E CE16CEA6 DE360453    44984498 24B88802 A88A44A8 05D3A85A    *.....Y.......................L..*
09EA0    044B4498 449824B8 8802A878 44A805CB    A8480447 44984498 24B88802 A86644A8    *................................*
09EC0    05C7A836 044F4498 449824B8 8802A854    44A805CF A8244498 44984587 44F844F8    *.G...........................8.8*
09EE0    55E89816 CE08CE8A DE0C04D1 A81204C9    A80E04C5 A80A04CD A8065598 5598548F    *.Y.........J...I...E............*
09F00    2889E77F 2F84BD20 005075F4 6606618E    B9209F20 618A6292 67A28100 B800981E    *..X........4....................*
09F20    6602A808 2889BD20 005075F4 6316641A    651E6722 600A6292 649A659E 6606389A    *...........4....................*
09F40    3D1CB503 880EB508 8802A81A 3D1DB548    8802A812 BA213194 2288880A 618EB900    *................................*
09F60    962C0042 A85AC982 A80614AC 4D2DFDC4    F1029840 E9860D0A F5089838 3401882C    *......I........D1.. Z...5.......*
09F80    44984498 32884388 2D0DCD10 618EB920    9F9A618A 8120B800 A49AA80E 618EB920    *................................*
09FA0    9FAA618A 8160B800 A49A2388 308130A1    55483D83 618EB920 9FC0618A B800ABCC    *................................*
09FC0    66026212 641A651E 600A3401 44984498    B8009FE2 34014498 44988806 45014081    *...................S.......... .*
09FE0    3581178C C918C986 74824488 A8149702    7482A702 44888814 97021784 B84014C4    *....I.I...................... .D*
0A000    C98FBF2C 01008802 86027794 B840618E    649A659E 67A26606 045D4498 44984488    *I.......... ....................*
0A020    9862BB20 A0C83081 618EB920 A038618A    80018184 B800952A 610E3306 348833F8    *.....H.........................8*
0A040    33F803DD 055F9501 05DF77A8 0E0C4E84    45889508 4586A601 880E5388 93285382    *.8..............................*
0A060    5F809701 3588BE8D 50825F80 4E04BE80    4E844306 35024586 6602610E 641A651E    *................................*
0A080    6722600A 4E048802 A81D4301 88083398    33983488 A813BB20 A0C83081 618EB920    *.........................H......*
0A0A0    A0AC618A 80018184 B800952A 610E3306    618D4101 318133F8 33F84381 33983398    *.......................8.8......*
0A0C0    610D3488 A883819C 00800000 0001B54C    34074498 4498C90A C98414C4 B84014B4    *......................I.I..D. ..*
0A0E0    B840178C 7482B840 659E6606 BD200010    75E43407 44984498 88164804 E07F4884    *. ..... .........U..............*
0A100    45073587 8802A808 318811F8 11F82183    BD200010 75F46602 610E651E 600A649A    *...........8.8.......4..........*
0A120    659E67A2 BF200030 77E42503 88143401    881CC91E 55985598 54872401 34812081    *.........U........I.............*
0A140    208377F4 610E641A 651E6722 600A3583    A8192501 88103403 880C4498 44984587    *...4............................*
0A160    24033483 A829811C B80097A6 2805E0F8    B0A89802 A808B920 0102B800 97B0BF20    *...............8................*
0A180    005077E4 2804F0A0 982EC990 075B7798    779827B8 880CD090 2884A80C F0108815    *...U..O...I.................O...*
0A1A0    A816D030 2884A8BA 2809D80A C886C802    A886A85A A82EA802 A8A8014D 11981198    *..........Q.H.H.................*
0A1C0    88162087 11F811F8 218F1198 119822F8    22F81287 02CDA88A 2087208F 22F822F8    *.....8.8.......8.8...........8.8*
0A1E0    02CFA811 01451198 11988816 208711F8    11F8218F 11981198 22F822F8 128702C5    *...............8.8.......8.8...E*
0A200    A8602087 208F22F8 22F802C7 A8110149    11981198 88162087 11F811F8 218F1198    *.......8.8.G.............8.8....*
0A220    119822F8 22F81287 02C9A836 2087208F    22F822F8 02CBA811 01511198 11988816    *...8.8...I.......8.8............*
0A240    208711F8 11F8218F 11981198 22F822F8    128702D1 A80C2087 208F22F8 22F802D3    *...8.8.......8.8...J.......8.8.L*
0A260    A811BF20 005077F4 610E6212 6722600A    E9B4F984 2782A80C BB200008 36982682    *.......4........Z.9.............*
0A280    36A86786 2301BA20 B84023B0 8808025B    22982298 A812B920 0105B820 97B0B920    *......... ......................*
0A2A0    0104B820 97B0A86E F982A866 6788F88E    F814E89A E820D8A6 D82CC8B2 A836139C    *........9.....8.8.Y.Y.Q.Q.H.....*
0A2C0    738A9704 A81713AC 738A9704 A81D13BC    738A9704 A82313CC 738A9704 A82913DC    *................................*
0A2E0    738A9704 A82F13EC 738A9704 A83513FC    738A9704 E9866306 738AA816 230D3398    *....................Z...........*
0A300    33986382 88043686 33A86386 66F866F8    268D1484 B8402301 BA20B840 23B08802    *.............8.8..... ..... ....*
0A320    A885025B 22982298 BB20A332 638AB800    A00E3688 678A6888 67889704 A891C990    *..............................I.*
0A340    45018808 B9200301 B80097B0 35014581    44F844F8 3481600A 66066396 05088802    *.................8.8............*
0A360    A808B920 0319B800 97B0C982 A8040F09    CF0EBC20 003074E4 A85EBC20 003074F4    *..........I............U.......4*
0A380    E9926216 33A82389 E17F2388 5008208B    6602600A BF20007C 77E40E09 D6020E89    *Z........................U..O...*
```

```
0A3A0   BF200070 77F4BF20 A3B8BA20 01F42782   67885208 1308B840 76883188 76D4BF20   *.....4.......4......... .....M..*
0A3C0   007077E4 0E09E6FD 0E89BF20 007C77F4   BF2001F8 2782A87D 03468863 074688A6   *...U..W........4...8............*
0A3E0   70837488 77017798 779807C6 0755A701   07D58838 B89C6216 40815008 D180BC20   *...........F.....N...... ...J...*
0A400   003074F4 238A2E05 D6802E85 23886602   600ABA20 003072F4 72E4B002 98040F09   *...4....O..............4.U......*
0A420   CF2D0246 22F822F8 4281A851 0F09CF56   D7800F89 075707D5 618E4188 BC200030   *.....8.8........P......N........*
0A440   74F431B8 88303788 77017798 77983081   6292BA20 A45C628A B800048A BC200030   *.4..............................*
0A460   74E41488 014611F8 11F84181 610E6212   73889001 A8833081 B920A482 618AB800   *.U.....8.8......................*
0A480   048A610E A92B6216 618EB920 A496618A   8120B800 A49A6296 A9216292 6396649A   *................................*
0A4A0   659E67A2 6606F982 A8043804 C82855A8   3788A808 47018838 77987798 045647B8   *......9.....H...................*
0A4C0   98200452 47B89804 8802A81C 7488BD9D   B9200304 A816B920 0306A810 B9200319   *................................*
0A4E0   A80AB920 030FA804 B9200315 B80097B0   0809F836 E802A832 BF200030 77E40809   *..................8.Y........U..*
0A500   E802A826 E0F70889 77F43788 37017798   77983081 30839501 618EB920 A524618A   *Y....7...4......................*
0A520   B800048A 610E7388 8836BF20 003077E4   075557A0 07D50746 880C0772 33F833F8   *...............U.....N.......8.8*
0A540   738104F2 A80403C6 04F2BF20 003077F4   0809F804 C81AA808 BF200008 77F477D4   *...2...F.2.....4..8.H........4.M*
0A560   6602610E 62126316 641A651E 6722600A   025ABC20 003074E4 0809C802 A80C2203   *.......................U..H.....*
0A580   0555A501 52B09806 880474F4 A82F0257   25A805D5 E07F0889 03463701 77987798   *...........4.......N............*
0A5A0   07C674F4 30813083 B920A560 618AB800   0496618E 649A659E 67A26606 35883800   *.F.4............................*
0A5C0   8804A528 B885A508 54884506 35824386   49049101 4984080C 0138984A 055FBF20   *................................*
0A5E0   000157B8 8840BD80 05DF075D 77987798   47B8883E 75018844 55985598 45B88804   *..... ..........................*
0A600   5788A811 618E7501 881C5598 55985101   7181610E 50814388 618EB920 A626618A   *................................*
0A620   8120B800 A49A6602 610E641A 651E6722   600A7501 05DD7081 7388A825 B9200120   *................................*
0A640   B80097B0 2C05E4F0 B4A09802 A808B920   0218B820 97B02301 33983398 BD200100   *......U0........................*
0A660   88028402 7594C984 13B4B840 7382B840   BC200070 74E40805 F0429822 024F02DB   *......I.... ... .....U..0.......*
0A680   98200247 02DB983A 024B02DB 98520909   C9060253 02DB9866 BB200004 73E474F4   *................I............U.4*
0A6A0   B8402298 2298D080 23073398 3398880C   2087308F 33F833F8 03CFA85F 00CD00CF   *. ...................8.8........*
0A6C0   A8582298 22982307 33983398 880C2087   308F33F8 33F803C7 A84000C5 00C7A83A   *...................8.8.G. .E.G..*
0A6E0   22982298 23073398 3398880C 2087308F   33F833F8 03CBA822 00C900CB A81C2298   *.................8.8.....I......*
0A700   22982307 33983398 880C2087 308F33F8   33F803D3 A80400D1 00D3D040 E0FB0885   *...............8.8.L...J.L. ....*
0A720   2904E17F 298474F4 230A1384 12A433A8   2305E307 D3087334 BB200004 73F4B840   *.......4..........T.L........4. *
0A740   B923DF31 BB2005A8 35888605 95243182   35863188 5388BE8D 5182B920 A774618A   *................................*
0A760   B923DF30 51860356 318811F8 11F8318D   B8009348 BF00943A B8401748 80200000   *...........8.8........... ......*
0A780   A8C026D6 2805E0F0 B0A09860 3805E0F0   B0A0980C 3804C84E D0803884 E0C3A812   *...O...0.......0......H......C..*
0A7A0   3804C842 F9881708 E73CE0C3 7058D080   3884F906 BF200010 77E42701 8852E03C   *..H.9...X..C......9......U......*
0A7C0   885C659E 77987798 7C04E43C 04389832   649A7488 77078842 77987798 7C04E43C   *..........U...................U.*
0A7E0   0438980C A8158101 B80097A6 8117A809   77F877F8 378733F8 33F84387 641A651E   *.................8.8...8.8......*
0A800   A82C77F8 77F83787 33F833F8 2381A813   308733F8 33F82381 A812641A 651E3087   *...8.8...8.8.......8.8..........*
0A820   27037798 779833F8 33F87387 2383F906   BF200010 77F4C98A 610E6212 63166722   *.......8.8....9......4I.........*
0A840   600A6606 618EB920 A856618A 629267A2   8140B800 981E6602 A823D9A8 4804C858   *................. ........R...H.*
0A860   D0804884 C9AE3707 885644F8 44F83487   44984498 4787D994 610E6212 6316641A   *....I......8.8........R.........*
0A880   6722600A BF200010 77E4A831 BF200010   77F4A81D 2805E0F0 B0A0982C 2701980C   *.........U.......4.....0........*
0A8A0   408744F8 44F82481 2483A808 478744F8   44F82481 D9ABA841 B9200202 B80097B0   * ..8.8.........8.8..R...........*
0A8C0   B9200205 B80097B0 B9200219 B80097B0   2E05E6F0 B6A09802 A808B920 0216B820   *..................W0............*
0A8E0   97B0C9A0 23018814 33983398 3F04E77F   3F843707 27819802 20833087 C98E610E   *..I...........X.............I...*
0A900   6722600A BF200070 77E4A829 BF200070   77F4A817 C9824085 0C07A415 0428982A   *.........U.......4..I. .........*
0A920   55C80508 95034589 950A840A 45833588   950C4788 970C900F 51107130 B8874109   *.H..............................*
0A940   4197610F 651E6722 600AB920 010DB800   97B02388 0E1487FF 72E06308 880433F0   *...............................0*
0A960   FB85BF21 7A402718 7B008200 33983398   BF217A50 37987502 7801883C F0408810   *..... ......................0 ..*
0A980   F1048806 7301E3F0 1394C9A0 7388A822   D82E5701 27B09820 95042298 22982598   *1.....T0..I.....Q...............*
0A9A0   F1048806 5301E3F0 1394C984 5388A802   5302BF20 02004088 BF200100 55C84088   *1.....T0..I........... ......H .*
0A9C0   57039701 27A89837 88132288 8837F999   A83B618E 6396659E 67A23588 950C4788   *..............9.................*
0A9E0   970C8016 51107130 B8874388 87003F83   871E3F82 610E6316 651E6722 600A0C14   *................................*
0AA00   85FF52E0 882AED21 7A605703 27B09820   BF200200 95042298 22982598 F1048804   *............................1...*
```

```
0AA20   58001194 C9845388 A8025302 77944088   BF200100 55B8A80D 618A6292 649A67A2   *....I......... .................*
0AA40   66063488 42018808 22982298 2488A80D   44F844F8 348DA86A 618A6606 34884103   *.................8.8............*
0AA60   C00A9824 0C110D07 11A84703 76186538   98167118 42018814 22982298 2488BC97   *................................*
0AA80   8104A818 8106A814 8108A810 44F844F8   348D3517 950A15B0 8808811F 8000B800   *.............8.8................*
0AAA0   97B03189 31110914 880411F8 F985BF21   7A400718 11C87900 11981198 BF217A50   *...........89.... ...H..........*
0AAC0   17980809 D802A812 618EB920 AAD6618A   8121B800 A49A11C8 A8B07101 8894F140   *....Q........O.........H......1 *
0AAE0   98967202 35110E14 6468D958 270157B8   98805598 55982598 5206390E E1F0B110   *..........R..................0..*
0AB00   8802A828 5904E912 D908B100 8802A862   A806B920 003C1298 A8103513 08140468   *......Z.R.......................*
0AB20   55808806 B9200010 1298A802 A898390E   F988B900 96320042 A806B900 96320062   *................9...............*
0AB40   11C8A846 27039701 57B89861 5588885B   390EE1F0 B1008802 A814B920 001071E4   *.H.................0...........U*
0AB60   B90C9C92 B9200010 71F411A8 A802A856   A818B920 0001A812 F8840D09 DD30E818   *.........4..............8.....Y.*
0AB80   72028813 B90098CC 00406602 6212641A   651E6722 1188600A 7402882B 6606B920   *......... ......................*
0ABA0   ABA8618A B8009348 660211C8 A8253D18   E560C520 98063D1B B507883F 85023D8D   *...........H....V.E.............*
0ABC0   72028853 A899B920 0006A843 618A0D09   DD02A81A 6606618E B920ABE4 618A8120   *...........................U....*
0ABE0   B800A49A BF200010 77F46602 600A55C8   0D113488 80104882 4803900E 980E4883   *.........4....H.................*
0AC00   22A8BD8C 8104A834 8106A830 8108A82C   77A84F03 49021718 11A80907 71B09815   *................................*
0AC20   49021728 72904701 88087798 77987488   A8313121 910E21B0 8808811F 8000B800   *................................*
0AC40   97B044F8 44F8348D 32893804 C847D040   3884B900 E610B800 93483F04 CF168510   *...8.8......H.. ....W...........*
0AC60   75E42C21 CC942C1E DC04C994 A804C982   A80EA806 8106A83D 408875F4 81024088   *.U........I...I........  ..4.. .*
0AC80   D7803F84 30872513 98102C21 E47F2CA1   33F833F8 23912393 A80C33F8 33F82393   *P...........U....8.8.......8.8..*
0ACA0   55985598 53876292 271A7226 27538520   75E4CF84 CE02A832 F606882E FF2CCEAA   *.................U......6.......*
0ACC0   253B9826 CF82A806 2223253B 981AB920   258021CD B92000FF 21D5B920 009821B9   *.........................N......*
0ACE0   4788BC00 1A887488 A8008530 75F46212   11C84088 24882721 C9842311 A8022391   *.............4...H .....I.......*
0AD00   F982A804 F902A80A 73B09806 E17F1194   B84055A8 4F02F984 4D03A806 0D077528   *9...9............ ....9.........*
0AD20   984A53B0 980C4401 88344498 449853A0   A8216628 97047498 3498F984 4800A814   *..........................9.....*
0AD40   4880F910 74A834A8 27219701 27A14F03   97014F83 27119701 2791D180 A851F988   *..9.......................J...9.*
0AD60   B9200405 B80097B0 F90BA861 B9200406   B80097B0 50000000 00000000 D6202000   *........9...................O...*
0AD80   C3E7C1E2 E4D7F27B 30DC5E2E CECAFD84   87FFA844 592ED98C 552D05BF 099E0741   *CXASUP2...............R.........*
0ADA0   07BDAABC 053FA810 091EBE20 0020053D   081FA804 081F5529 572F6748 CF02A824   *................................*
0ADC0   E6805EAF 572F6308 E31EF902 93208212   3701CF4B BE82A816 57ABB8A7 552905BD   *W........T.9....................*
0ADE0   099EB840 572BBE91 CF02A802 CF95F73F   880CA701 F91F8633 A823B800 AFFECF07   *... ..........7.....9...........*
0AE00   5E2ECEB8 CF82A834 BF200100 F904BF20   150057AB 76E4572F 6748CF1C 5727E7F1   *............9........U........X1*
0AE20   54354B01 37587401 54A5DF88 572FD6C0   76485EAE 76F4A85F 76F4A87D BF2000FF   *..............O......4...4......*
0AE40   57AB76E4 572F6748 CF135231 4204573B   8814572F D6807648 5EAE5727 E7C17721   *...U................O.......XA..*
0AE60   57A576F4 A88D5E53 F6018826 5E01E6FD   C630981E 5739881A 574A8808 77F877F8   *...4....6.....W.F............8.8*
0AE80   578F50CA 5E53FE0A 5739B780 8804D701   57B9475C 67087480 5E41EEA2 E7F0B730   *..............P.............XO..*
0AEA0   8806B7F0 9816A81C BF200200 47644380   A2F09802 A80E434C DA9AA8B0 47544380   *...0.............0..............*
0AEC0   A2F0987C 8303A8AC 5B49DB93 5E41EE04   5E50EE04 8307A89C 4380E20F 5B53B209   *.0........................S.....*
0AEE0   881CB20A 8818B208 8866C20D 981B5A53   FA82A821 435CF2F0 888C879D A82A83F0   *..........B...........20.......0*
0AF00   5F33CF31 5E398780 57B35BB9 5727E7C1   7727D701 57A50E22 5F2F6748 5FAE5735   *..............XA..P.............*
0AF20   7F0C5353 FB82FA90 434CD2F0 4344A800   4754A800 76F4A95F 5E3DD680 5EBDA819   *..........KO.........4....O.....*
0AF40   434CDAA6 4380E20F 2308C208 981E8307   5727E7C1 7727D701 532573B0 888B57A5   *......S...B.......XA..P.........*
0AF60   87005FB3 5F395FB2 A855A8A5 33485E2E   CE828301 5727E7C1 772157A5 5E41EE86   *......................XA........*
0AF80   474CD6F0 47440739 05B99808 05B776F4   70C4A804 75AD76F4 5F53CF04 5F475FBC   *..00...........4.D.....4........*
0AFA0   5739FB92 98028780 57BB5E53 CE046648   5EC750B9 A9DDFB1C 87E857BB 47806708   *.................G.......Y......*
0AFC0   E7F0B730 881DE60F B6088802 A82587F2   5FBBA80A EB8487EA A83387F0 57BB5E49   *XO....W........2...........0....*
0AFE0   CE02A83B 5E41EEBF 76E45231 4204870F   475450D5 76F4BF20 4D9657CD A85576E4   *.........U.........N.4.........U*
0B000   572F6748 CF4A5231 4204A800 435C2308   3480A2F0 982A8303 573B9834 B303880E   *...................0............*
0B020   5F41EF8A 4780E7F0 B730880C 47545727   E7C17721 57A5A8C5 BF200200 4764A813   *......XO........XA.....E........*
0B040   434CDA94 BE201200 6701F902 672157AB   BE200020 76F4AA7F 5B49DB99 8307A849   *..........9..........4..........*
0B060   BF202CD8 71019101 7181BF20 2CEA7181   0703880C BF86BF00 943A77A8 0783A836   *...Q............................*
0B080   07078832 BFAEBA21 9C602F39 F7F09822   D7602FB9 87022FBD BA2197E4 BE2005A8   *............70..P..........U....*
```

```
0B0A0    618EB920 B0B2618A 629267A2 8100B800    981E77A8 0787081D B886800A 089DA804    *................................*
0B0C0    089DA872 01639101 01E30367 31B89866    BE2005A8 024A2301 88503398 3398618E    *.........T......................*
0B0E0    B920B0EE 618A67A2 8100B800 A8D03D05    DD2A618E B920B102 618A6396 9304B800    *................................*
0B100    982E0163 23018822 33983398 370971B8    88359804 8802A83B 07E7A81A 350B5598    *.........................X......*
0B120    5598BF20 B132678A 5088B920 050FB800    97B0024A A835BC20 17C44388 93248520    *.........................D......*
0B140    75E4412F 8832B8A2 910149AF 4840C80A    75F44227 B9007CF6 A82039AF 75F44227    *.U.......... H..4.....6.....4..*
0B160    B9007CF6 BC2017E8 A8193C2E C4018829    48AE9101 49AF39AF 75F40A31 0AA60A32    *...6...Y....D............4......*
0B180    0AA70A33 0AAD0A34 0AAE0A35 0AAF8204    B9200680 91371B00 B3FF8804 83801B80    *................................*
0B1A0    9101BA8F BC2078B8 4A08CA26 D280BE20    002076E4 4A8876F4 BA2197B4 BE2005A8    *...........K......U...4.........*
0B1C0    618EB920 B1D2618A 629267A2 8100B800    981EA800 BD200040 7574081C B8CCBE20    *.....K................ ........*
0B1E0    79B26914 8840800A 089C6113 9101B1FA    983081F0 9001B0F6 982880F0 6B109301    *..... .............0...6...0....*
0B200    B3FA981C 83F06A0F 9201B2F6 981082F0    650D9501 B5FA8816 B5F48818 658D6A8F    *.....0.....6...0.........4......*
0B220    6B906193 A8548001 A84E089C A84C85F0    9401A819 B4F2981D 1580670B 9701B7FA    *..............0.....2...........*
0B240    981A87F0 9601B6FA 981286F0 678B6F09    9701B7FA 980287FC 6F89A802 678B6F04    *...0.......0.............0.......*
0B260    9701B7FA 980E87F0 6E039601 B6FA9802    86F06E83 6F84A85D 089CA800 BC207982    *.......0..........0.............*
0B280    4E0C881E FE84B618 98108600 4E8C408A    408E8603 4E864E87 A808BD20 78946518    *............ . .................*
0B2A0    50028402 4F06885E 410AFF9C B7088828    B706883E B7028834 B704883A 8600BC84    *................................*
0B2C0    4E87A844 4E86A834 86004E86 C701A825    86004E87 C701A82D BB20010C E070E1F0    *............G.......G...........0*
0B2E0    13D8B900 B2E61385 11C8A800 BC8C7124    A8161102 A80B1101 A80F7114 4F078808    *.Q...W...H......................*
0B300    410EFFB5 A85BBC8D 4E00FED2 8429712C    E018EC8A 430513C0 8806C430 11C04185    *...........K...............D.....*
0B320    711CEC90 430213C8 880CDC8C C43011C0    4185A804 4182DC1E BA2197A4 BE2005A8    *.......H....D...................*
0B340    618EB920 B352618A 629267A2 8100B800    981ED603 4E80FC86 BF202000 7774B840    *...................O............ *
0B360    BC207982 4E00FE11 8416A85F BF200020    43134115 882A4193 4095BF20 60003288    *........................ ......*
0B380    76E48812 4204A800 47344093 4195A84C    43934195 A8461288 4204C6C0 4734A83C    *.U........ ..................F....*
0B3A0    328876E4 4204A800 414C435C 456C76F4    2608E6F0 B6308802 A80ED419 CB02C401    *...U...........4..WO.......M...D.*
0B3C0    DB02C408 EB82C410 4308E3FD 4C088806    31C013C0 31C07114 732476E4 BA2003FE    *..D...D...T...................U....*
0B3E0    4204A800 76F4A8E1 779C71EC 736C2008    11808804 B8000028 CF02B840 B8000066    *.....4.................... ....*
0B400    23888848 A3028514 2D808513 2D848501    2D86756C 2589754C 358EF7F0 98040542    *.........................70....*
0B420    A814CF10 CF8ADF04 158CA80A 150CA806    058CA802 05663592 279375EC 25952793    *................................*
0B440    75EC2595 F918B920 050C2183 0827B894    B9200501 22888802 21830FA8 AB31B920    *....9...........................*
0B460    050DA81B 08A7CF02 B840B800 0066BC20    78B84201 2B01CB4A 2588951A FBB44581    *........ .......................*
0B480    5A078808 22182218 22182218 2A87D301    2B814B08 E37F4B88 20832280 6088BC20    *...............L.....T...........*
0B4A0    78B84205 2B01CB20 2588951A FB844585    A8335B07 E30FB30F 88029301 5B8722C0    *.......................T.........*
0B4C0    6088BD20 7910A84D BD2078C2 A823F7F0    9806B920 000EABAB BB200009 C98AD906    *...........B..70.............I.R.*
0B4E0    D982C319 C308C303 D922E908 F08699F2    D9AEA810 BE00B554 8408BE00 B5F0B920    *R.C.C.C.R.Z.0..2R.............0..*
0B500    001BAA2C 31880F30 0FA8ABDF DF82A814    158CA502 8804D995 A80AB920 000DA81B    *.......................R........*
0B520    DF93A821 BE00B554 880C8420 BE00B5F0    11888818 A8310C2E BC8EB920 B2E831A8    *..............0...............Y..*
0B540    8819B920 001AA81F 0CAEA823 BE200004    7674A96D CF1ECFAA DF0CDFB4 33C8B920    *...............................H..*
0B560    000E1180 6088130C BC00B5A2 88026088    13046088 0366BC00 B5A28802 608803E6    *...............................W*
0B580    6088038C BC00B5A2 88026088 03846088    138CBC00 B5A28802 6088B920 000A1180    *................................*
0B5A0    6088028A 33888806 026223B8 9806B920    0020A822 A30223B8 9802A80F 3501E488    *...............................U.*
0B5C0    E50F11C8 BA20000C 52B0880A BA200004    52B08802 A8103501 E470E5F0 BA2060D0    *V..H......................U.V0....*
0B5E0    52B08802 A804B920 000A020A 11884088    22888824 85122D80 85122D84 2C86BD20    *............... ...............*
0B600    002051B8 88143501 25892793 2788A702    754C758E 73922183 608855C0 A817BE20    *................................*
0B620    C2CC737C F808F702 9912E89A A836F308    8808FF06 BD200008 A804BD20 000005FF    *B...8.7...Y...3.................*
0B640    BD200000 A812DB06 BD200008 A804BD20    000005FF BD200008 5574BF00 B6A0556C    *................................*
0B660    F4E08806 B9200503 A8C6F41E 980AF50C    9806B920 050AA8B8 0A2DBA86 B9200507    *4........F4...5.................*
0B680    A8AE0AAD BD20940E 5588880E BF20B694    678A5088 057F5574 AAB3B920 0521A890    *................................*
0B6A0    2288883C 85182D80 85102D84 8504E882    85022D86 536C0385 2391550C 2589551C    *..............Y.................*
0B6C0    258B552C 258D555C 258F558C 2593DA04    55C8A802 559C2595 55A82597 55CC2599    *.................H..............*
0B6E0    7088737C F806FF34 E89AA889 F3088808    FF06BD20 0008A804 BD200000 05FFBD20    *....8...Y...3...................*
0B700    0000A812 DB06BD20 0008A804 BD200000    05FFBD20 00085574 556CDC02 AA2FBF00    *................................*
```

0B720	B6A0BB20	0506D984	3188A804	A301A809	0F300FA8	22888802	2183AE0F	22888826	*......R.........................*
0B740	85122D80	85102D84	85842D86	55A82589	55A8258B	55A8258D	55A8258F	55A82591	*................................*
0B760	657C0585	2593F080	88CC677C	BD200001	57E007FF	BF200400	6774756C	EC8CBF20	*......0.........................*
0B780	05006774	756CEC82	A927637C	F340992D	DB06F390	984CA935	BF200000	7788887A	*............3 ....3.............*
0B7A0	0B30CB06	CB88DB0A	A9470366	A806038C	A802130C	A3027503	35B89808	750153B8	*................................*
0B7C0	9802A840	0C2DBC86	B9200507	A89F0CAD	BD200020	6574BE00	B554884E	B920050A	*... ....*
0B7E0	A8B3D720	6774653C	776CF604	98064238	8828A810	BD200000	55888963	BF20B804	*..P.......6.....................*
0B800	678A5088	BD200000	55888973	BF20B814	678A5088	11889EEB	A810BD20	00005588	*................................*
0B820	8989BF20	B82A678A	5088077F	7608E700	D6046774	AC4F637C	F34099D9	BF200020	*..............X.O.......3 .R....*
0B840	6774653C	776CF604	99E74238	8802A9ED	DB18F390	9802A9F5	BD200000	558889C7	*......6..X........3....5.......G*
0B860	BF20B868	678A5088	AC830C2D	BC86B920	0507A945	0CADBE20	00206674	BE00B554	*................................*
0B880	8C9BB920	050AA959	450C05F7	BB200680	C89CD822	D8A8E82E	BB20050B	A92A4504	*...........7....H.Q.Q.Y.........*
0B8A0	3488BE00	B98A4D00	B5FF8876	A8209337	BD200840	A8199338	BD200940	A8219339	*................... ....*
0B8C0	BD200A40	A829933A	BD200B40	A831453C	FCB8DD36	CD0CFC08	CD88DD86	F4FC9872	*... ....4...*
0B8E0	A8460C2F	BC82A826	0CAFBD20	40044534	A812BD20	80024534	BD204004	453485FF	*............ ....*
0B900	4D806088	05774504	AD230C2F	BC86BE00	B8F2A811	0CAF0492	BE00B554	88350412	*.................2..............*
0B920	A815B920	0504A9F9	55C84D00	B5008814	55984D80	5598D480	4534BE20	C1F865C8	*.......9.H............M.....A8.H*
0B940	4534A85B	0C2FBC82	A8590CAF	44488502	A8230C2F	BC82A814	0CAFBD20	40044534	*............................ ...*
0B960	8410BC83	453CF4FC	9819A869	453C4508	44485598	D4804534	BD204004	45348410	*......4.............M..... .....*
0B980	BC83453C	F4FC8885	A87D2288	88388512	2D808511	2D842886	453C2589	754C2388	*....4...........................*
0B9A0	A302358E	759C2593	DD88DD0A	CD8CCD0E	A810158C	A80E150C	A80A058C	A8060542	*................................*
0B9C0	A80255C8	35926088	3188AA9D	BD20786C	5319F3F0	8832D70F	7368882C	51179101	*...H..............30..P.........*
0B9E0	51975113	54152118	41B09802	51115193	11981198	FB9A5202	24011481	24031483	*................................*
0BA00	33789504	9104BA95	B9200008	7174AE29	54401081	1282A819	BA207982	2305FB2C	*................. ....*
0BA20	888E2111	88061198	11981088	DAA8EA2A	CBACDB1A	DB9C208A	208E8303	2B862B87	*................................*
0BA40	83FD2B80	B8403540	83FEA80B	A860B800	C638B801	266CB800	C5CCB800	C5B833A8	*..... . ...F.......E...E...*
0BA60	2B03B303	9802A833	33983398	3098B800	BA7AB801	2598B800	BA9C2302	8802A84B	*................................*
0BA80	BA219C60	2B39F3F0	9810D360	2BB98301	2BBDBA21	97E4B840	1D00A826	2B020A36	*......30..L..........U. ....*
0BAA0	0BB6238A	208E8303	2B862B87	A86F8300	2B8C2091	2087BD20	786C5B19	E30F5B99	*............................T...*
0BAC0	A883BA20	7982A889	00000000	27B3D90C	00000000	00000000	00000000	00000000	*..............R.................*
0BAE0	00000000	00000000	21270000	2539D508	D90CE1FE	21A7E1C0	3770FFFE	EF000000	*..............N.R...............*
0BB00	00000000	0002BE20	BAC86B00	CB267201	2580FDA0	2853E81E	F882A81A	25195598	*.........H............Y.8.......*
0BB20	55985A12	CA0E2E49	EE848620	6EBC8604	C892A816	A8722519	55985598	5A28CA68	*................H...............*
0BB40	6648A806	D608D802	22232335	E808877E	F88687FF	A80C3F16	6D3CF010	8802D540	*....O.Q.....Y...8.........0...N *
0BB60	6DBC2D49	DD02A802	D610CD82	A80CD620	2588A502	5501E5FE	65A12D51	6D9FE5F0	*........O.....O.......V.......V0*
0BB80	2C506583	25316585	6587EE02	A806221F	25316587	D6806781	BF207894	BD20BC34	*....................O...........*
0BBA0	758ABF23	FFFFA802	77A8BA20	79828300	2B8C278A	278E8303	2B862B87	A97FA819	*................................*
0BBC0	0000BCB6	0000BCEE	0000BCF2	0000BD14	0000BD26	0000BD2C	0000BEA8	0000BF23	*...........2....................*
0BBE0	0000BF4A	0000C021	0000C02E	0000C04F	0000C059	0000BBA9	0000C072	0000C18E	*..............................A.*
0BC00	0000C086	0000C0DB	0000C0E9	0000C153	0000C159	0000C15D	0000C161	0000C165	*...........Z..A...A...A...A...A.*
0BC20	0000C207	0000C20B	0000C20E	0000C20E	0000C29A	BE20BAC8	852075E4	62054204	*..B...B...B...B...B....H...U....*
0BC40	BC207982	42958704	4F8C2701	FFD06D00	FD2AD502	6D80ED02	A80E6207	2701BD20	*..................N.............*
0BC60	17CC75A5	62052701	BD2017D0	75A5B920	C2C661A6	61AAB920	C10261AE	4702B920	*................BF......A.......*
0BC80	BAC06118	61186118	61181002	A87EBE20	BAC86D00	CD02A8F1	B65D9804	A8F7A86C	*.................H.....1.....7..*
0BCA0	B920BAC0	61186118	61186118	1302FBA7	82082A8C	AA776D02	6B034354	B900BCDC	*................................*
0BCC0	BF20C2C6	67A667AA	6E00EE02	A83E6207	42046B03	4354B900	BCDCA830	6C3CDC04	*..BF............................*
0BCE0	8400A802	84804564	D3014354	10884D03	A83BBD20	00034564	6F03D708	4754D2F1	*........L.................P...K1*
0BD00	6B01BF20	C2C6E2FB	434467A6	852075F4	A800B840	4B03BF20	BD006D00	ED97BF20	*....BFS........4... ....*
0BD20	BCFEE2FE	A81F4B03	8200A82B	4B038200	BF00BD08	6D00ED02	A81AE2FB	D2014344	*..S.......................S.K...*
0BD40	6D03D50D	4554BD20	C2C665A6	62074204	4295A810	BF20BD64	6D39FD84	BF20BD96	*..N.....BF......................*
0BD60	6D1FAD5E	BF20BD76	6D00ED04	67A6A802	67AA8585	AD4EBF20	BD866900	E90467A6	*............................Z...*
0BD80	AD4667AA	AD42E2FB	BF20BD96	6900E904	67A6A802	67AA11A8	6199619B	699E61BB	*......S.......Z.................*

```
0BDA0   61A36D39 FD06BF23 FFFF67A3 BF20BE5A   6D00ED04 67A6A802 67AAB3FF 880ABD20   *................................*
0BDC0   BAD01518 5B80699E 612373B4 6D39FD04   FDC0A854 71BCB303 8812B301 880AB302   *................................*
0BDE0   8806B332 8842A83E 60A3A83C BF20BDF4   67A6A832 6BBBBF20 BDFE67A6 A82A6BBA   *...............4................*
0BE00   6123673B 17B08B6C B920C2C6 61A661AA   AA6B71CC EA84D204 A80C6123 BF20F0B8   *..........BF..........K.......0.*
0BE20   17B08B50 A81F61A3 6731DD82 A812683B   68BA6BBB 60388802 AC8E7338 8B36AC88   *................................*
0BE40   36388B30 37388B2C 67333638 8B263738   8B166F34 37388B16 AC6E691E 9101D982   *..............................R.*
0BE60   A8A96B97 BF20BE74 6D00ED04 67A6A8A9   67AAA8AD 6D03D507 B3FF8812 61199101   *......................N.........*
0BE80   6199B300 88BF611B 9101619B A8C76900   E982A80F 417CF0E0 9806EA84 CA02A81B   *.............G..Z.....0.........*
0BEA0   611D9101 619DA823 FF86BF20 C102A804   BF20C12A 67AE6D00 EDE6DD82 A8206B03   *............A.....A......W......*
0BEC0   43546D02 B900BCDC BF00BD0A 434455A8   45646D03 D5034554 BF00BD0A 43446D03   *....................N...........*
0BEE0   45546D02 D5206B03 B900BCDC BF00BD0A   434411A8 41646D03 D5024554 BF00BD0A   *....N...................N.......*
0BF00   6D03CD08 D507BF20 BD96ABB6 6D03D505   BF00C2C2 6F017338 88156D03 D505ABA4   *....N.........N...BB........N...*
0BF20   AB7BE70F 691EBD20 BAD01518 5F80B70F   880C870F 5F819101 B10F8808 A80211A8   *..X.............................*
0BF40   699EABA3 11A8699E ABA3DF86 BF20C102   A804BF20 C12A67AE 6D00ED3D DD02AA55   *..............A.....A...........*
0BF60   2101114D BF204C04 17C89A61 62214204   853F4554 8100699E BC207982 4295BF00   *.........H......................*
0BF80   BD0A6221 43448402 45648530 D5044554   62054204 6D034554 6D02D520 6B03B900   *............N.............N.....*
0BFA0   BCDCBF00 BFB44344 62214204 80004164   BF20BFB8 67A6B840 6221455C FD84FD4E   *....................... ........*
0BFC0   ED084344 85304554 AABF691E BD20BAD0   15185B00 B30F881E 9101699E BC207982   *................................*
0BFE0   4F03E70F 7148880C 43448738 47548000   4164A800 B8406221 455CFD18 FDBD4344   *..X.................. ..........*
0C000   BF20BFF6 67A68330 D3054354 A821E30F   C30C9853 43448330 43546207 4204A931   *...6....L.....T.C...............*
0C020   6D02E5FB B7FF9802 D5046D82 AC8D6D00   ED02A806 62074204 42956F03 D7074754   *..V.....N...................P...*
0C040   BF20BD96 ED0467A6 AB3F67AA AB43E70F   6E037658 6E9FACB7 85002D8C B73E9802   *..............X.................*
0C060   ACBBBD20 BAC87518 258A9502 258E8304   ACBB4B03 8201AB77 85006C00 EC02A82C   *.....H..........................*
0C080   62074204 A810FF91 6D00ED02 A8166207   42046D03 D50F4554 2301B920 17D431A5   *....................N........M..*
0C0A0   62054204 2301FF84 6D03D50F 45548500   4D8C4D86 4D87B920 17D431A5 6C00DC0E   *..........N..............M......*
0C0C0   852075F4 843E8500 6530BC85 AD2D6221   4204FF82 853F4554 A81BBD20 C1026E35   *...4........................A...*
0C0E0   96016EB5 6EB6A80C BD20C12A 6E379601   6EB76EB8 A601B628 9802AD5B 65185F80   *..........A.....................*
0C100   AD595532 3237FF55 32324040 7F7F2DFF   FF99C9D1 D2D3D4D5 D6D7D8D9 E2E3E4E5   *..........  ......IJKLMNOPQRSTUV*
0C120   E6E7E8E9 F0F1F2F3 F499FF87 8D0AA0A0   A0A048C5 CCCCCFA0 C6D2CF4D A0D4D459   *WXYZ01234..........E....FK...MM.*
0C140   3333AF33 35A08DFF 0AFF0A0A 0A0A0A0A   0A996FB0 8600ADAF 6FB1A809 6FB2A80D   *................................*
0C160   6FB3A811 6FB4A815 BF20C102 A804BF20   C12A67AE 6E00EE02 A8224344 BF20C2C6   *..........A.....A.............BF*
0C180   67AA6205 4204BC20 79824295 A80EFF86   BF20C102 A804BF20 C12A67AE BF200003   *..................A.....A.......*
0C1A0   47646F03 D7084754 82EF6B01 BF20C1B2   ACAB672E 7310B920 C12A17B8 98086837   *....P.........A.........A.......*
0C1C0   A00168B7 A8066835 A00168B5 98186900   E98AB3FF 8802A808 D201A806 B37E8809   *................Z.......K.......*
0C1E0   E2FE67AE A8E0B920 C10217A8 B729980A   6D386DB7 B920C12A A8046D36 6DB561AE   *S.......A.............A.........*
0C200   BC207982 ACD36FB5 A90B6FB7 A90F8120   71F4FF88 BC20C102 6835A806 BC20C12A   *.....L...........4....A.......A.*
0C220   68378AE3 B0259806 AAE9B886 A8224288   FEC660A3 4510B501 8811B502 8815B532   *...T.....Z.......F..............*
0C240   880C71E4 75B46323 73BC71F4 63A3B89D   86FF3248 23483248 4A804B81 4E824188   *...U.......4....................*
0C260   21A89103 FF8669B5 69B6A804 69B769B8   3788A975 B882A81A BD23FFFF 65A34510   *................................*
0C280   B57E8811 71E475B4 632373CC 71F463A3   B895C2FF C3FF867E A8496FB9 A94BA800   *.....U.......4....B.C...........*
0C2A0   BE20BAC8 2E2FC680 E6802EAE 62056026   A800BE20 BAC82E2F C680E680 2EAE6207   *...H..F.W............H..F.W.....*
0C2C0   602A67A6 4554E2FB 4344AAD9 0003DF11   0000C2F4 00000000 00000000 00000000   *......S....R......B4............*
0C2E0   00000000 00000000 00000000 00000000   00000000 0000C2CC 0003DF10 00000000   *......................B.........*
0C300   00000000 00000000 00000000 00000000   00000000 00000000 00000000 50000000   *................................*
0C320   00000000 D6202000 C3E7E2C7 D4C9E2C3   B8401900 77A82126 1507F580 8812E51E   *....O...CXSGMISC. ........5...V.*
0C340   B50C89B2 B51A89AE B50689AA 3588A830   E51EB51A 89A0A80D 8701A824 B7018802   *................V...............*
0C360   A8062488 421AA812 B7028802 A80444A8   A808B920 300CB840 000087A0 A8028781   *....................... ........*
0C380   22888802 A802A859 B8402170 0000C508   1005358A 21261731 A60877F8 015A1934   *......... ....E............8....*
0C3A0   C90677F8 77F877F8 67858705 6F874788   882E6F06 CF184725 679740A5 4F266F98   *I..8.8.8.................. .....*
0C3C0   471F679B 4F206F9C 4F244FA6 A8124723   679740A3 4F2D6F98 4F246F9C 4F224FAD   *.................. .............*
0C3E0   6F06B700 8806B7A0 8802A862 B7A08802   A80C4488 8808471F 67894F21 6F8A2126   *................................*
0C400   1F016F8C 17036E8D 6F8E1F00 6F8F1707   67911F04 6F92170B 6E936F94 1F086F95   *................................*
```

```
0C420   6F068802 A8284788 88144F20 B7878802   A80C1713 77987798 88027F04 6F99350A   *................................*
0C440   880C308A 308B571D 6789571F 678B6F06   B7818802 A8068701 6F86A866 B7A08802   *................................*
0C460   A8601F05 6F991F53 CF82A808 11231F59   6F9D111F 44888814 4F2F6F9E 4F316F9F   *................................*
0C480   4F286FA0 4F296FA1 8703A802 87026F86   175367A3 1F07E7FE B7628802 A8241513   *......................X.........*
0C4A0   55985598 881C3F02 75185F04 6FA45F05   6FA55F06 6FA61513 55985598 B8400518   *............................. ..*
0C4C0   A800A810 00000000 0000C4EA BC217F0C   B800C4EA B84020B6 0000F520 00000801   *..........D.......D.. ....5.....*
0C4E0   00300000 C4C40000 F524B700 8808B920   3005B840 0000A9C9 50010000 61950695   *....DD..5.......... ...I........*
0C500   C3E7C4C9 D3C5D97C B8401900 8181B840   21700000 FC104205 0D10B7A0 8802A80A   *CXDILER.. ..... ................*
0C520   B5439802 A8028500 A808B539 9802A802   8500B500 8802A822 8001B840 030E360A   *........................... ....*
0C540   B8400661 85123D83 B7A08802 A8068523   6D83A804 85196D83 A814BE20 001C3698   *. ..............................*
0C560   B7A08802 A8048535 A802852B 3D83B7A0   8802A80A BD20002B B9200023 A808BD20   *................................*
0C580   0021B920 00193597 65889504 5030B985   85033D9C 4488880C CF02A804 451DA802   *................................*
0C5A0   451DA80A CF02A804 2511A802 2543359F   6F86A8AD 8840B800 BD20C5C2 0B36CB24   *..................... ....EB....*
0C5C0   A84EB800 BA368308 2B87A80C 21020362   13B89813 83042B87 218A218E 83032B86   *................................*
0C5E0   B800BA48 2102E070 B0409804 B050982F   2102BB20 F0F031E8 23883419 41B0980C   *......... ..........00.Y........*
0C600   93023419 930214B0 98115088 95045088   2102BB20 F0F031E8 BB2010F0 13B89817   *....................00.Y...0....*
0C620   A8175001 00000000 00000000 60710038   C3E7C4C9 D9D4C440 2703F6C0 985CF68E   *................CXDIRMD ..6...6.*
0C640   98406378 E6817790 055A5D34 CD067790   77907790 96087401 0562A55C 54B89806   *. ..W...........................*
0C660   A8304427 A80445F8 98094531 E5FE75B0   88147501 A502981A 5501E5FE 75B08806   *.......8....V.............V.....*
0C680   A810B800 BBBE3378 3378B304 8808B30C   980CB800 BA36B800 BB06B800 BC8EBD20   *................................*
0C6A0   78AC3518 5301CA26 241374B0 88022795   2B8CB20F 88109806 82802A88 A8048200   *................................*
0C6C0   2A88B800 BA408200 2A88B800 BA48E27F   55C82508 5098A847 A849A84B 50010000   *..... ........S..H..............*
0C6E0   00000000 61570243 C3E7C4C9 C9C3E640   BD2078BA 5501BA21 9C608700 BC00C764   *........CXDIICW ..............G.*
0C700   B7008802 A85ABC00 C790BC00 C7DE5901   E1FC5981 BE207910 65B88806 65B89812   *........G...G...................*
0C720   8810BE20 78BAC904 951AA804 BD207910   A80EBE20 78BEC904 951AA804 BD2078C2   *......I...............I........B*
0C740   6581B840 21700000 F5200000 B7008802   A804A865 A808B920 3005B840 0000A804   *... ....5.................. ....*
0C760   B8403540 5101F98C BD2078BE 55015101   F98287FF B7008802 A814292A E1C0B1C0   *. . ..9.........9...............*
0C780   880CBE20 78C06900 E17F6980 87FF4088   8181B840 21700000 FC100004 57010910   *.............. .... ............*
0C7A0   60089020 01389802 A81E8001 B840030E   360AB840 06618012 38836E83 81006982   *............. ..... ............*
0C7C0   B9200004 1698A80C 60089012 3883BE20   00203698 B9200008 61183197 40888103   *............................ ...*
0C7E0   399CBA21 9C602125 319F5800 52889502   51106130 B8872588 40884101 00000000   *........................ .......*
0C800   00000000 60290344 C3E7C4C9 C5D9E340   B8401AB8 00C02188 A1081288 B8400F78   *........CXDIERT . ........... ..*
0C820   33E88AC6 11A82929 88082198 1800F001   9B0E380D E003292E F1018802 D080388D   *.Y.F..........0.........1.......*
0C840   3093381F F0808806 282DE0BD 28AD2422   2920C962 44228804 492CF95A 22223D1C   *....0.............I.......9.....*
0C860   3C1DB506 8AB6B507 8AB2B501 8842B505   883EB508 8802A83E CCAAB406 8826B418   *................................*
0C880   8822B421 881E2F2C EF02A818 B8401081   00824928 D982AA52 41889114 1488B840   *............. ......R.......... *
0C8A0   1D10AA46 B8402170 0000D178 0004AA3A   2920F140 9A663D1C 3C1DB504 8A46B508   *..... ....J.......1 ............*
0C8C0   884B4488 88104928 F102880A B5038806   292CF102 9A32360E 6E00CE82 AA3E2F2C   *........1.........1.............*
0C8E0   DF06292B C902AA2C 292DF102 9A564488   88064928 C902AA20 360E6602 69288804   *....I.....1.........I...........*
0C900   B8000000 B5089802 A9FAED8A FD04FD98   A9F2FD8A A8C8FD02 FD90FD8A A85C090A   *.................2...H..........*
0C920   F102997A A9DEA918 A866B407 9802A9DC   DE86A9E8 DF88A9E8 FF85CF89 EF0B291F   *1..................Y...Y........*
0C940   F1018812 2935880E B40189D0 B40289CC   B40489C8 A804B406 89C2B840 21700000   *1..................H.....B. ....*
0C960   CC980000 6C806108 E106C106 98063904   F1809974 B8400508 A96EEE02 A99EB402   *..........A.....1.... ..........*
0C980   9802A988 B8402170 0000CB98 0000A958   B4069802 A976DE88 A982F701 8806A980   *..... ....................7.....*
0C9A0   B405880B 291FF101 88062935 8802A96C   B84020B6 0000CB98 00000000 00300000   *......1.......... ..............*
0C9C0   CC28F404 8806D710 B4058802 A91AB840   21700000 CC980000 11A86980 A90AEE02   *..4...P........ ................*
0C9E0   A93AB404 8926B405 8922B40C 891EB40D   891AB40F 9802A914 291FF101 88062935   *..........................1.....*
0CA00   8802A918 B4078802 A806F701 8802A910   EC14B840 20B60000 CB980000 00000030   *..........7........ ............*
0CA20   0000CC28 A80AB840 21700000 CB980000   4108E103 C1039806 D710B407 8871A8A8   *....... ............A...P.......*
0CA40   B4049802 A8C6291F F1018806 29358802   A8CAFC82 A816F701 8802A8C4 B4038802   *.....F..1.............7....D....*
0CA60   A80A6108 E106C106 9802A8B0 B84020B6   0000CB98 00000000 00300000 CC28D710   *......A...... ................P.*
0CA80   B4028802 A812F604 880E11A8 292A2198   1D00D502 1D808507 FC82A84C A8D1B404   *......6...........N..........J..*
```

```
0CAA0   9802A868 291FF101 88082935 8804B801   2B20FC94 B84020B6 0000CB98 00000000   *......1............... ..........*
0CAC0   00300000 CC28A81E B8400D40 BE200000   8808691C B1078802 A862B840 21700000   *........ . .............. .....*
0CAE0   CB980000 E7BFFC12 2FAC2F2C DF82A806   B8401AB8 00C1B840 3500D710 4428A87B   *....X........... ...A. ..P.....*
0CB00   8081A850 8082A840 8097A848 8083A838   8084A840 8085A83C 8086A838 8087A828   *......... ........... ..........*
0CB20   8088A824 808AA82C 808BA828 808CA824   808DA820 8091A810 8094A818 8096A814   *...............................*
0CB40   8099A810 809CA80C 292DD102 29AD8180   399BA804 1128399B 3D1CB508 8814B503   *..........J.....................*
0CB60   8810391F F906B840 2F09A883 B8402F0A   A889B840 2F08A88F D7E3C650 05020000   *....9.. ..... ..... ....PTF.....*
0CB80   00000000 00000000 62300399 C3E7C4C1   F0F0F040 21A781C8 B820C9C2 DF84B800   *............CXDA000 ...H..IB....*
0CBA0   CB20F604 8850FE02 A828B840 20B60001   4E380000 56050030 00014E4E 00088804   *..6........ ...................*
0CBC0   B800CB48 E76F2930 910129B0 EF37D740   A83B11A8 292A2198 1900F102 8818492C   *....X.........P ..........1.....*
0CBE0   F1048806 8089B800 CB54B502 8802A806   8088B800 CB54E7EF 29309101 29B0F708   *1...................X.......7.*
0CC00   9802D740 B8402170 0000CC58 0000492C   F938F9B6 4928D9B2 E902A82E 2930B101   *..P . ...........9.9...R.Z......*
0CC20   98048802 A824A810 DF864928 D986A81A   B800CB20 FF02D912 4188880E 91141488   *............R.........R.........*
0CC40   B8401D10 4188A114 1488B840 10810082   A8BBEF63 5768A806 B820CCAA 41419101   *. ......... ....................*
0CC60   41C1F604 880E11A8 292A2198 1D00E5FD   1D803D1C 292DC9A1 4928D986 EF27E77F   *.A6...........V.......I...R...X.*
0CC80   A82B4188 91141488 B8401D10 4188A114   1488A819 55987598 B820C964 F6049826   *........ ..................I.6...*
0CCA0   B8402170 0000CC58 000011A8 29272688   16983119 6185390D 6981310E 61823115   *. .............................*
0CCC0   6187D701 A82FFE02 A82BB840 21700001   4E385605 00C88804 B800CB48 B5058802   *..P....... ....................*
0CCE0   A8433904 F1808849 11A82927 26881698   A8317108 2853E10F 87FFA802 87004428   *....1..........................*
0CD00   242E2626 B8400F00 33E888BA 3D1CB503   881C4D2D F5088844 4D2EFD86 B8400509   *..... ...Y..........5........ ..*
0CD20   A804B840 05494D2D E5F74DAD A8988162   399AA810 00000000 00000000 BC200000   *... ....V7.......................*
0CD40   B8000000 B84020B6 00013378 00000801   00300000 CD340001 337CA86A 3D1AB5EA   *..... .........................*
0CD60   881AB565 8816B5EC 880CB5F3 8808E51F   B5048802 A80E2D28 E5FD2DA8 381AD060   *............3..V........V.......*
0CD80   389AA83E 80606507 3D9BB7FF 8808B840   2F0D4428 A8304D1E F5048818 B8402170   *............. ..........5.... ..*
0CDA0   00017150 0E05880C B8401081 00C2A872   B8400F00 49288808 80C4BE00 0000A810   *........... ...B... ........D.....*
0CDC0   8062B840 2F0B2D28 F5408804 B800E978   4D2CED36 43018832 33983398 3D1CB508   *... ....5 ....Z..................*
0CDE0   8802A816 B8400F10 3D0DD510 3D8DB840   21700000 D1780A05 A8272D2C F501880A   *..... .....N.... ....J........5...*
0CE00   2D44F510 9818B801 4FF82D2C F502880E   2D3FF540 8808E5BF 2DBFB801 5948B800   *..5.......8..5.....5 ..V..........*
0CE20   D328B800 CFC04101 00000000 60280534   C3E7C4C2 C3C8D57C 2626242E B8401AB8   *L...............CXDBCHN...... ..*
0CE40   00C13388 880A391A D906C984 D120399A   60838500 6D806D07 E51EB508 8806B518   *.A.......R.I.J............V.......*
0CE60   8802A804 B800CFC0 85946D81 B8402300   B8403540 41010000 00000000 60290048   *............. ... . ............*
0CE80   C3E7C4C2 E6E3C940 26266D06 E50EB508   8802A80C 60872135 A10821B5 B800CFC0   *CXDBWTI ....V...................*
0CEA0   8701A802 7728B840 1AB800C4 2D38E5F7   2DB82626 65073D9B B4008804 B800D290   *........ ...D..V7...............K.*
0CEC0   FF908538 6D872D28 ED84B800 CFC0B800   E970BE00 CF562D2C FD02A817 242E4D1E   *...............Z...............*
0CEE0   F5208840 351DB402 8802A838 E5F7B503   9802A830 4D20E57F B54C8802 A81E3588   *5.. .........V7........V..........*
0CF00   11A83902 95045198 1C011D02 E40FB401   8806B405 8802A80C F5088808 85004DB3   *............U...........5.......*
0CF20   B8015A80 4D339501 4C328867 45388804   4DB3A86F 3D1DB506 8818B50E 8814B502   *...............................*
0CF40   8806B50A 8802A883 2D3FD540 2DBFB800   CFC0B801 59483D1D B5068806 B50E8802   *..........N ....................*
0CF60   A848242E 4D2DED1C 35888001 B840031E   530AB840 320B3085 381AE060 D000B840   *............ ..... ............ *
0CF80   2F0D5388 B8400B48 A812BD20 0000492E   F986B840 0518A804 B8400558 4D2DE5F7   *.... ..........9.. ..... ....V7*
0CFA0   4DAD3081 30A18500 3D836088 41010000   00000000 60290049 C3E7C4C2 E6E3E340   *........................CXDBWTT *
0CFC0   23013398 33982735 88169704 27B5252A   57987900 88087602 56A826B5 77027002   *...............................*
0CFE0   B9201003 B8400000 41010000 60290032   C3E7C4C2 E2C5D87C 2626B840 1AB800C4   *..... ........CXDBSEQ.... ...D*
0D000   2D38E5F7 2DB8391A 9120399A 27889714   B8400FA8 BC200000 B8401AA8 00C12C28   *..V7.............. ....... ...A..*
0D020   E4DF2CA8 85004DB3 4D1EF520 883E3D1C   B5028802 A8364D20 E57FB54C 8802A81E   *U.........5..............V.......*
0D040   358811A8 39029504 51981C01 1D02E40F   B4018806 B4058802 A812F508 880E4D2C   *..............U...........5.....*
0D060   E5FD4DAC 65073D9B B8015A8C 4D2CE5F5   4F308804 D540A804 F5418802 E57F4DAC   *V.............V5....N ..5...V...*
0D080   B800CFC0 41010000 00000000 60290008   C3E7C4C2 C4E34040 242E2626 B8401AB8   *................CXDBDT  ..... ..*
0D0A0   00C42D2C F504881A 6D06E50E B5088802   A8106D01 B525880A 2135A108 21B5B800   *.D..5.....V.....................*
0D0C0   CFC02D2C F5028824 6507B596 8802A81C   4D358804 B801628E 4D2DF510 880A2135   *....5.......................5....*
0D0E0   A10821B5 B8015948 B80159B8 6507B58C   8802A816 2D28CD92 2D28E5F7 2DA82588   *..........................V7....*
0D100   9514B840 1D18B840 3540B800 D9984101   00000000 60290017 C3E7C4C2 D5D9E340   *... ... . ..R...........CXDBNRT *
```

```
0D120   B8400F00 B8402170 0000D178 02052F2C   21889114 1288B840 0D40BC20 0000880E   *. ... ....J............ . .......*
0D140   B8400D50 BD200000 880C5701 8816B840   1D00B840 3540F702 880D2188 A1141288   *. ............ ... . 7.........*
0D160   B8015948 571DBD20 084357B0 8802A823   2D14D510 2D94A827 B8401900 360E6F00   *...............N...... ......*
0D180   CF18CF9C DF08B700 880AB800 D202BF21   9738A810 BF219738 A80ABF21 9724A804   *............K...................*
0D1A0   BF2196EC 3C1D6202 79001438 880C7801   C8049704 A80FB800 D23C7002 D7E3C650   *................H.......K...PTF.*
0D1C0   05030000 00000000 62850365 C3E7C4D2   C3E3D3D9 EC55BD20 80600608 3D1DCD02   *............CXDKCTLR............*
0D1E0   A8163D1E CD02A810 0D0ACD82 A80AB840   21700000 00004005 6008B840 2F0AB800   *............... ...... .... ....*
0D200   D1788081 A80D8082 A8118083 A8158084   A8198085 A81D8086 A8218087 A8258088   *J..............................*
0D220   A829808A A82D808B A831808C A835808D   A839808F B800D1FA 8091A843 8095B800   *.....................J.........*
0D240   D1FA4101 00000000 00000000 60300060   C3E7C4D2 C5D5C440 B8401900 4D274188   *J..............CXDKEND . ......*
0D260   51188400 3C9E3C9A 3C9B3C9F 30851505   35991507 3595451D 359730A1 1C013C8D   *................................*
0D280   1502358E 1C003C9D 85053D9C A8378000   77A82F3C 2C3B2D3A 54388830 94012CBB   *................................*
0D2A0   77808818 B8400F00 35889504 B8402C83   00282135 A10821B5 B8403580 2135A108   *..... ...... ........... ......*
0D2C0   21B5B800 CFC0E5DF 4DADA828 242E8400   2CBBB840 0F00381A E060D081 389A4D20   *......V............ ............*
0D2E0   B5878802 A8044D2D DD25B840 21700000   C3300605 49288808 8004BE00 0000A812   *.......... ....C...............*
0D300   381A3D1B F5019806 B8402F09 A804B840   2F0B4D2D D5404DAD 2D28CD84 B800D328   *....5.... ..... ....N ........L.*
0D320   B800E978 A816DF94 B8402170 0000D338   0004B840 3540C610 B8401900 2D38F501   *..Z...... ....L.... . F.. ....5.*
0D340   981C2588 95145401 88404498 44984905   E1F0B1A0 98084301 880E3398 33982588   *......... ........0..............*
0D360   9514B840 1D18A831 45889508 B8401A98   00C12D28 D5102DA8 0D09F520 8847B840   *... .......... ...A..N.....5.... *
0D380   21700001 69100000 A8532541 98312D2C   F5028823 2D548827 A83D4101 00000000   *..............5...............*
0D3A0   00000000 60290044 C3E7C4C2 E2E4C27C   BD200014 52A8242E 26262D37 F50198D0   *........CXDBSUB..............5...*
0D3C0   2D28E5EF 2DA82C2C FC04B801 4A982C2C   F4028812 651E214E 15B89802 A808B920   *..V..............4...............*
0D3E0   10EEB840 00002D28 F520982A B8400F38   33E88802 A8462541 E4808808 B92010FF   *... ....5.... ...Y......U.......*
0D400   B8400000 2C2CF401 8804B801 4C98F402   888CB801 55604D2D CDBAB840 0D108814   *. ....4.......4............ ....*
0D420   2D37F508 880EB840 21700001 73C80004   B8403540 B8400F10 33E8882E B8402170   *..5.... .....H... . . ...Y... ..*
0D440   0000D508 0004B840 1F80B840 108100C2   B8403540 43018822 33983398 351DB408   *..N.... ... ...B. . ............*
0D460   8802A816 B512884F CDD12D37 F508980A   2D38F501 8804452F FD1A2D28 D5102DA8   *.........J..5.....5.........N...*
0D480   0D09F520 880AB840 21700001 69100000   B8403540 B8017416 B8400F38 A8634D2D   *..5.... ......... . ..... ......*
0D4A0   CDCF2141 882D4D2C CD316D9C F5418812   2C28D408 2CA8F540 88342D2C F50198AB   *............5.....M...5 ....5...*
0D4C0   A828A101 21C1D58A 4DAC2C28 D4202CA8   4D30A501 4DB02588 9514B840 149A00C0   *.....AN.....M............... ....*
0D4E0   A8CD4301 33983398 A804BB20 D4E4B840   21700000 D5080004 B8401D00 B8403540   *.............MU. ....N.... ... . *
0D500   06004808 A817BC00 B8401900 3388980E   418855A8 4D275118 84051D00 A8043C1C   *........ .........................*
0D520   3D1DB920 12401701 75B08814 B6FF8804   9102A80F B4C88808 B9201004 B8400000   *..... ...................... ..*
0D540   BF201240 71A8272A 17987501 25B5A849   41010000 60290021 C3E7C4C2 D7E6E27C   *... ..................CXDBPWS.*
0D560   242E2626 B8401AB8 00C42D28 F5049932   6507B406 8802A83C B51E8828 4C20B487   *..... ...D..5...................*
0D580   8802A830 FD82A82C 63133398 33988824   3D04B508 880AB520 8814B510 8810A814   *................................*
0D5A0   B8400508 2D28F540 98F8B800 D3284D2D   D5204DAD 43013398 33982D28 E5F72DA8   *. ....5 .8..L...N...........V7..*
0D5C0   2541A501 25C14D30 A5014DB0 391AD906   C984D120 399A6507 3D9BB51C 8888B58E   *.....A.........R.I.J..............*
0D5E0   8884B586 88804D20 B5878802 A82C6507   FD82A826 452FDC22 35015598 55985588   *................................*
0D600   8806B840 05583081 65135598 5598B840   0619651B 35A155A8 3C83B840 0F104D30   *... ........... .......... ....*
0D620   8802A806 4D2CE5BF 4DAC4D2C D5804DAC   381AE060 D089389A 6507B51A 8802A81E   *......V.....N...................*
0D640   4D20B5CC 881CB54C 88186C07 B5CF8806   B5D08806 A808B40E 8808B408 8804B800   *................................*
0D660   D2DEB801 61D42588 9514B840 149A00C0   B8401A98 00C44D2C D58AE5BF 4DAC2D28   *K....M..... ..... ...D..N.V.....*
0D680   D5202DA8 6507B586 881C3D1D E5FF980A   8060B840 0F10B840 2F0B2D28 CD84B800   *N............V...... ... ........*
0D6A0   D328B800 E978381A E060D084 4D2DD540   4DADA823 D7E3C650 05030000 00000000   *L...Z..........N ....PTF.........*
0D6C0   62850363 C3E7C4C2 C3E37C40 014829AE   B8401900 2D2CCD84 FDC8A80D B8400D00   *....CXDBCT. ..... .......H... ..*
0D6E0   8813381C 391DB008 8806B840 0F00A81C   B8401308 44E88829 481C491D B0088808   *........... ..... ...Y..........*
0D700   B8401681 00A0A804 4388A81D E5BF2830   A00128B0 FD82D580 282DD040 28AD80B8   *. ...........V.........N.... ....*
0D720   A822391E D936E5FE D5803688 8001B840   0326330A 30852488 B8402170 0000D258   *....R.V.N...... .......... .....K.*
0D740   1005809E B8402F0A 63887788 880A7937   E9867141 A10171C1 2DACA88D 11A8292A   *..... ..........Z......A........*
0D760   88082198 1900F110 88457937 F18098A1   391DB199 8802A8A9 292DD104 29ADE5FE   *......1.....1..............J...V.*
0D780   D580A83B 41010000 00000000 60290182   C3E7C4C5 D9C3C940 242E2626 B8401AB8   *N...............CXDERCI ..... ..*
```

```
0D7A0    00C18500 6D8055A8 4C2FE478 65832D28    F508989E 6C01DC1E B48D8802 A80A6507    *.A........U.....5...............*
0D7C0    E5FEB516 8886A88A 6507B586 887EE5E0    8880B580 887CB427 88726507 E59EB510    *V.............V.............V...*
0D7E0    8858B400 8822B594 8868B412 885EB506    885AB586 8856B58A 8852B408 8802A852    *................................*
0D800    6C01B42A 8846A84A B51C8846 B5968842    E51EB518 883C2C2C FC02A814 6C01B428    *................V...............*
0D820    8802A80C 6D1CCD82 A8068500 6D9CA822    6507E51E B5108802 A8122D3E 88143D1E    *..................V.............*
0D840    E5AF3D9F 608F8525 6D81A926 852A6D81    A8682D28 F5089810 3D1ED550 3D9E6503    *V...................5.....N.....*
0D860    B9200040 15D06583 2D2CFD06 4C1FFC96    A82C4D2D F5108804 8502A802 2D506D94    *... ................5...........*
0D880    85006D9C A8048510 6D946503 B9200020    15D06583 BD200037 47885798 67964D2D    *................................*
0D8A0    E5F74DAD 85286D81 6D07E5FE B50E880A    6703B920 200017D0 67832D28 F5088808    *V7........V.................5...*
0D8C0    851E6D8C 608FA88C 6503B920 001015D0    65832301 33983398 318833F8 33F8638F    *...........................8.8..*
0D8E0    13886703 6D01B52A 8802A830 3C1EE402    2D38E508 54588806 B9200002 17D03C1E    *..............U...V.............*
0D900    E4042D38 E5085458 8806B920 000417D0    67832D2C F5048804 B80135E8 2D2CF504    *U...V...............5......Y..5.*
0D920    8804B801 362A6783 3D1EF520 88263D03    881A6D94 3D023188 51189104 61968500    *..........5.....................*
0D940    3D836503 B9200008 15D06583 2D3FE5DF    2DBFA81E 4D20B58A 88062D3F F5208812    *..............V.............5...*
0D960    B84020B6 00015350 00000205 00300001    53EAB840 2300B840 3540D7E3 C6500502    *. ................. ... . PTF...*
0D980    00000000 00000000 62370954 C3E7C4C2    D9C97C40 B7158887 2626242E B8401AB8    *............CXDBRI. ......... ..*
0D9A0    00C44D1F F5018808 4D358804 B8015CC8    2D3FF504 881E6D01 DD82A818 3D1ED510    *.D..5..........H..5...........N.*
0D9C0    3D9E6513 55985598 55888804 B8400659    85003D83 2D28F508 88F0630F 33983398    *............. ........5..0......*
0D9E0    33889818 8001B840 03340000 E000BB20    E0003306 841E85C0 3583A800 B8402170    *....... ..................... ..*
0DA00    0000D258 0004B840 10810082 3D1ED550    3D9E2D28 E5F72DA8 3D1DB505 880C4D2C    *..K.... ......N.....V7..........*
0DA20    E5FE4DAC 2541A501 25C1651B 35A16D05    3D8CB840 21700000 E6F00004 391AD906    *V........A......... ....W0....R.*
0DA40    C984D120 399A6507 3D9BD400 9852B58E    884E4D2C D58A4DAC 2D28D520 2DA82788    *I.J.......M.........N.....N.....*
0DA60    9714B840 14AA00C0 B8401AA8 00C43D1D    B504881E B505881A 4D2CE5EF 4DACF540    *... ..... ...D............V...5 *
0DA80    88102788 4288B84C 21700000 D6D02C05    72886507 440888E0 E59EC510 88DAAB3A    *....... ....O...........V.E.....*
0DAA0    E40EB402 8855651B 98594D2C D5804DAC    4D2CE501 880C4D2C E5FE4DAC 2541A501    *U...........N.....V.....V.......*
0DAC0    25C1381A E060D089 AB206503 BF200006    75E075C0 98142D38 E5F72DB8 4D20E57F    *.A......................V7....V.*
0DAE0    C5469806 4D2DE5DF 4DAD651B 35A1391A    D906C984 D120399A 6D053D8C 2D3EB500    *E.....V.........R.I.J...........*
0DB00    8802A80C 65073D9B E59EC510 8810A82C    650F5598 55985588 981030A1 A81A6D06    *........V.E.....................*
0DB20    88562D3F E5FB2DBF A8DCB840 06596507    3D9BE59E C510881B 85002DBE B8402170    *....V...... ......V.E........ ..*
0DB40    0000E6F0 00042D38 F5018816 B8402170    00017320 0E05880A 389A2D28 D5022DA8    *..W0....5.... ..............N...*
0DB60    AA1A6507 3D9BD400 9A70B596 8802A808    381AE060 D083AA72 0D0AF502 8812B840    *......M...................5.... *
0DB80    21700001 31C80E05 88062D28 D5022DA8    4D20F540 883C3788 3D03B500 88343D02    *.....H......N.....5 ............*
0DBA0    57189704 7C00B46C 8802A826 7C01B4C4    8816B4E5 8812B4D9 8802A816 6507E59E    *...............D...V...R......V.*
0DBC0    C5108842 B8015B20 4C2DD440 4CAD84EA    3C9A6507 E51EB518 89A26507 E59EC510    *E.........M ........V.......V.E.*
0DBE0    98C8452F ED02A81E 4D2DF508 98182D3E    95019804 2DBEA804 85012DBE 2C3DB400    *.H........5.....................*
0DC00    88EA4538 98E68500 2DBE212A 2D2CFD86    BD2015B4 A804BD20 142415A8 A50425B5    *.....W..........................*
0DC20    8020B840 2B00A800 85256D81 B8402300    4D1EFD82 A8088010 B8402B00 A800B840    *... ......... ........... ..... *
0DC40    0F384D2D F508880A E5F74DAD B8400508    A8184D20 B5CC8802 A80480AB A80880A1    *....5...V7... ..................*
0DC60    4D2DD540 4DADBD00 DFF42D28 E5EF2DA8    4D2CE501 880C4D2C E5FE4DAC 2541A501    *..N .....4..V.....V.....V.......*
0DC80    25C1B840 35402626 651B880A 630F3398    3398B840 05088518 6D872D2C F50288D2    *.A. . ............. ........5..K*
0DCA0    242E4D2D E5DF4DAD AA142C2C F4049A7F    2D3FF504 8804E5FB 2DBF11A8 49274198    *....V.......4.....5...V.........*
0DCC0    1D08F504 88082135 910421B5 A8AE3D1C    B501880C B5058808 1C08B401 8882A80C    *..5.............................*
0DCE0    3D1DD500 880FB501 8876A800 2D28F502    8814E5FD 2DA83D1B B5188802 A8103D1A    *..N...........5...V.............*
0DD00    D5603D9A A808381A E060D002 389AB840    0F383588 8001B840 031E530A 3085B840    *N.............. ....... ....... *
0DD20    320B30A1 3F1EE7DF 3F9E8700 3F9B3F1A    E7603F9A 3E1EE6AF 3E9EB840 10810082    *......X.........X.....W.... ....*
0DD40    53882135 A10821B5 2D28F502 980C4928    880880C4 BE000000 A97C381A BD00DFF4    *..........5........D...........4*
0DD60    2D28CD84 B800CFC0 26266507 E59EC510    896D2D28 E5FD2DA8 B800E970 2D3FE5FB    *............V.E.....V.....Z...V.*
0DD80    2DBF2D2C F5048814 4D2DE5EF 4DAD2C3F    F4089946 4D2DF520 8802A988 2D2CF502    *....5.....V.....4.....5.......5.*
0DDA0    88433D1C B5018804 C505980A 3D1DB504    8853B505 88574D33 95014C32 885F4538    *........E.......................*
0DDC0    88044DB3 A8672D38 F5088806 E5F72DB8    A8732D3F D5402DBF A87B4D2D F5208804    *........5...V7......N ......5...*
0DDE0    C5204DAD 381AE060 D081389A 4D2DF508    880EE5F7 4DAD2D3F D5402DBF B800CE0A    *E.............5...V7....N ......*
0DE00    6703EF02 A80E2F2C FF82A808 F7048804    B8000000 6707F701 9802A80E 67137798    *............7.........7.........*
```

```
0DE20   77988806 30A1B840 05284D20 B5CF8806   B5D08802 A80C6507 B5088802 A804B801   *.......  .........................*
0DE40   61A0B840 0F38242E B8402170 0000C330   24054D2D D5404DAD 49288808 8004BE00   *... .....  ....C.....N ..........*
0DE60   0000A872 26263521 98326507 B58C8802   A82A482B F010881C 282CF001 8816381C   *.................0.....0.....*
0DE80   B0058802 A80EB840 0D50BD20 00008804   80FF589A 381AE060 D09EA82A 6507B412   *.......  ........................*
0DEA0   8802A808 381AE060 D080A81A 381A2D28   F5208812 2D2CF502 880CBD00 DFF40D00   *..............5.....5......4..*
0DEC0   4DB3B801 5948BD00 DFF44D2D D5404DAD   2D28F540 996FB800 D3284D20 E57FC54C   *.........4..N ....5 ....L...V.E.*
0DEE0   980A4D2D E5DF4DAD B80161A0 E4F72CBF   4D20E57F C546995D 2D2CF502 9802A965   *....V.......U7....V.E.....5.....*
0DF00   47017798 77988816 751DB408 8802A80E   B5438802 A8082D38 F5089802 A9834D2D   *.......................5.....*
0DF20   D5104DAD 2135A108 21B5B801 59486507   E51EC512 880A2D3F D508E5FE 2DBFAA87   *N.............V.E.....N.V......*
0DF40   2D3FE5F7 2DBFF504 8802A848 3D1DB504   8842B505 883E3D1C B501882A B5058826   *..V7..5...........................*
0DF60   4C20E47F C44C980E C502980A 3C1DB40E   8822B406 881E11A8 49274198 1C08B403   *..U.D...E.......................*
0DF80   8812B800 CFC03D1D D5008817 B5038804   B800CFC0 4D20E57F B546A800 B547A800   *........N.............V.........*
0DFA0   B54C882C 2D3FD501 2DBF4C20 E47FB44F   8810B450 880CF504 8ACFE5FB 2DBFB800   *......N.....U..........5...V.....*
0DFC0   CFC02D3F 381AB0EA 8806B065 8802A81B   4D2DF508 98198518 3D9B4C2D D4084CAD   *...............5..........M...*
0DFE0   381AB0EA 8ADBB065 8ADF2D28 F5029AFF   8062AAE9 2F28E7FD 2FA8B840 2F0B5088   *...........5......Z..X....  ....*
0E000   00000000 00000000 D7E3C650 05020000   00000000 00000000 62400051 C3E7C4C2   *........PTF..............  ..CXDB*
0E020   C3D9E37C A8062C41 242E2726 B8401AB8   00C111A8 7980293B 11088806 81167981   *CRT.........  ...A..............*
0E040   A99E412F 2D2CED86 F1049802 D002BE20   FF0016E8 292CE99A 381DB001 8806B009   *........1..........Y..Z..........*
0E060   8802A80E F986B920 00A8A804 B92000A0   21B57507 41088816 391B885C F5808808   *....9.......................5...*
0E080   5108E11E C11A8960 F401884C A95A412F   F0028804 B59088 58 B596883C E51EB518   *....A...4.......0..........V...*
0E0A0   8836E40E B4068830 7D01B5AC 8866B58F   881EB58D 8802A812 292CF101 880CBD20   *..U.......................1.....*
0E0C0   00407103 15E89808 7D01CD0C DDC6A84A   7107E11E B11C883C 81107981 76834928   *.  ...Y.......F...................*
0E0E0   88768020 BE000000 A8002726 7603A868   81197981 75165101 88081198 11981588   *.................................*
0E100   A80DB840 064BBD20 00027103 15E88835   56D8A839 81127981 A83F491E C986292C   *...  ........Y...Q..........I...*
0E120   E996A84D 292CE982 A8177107 E11EB112   881FB114 8802A861 B8400F00 8180399B   *Z.....Z......................  ......*
0E140   8089B840 2F08492D D14049AD 2928C984   B800D328 B800E978 4920C982 A804B801   *...  ....J ....I...L...Z...I.....*
0E160   3508292C F902E990 491FF902 A80A11A8   4934912C 419871A2 318811F8 11F8718F   *....9.Z...9..............8.8..*
0E180   391EF108 98403802 788C3521 8838492E   F1028832 780C7507 B590881A 730F3398   *..1..  ..........1..............*
0E1A0   33980318 93043900 B1018802 A806BD20   000256D8 9001788C 8806B920 001016D8   *..................Q...........Q*
0E1C0   B9200900 16D87683 293FF120 8812B840   20B60001 53500000 00040030 000153EA   *.....Q....1...  ..................*
0E1E0   B8402300 B8403540 81127981 7603293F   D9B2B920 001016D8 7107B11C 880A8110   *.  ...  .  ........R.......Q.........*
0E200   7981B198 8802A812 7103E982 A802F80A   492EF906 790D9101 798D7111 718F790D   *...........Z...8...9.............*
0E220   798CA897 E1EF29BF B9200004 16D8B920   FFF716E8 412FF806 B920FDFF 16E8A87B   *.............Q...7.Y..8.......Y..*
0E240   D7E3C650 05040000 00000000 00000000   63150541 C3E7C4C2 C3E6C97C 0000B800   *PTF................CXDBCWI.....*
0E260   242EB840 1AB800C4 26266507 3D9B292C   F1048814 6906E10E B1088802 A80A2135   *...  ...D.........1...............*
0E280   A10821B5 B800CFC0 6901C119 9820B590   8A3C6716 758835B8 880C5188 15018808   *...........A......................*
0E2A0   55985598 A8111081 B8400528 65074408   8A14B406 8802A816 B51E8802 A810292C   *........  ......................*
0E2C0   F902A8D0 2135A108 21B5B801 59485108   E1E09860 FD82A85C 67137798 7798881C   *9...............................*
0E2E0   7904B108 880AB120 880CB110 8808A80C   B8400528 A839492D D12049AD 412FD82A   *................  ......J.....Q.*
0E300   33013398 33983388 8804B840 05482301   33983398 3081611B 31A18000 38836613   *...............................*
0E320   66986698 B8400661 A8347788 8866B840   0528A82A F5808808 5108E11E C11A88FE   *....  ......  ....5.......A...*
0E340   F4018808 B51C892A B5988926 DCCCB50E   8802A80A 4108E10E B1068802 A83C5008   *4.................................*
0E360   E0FE4920 B1D08814 B1CF8802 A812B00E   8802A808 4108E10E B1068820 B008881C   *.................................*
0E380   5008E09E B0108A0A A8B44920 B1CC880C   B14C8808 B8400F38 A810A8E8 002828BB   *...........................  .....Y....*
0E3A0   B80161A0 E1DF49AD A81C381A E060D081   4920B187 8802A804 492DD919 B8402170   *..........................R..  ..*
0E3C0   0000C330 75059020 391DE103 B1038802   A806492C E1EF49AC 492DD140 49AD389A   *..C.......................J  ....*
0E3E0   49288808 8004BE00 0000A824 F5019816   381AB840 2F09292C F1028814 810049B3   *...........5.....  ....1.......*
0E400   29BBB801 5948242E 381AB840 2F0BA81B   002828BB 2928C984 B800D328 B800E978   *.........  ..........I...L...Z.*
0E420   6103F001 88123701 77987798 8806B840   05683081 11283983 30A1B800 CFC02838   *..0.........  ..................*
0E440   F0018816 B8402170 000172C8 0004880A   389AB840 0F38381A A893B59A 8802A8D7   *0....  ....H.......  ..........P*
0E460   412FE986 F401980A A8E1B840 0F3880D3   A8AB2135 A10821B5 B8402170 0000E6F0   *..Z.4......  ...L.........  ....W0*
0E480   5005A84B 293A283B 90010138 982C28BB   B8402170 0000E6F0 5005B840 0F38B840   *...............  ....W0...  ...  *
```

```
0E4A0    1FB811A8 293C1488 B8402C81 00502135    A10821B5 3193B840 3540B840 0F38381A    *......... ............. . . ....*
0E4C0    E060D080 A917B590 8802A856 63968001    B840030E 370A7085 B8403229 B8400F38    *...................... ... ..*
0E4E0    7388B840 108100C2 6901C119 98046507    A8306316 670F7798 77983588 73B88816    *... ...B..A.....................*
0E500    51011198 11985081 B8400518 158817B8    8802A815 6596B840 0D00690D 91016994    *......... ............. ........*
0E520    6507B840 21700000 E6F05005 391A9120    399A4920 B14C8802 A826391D E1F7B106    *... ....WO..................7..*
0E540    8802A81C 11A83902 91043198 1E00B627    88029101 1E02F608 8806492D D12049AD    *.....................6.....J...*
0E560    002828BB B58689E9 FDB65108 E1E0B120    8820B140 881CB160 8818391F F1048806    *.......Z.......... ........1...*
0E580    492DD108 49AD491E D902A96D 30A1B801    5AD82135 910821B5 293FD104 29BFA981    *..J.....R.........Q........J.....*
0E5A0    B801359E D7E3C650 05040000 00000000    63430408 C3E7C4C2 C3E6E37C B9200140    *....PTF..............CXDBCWT.... *
0E5C0    37883503 9414A514 75833521 759B3515    75993513 75953517 A50A75A1 3509A514    *...............................*
0E5E0    75893511 75977093 7091708E 1088D7E3    C6500504 00000000 00000000 00000000    *..............PTF...............*
0E600    63160713 C3E7C4C2 E2D9E340 B598881F    37887503 A4069506 35837509 95067589    *....CXDBSRT .....................*
0E620    75173593 7521950A 35977515 35917519    3595751B 35A1CC06 849B8580 A804849B    *...............................*
0E640    85903599 84003C9A 3C9BBD20 0E00358F    1088DF86 44984498 292DF142 887EF140    *.........................1...1 *
0E660    9806E1FD 29ADA874 B8400D40 BC200000    8830292C 4E1CB608 8818B606 8810B602    *......... . ....................*
0E680    8802A804 4E1DEE06 F1088806 A80AF108    8806808B B800D1FA 3E1E4F1E 67584F9E    *.........1.....1.......J.........*
0E6A0    A80E292C F1089804 D110A802 E1EF29AC    292DE1BD 29AD292C F1418808 F1089804    *....1...J..............1...1...*
0E6C0    E17F29AC 27222820 C8027722 7788880C    7828F010 88069714 B8401D28 B800D1D8    *........H..........0...... ....JQ*
0E6E0    41010000 60280527 C3E7C4C1 D9C5D340    B8401900 22888834 44888830 47259701    *........CXDAREL . ..............*
0E700    47A52526 5F09880A 4E269601 4EA69601    98084725 97019802 A812B840 20B60000    *...............................*
0E720    C3300000 75050030 0000C358 A83F4101    00000000 60290354 C3E7C4C9 D3E2C140    *C...........C.............CXDILSA *
0E740    B8200000 2F282E37 CF02A804 DE02A816    CF0AB900 F3580000 0817A808 B900F358    *.................3.........3.*
0E760    00000818 A818BC00 E780B700 8802A806    BC00E7D6 A808B900 F3580000 081AA841    *........X..........XO....3.........*
0E780    21418802 A824DF82 A8202115 8802A81A    2E18CE16 2E2C8700 FE02A804 BD00E7AE    *.............................X.*
0E7A0    2E37EE82 A8028701 A8028701 40882745    88048701 A81E8700 61889104 1E00B6FF    *............ ..................*
0E7C0    8812F680 980E1602 6E2CF608 88048701    A802A81B 50882E37 D6802EB7 B8402170    *..6.......6.............O.... ..*
0E7E0    00014970 08052F28 E77FD740 2FA823B2    33A84088 41010000 00000000 60290104    *........X.P ...... .............*
0E800    C3E7C4C5 C4D3C840 B8401900 7243B840    3182BE20 00008812 61889104 16886800    *CXDEDLH . ..... ...............*
0E820    B0FF8802 C8A022A8 A823B920 1002B840    0000722E 882F221D B8403182 BE200000    *....H.......... ......... ......*
0E840    88196202 A80E6202 792CF101 88062920    F180982F 7937C908 292CF104 9838A849    *...........1.....1.....I...1.....*
0E860    291EF120 8818292C F1088812 F10298OE    2904F180 98087930 D18079B0 A867B840    *..1.....1...1......1.....J...... *
0E880    21700000 EC606605 292CD110 E1F329AC    112829AB A80AB840 21700000 EB206005    *...........J..3............ ......*
0E8A0    792CF101 888F7944 F1108895 712E8899    21B88802 A89F2588 292A1518 5900E1FD    *..1.....1.........................*
0E8C0    5980A8AD 41010000 00000000 60290098    C3E7C4C5 C3C4E640 B8401A80 00C42F28    *................CXDECDW . ...D..*
0E8E0    E7BB2FA8 2F37E77F 2FB7212E 88081E29    8804BC00 E938BE21 9C606729 A70167A9    *X.....X..............Z..........*
0E900    2F2C1188 8808F701 8804BC00 E948B840    21700000 D3380004 23328802 A808B920    *......7......Z.. ....L...........*
0E920    300DB840 000020B2 8503B840 21700000    FB980000 B8403540 61181F00 FF82A804    *... ...... ........ . ..........*
0E940    B801429A 61284088 1E2A6118 1F00D702    1F806128 DF8210A2 2F44E7EF 2FC44088    *...... .......P...........X..D .*
0E960    41010000 60290100 C3E7C4C5 C4C2E340    2928E1FB 29A8A806 2928D104 29A8242E    *........CXDEDBT ..........J.....*
0E980    27887626 7937F180 98A06901 B1288810    B18D8812 B1AC8854 4D2CF504 984EA902    *.......1...................5.....*
0E9A0    6103D90D A828742E 4D2CA840 2928F108    88102944 F1808841 2746790C A101798C    *..R......... ..1.....1...........*
0E9C0    A84B5900 D102E1FB 598040A2 A8576807    B0968810 4D2CED94 7928F104 98CAB840    *....J..... ...............1.... *
0E9E0    1D28A8BE 7928E1F7 79A8A8BE 492BF180    9838F102 9824B110 880C7937 F140982A    *.......7......1...1..........1 ..*
0EA00    F1209816 A8246807 B096881E B08C881A    68068802 A814B801 79086807 B08C880A    *1...............................*
0EA20    68068802 A804E5FB A8537928 E1F779A8    B8400D28 884A482B E0369816 7837F080    *......V......7... ............0.*
0EA40    9810F040 9850482C F0048806 482BF080    9844B840 0F286807 389BB08C 8802A810    *..0 ....0.....0.... ...........*
0EA60    6901D902 A804611B 31A111A8 81186187    492DE918 381AE060 D09E4288 B8402F48    *..R.................Z.......... ..*
0EA80    7937C99E F1808822 B8403540 B8400509    E1F749AD A8177D28 F104984C 7288B800    *..I.1.... . . ...7......1....... ..*
0EAA0    CFC07828 E0BF78A8 4DAC792C F101882E    B84020B6 0000E808 00000004 00300000    *............1.... ....Y.........*
0EAC0    E8327944 F1408820 724AB840 20B60000    E8080000 00040030 0000E836 A80AB840    *Y...1 ..... .....Y.........Y.... *
0EAE0    21700000 E8080004 7828E0FB 78A87937    F1408804 B8000000 7828F040 980A7804    *....Y............1 .........0 ....*
0EB00    F0208814 B8403540 7937F140 9804E0BF    78A84D2D E5FE4DAD 7288B800 D32811C8    *0.... . ..1 ........V.......L..H*
```

```
0EB20   B8401900 292BE136 888A3488 B8400F00   33E8881A 351DB408 8808809E B8402F48   *. ........... ...Y........... ..*
0EB40   A817CD82 A80DB840 14A900C0 A823B840   0F2833E8 8858B840 20B60000 EC600000   *....... ....... ...Y... ........*
0EB60   04050030 0000EC78 B8402170 0000EBE0   0605381A B0FF8802 A81E2488 B8402170   *........ ................... ..*
0EB80   0000ED28 0405282D DC0828AD 3488B840   0D000028 389D4388 8060B840 2F0AB840   *............ ........... ... *
0EBA0   0D28880A 351DB408 8802A802 CDE1282B   E0C928AB 7937F140 9812292B F1809808   *................I....1 ....1...*
0EBC0   2D2CE5FB 2DACA8A9 B8000000 B8000000   41010000 60290188 C3E7C4C5 E2E2C140   *..V....................CXDESSA *
0EBE0   B8401900 381AE008 880B2188 91081288   B8400D00 8817B840 0F40391A 809EB840   *. ................ ..... . ..... *
0EC00   2F48B108 8827A819 41010000 60300487   C3E7C4D5 D9C4C940 B8401900 B8400D00   *...............CXDNRDI . ... ..*
0EC20   88223517 75B08812 B8401308 44E88814   451775B0 880A4388 A81333A8 8103A829   *......... ...Y.................*
0EC40   8101A82D 33A88100 A8334101 00000000   00000000 60290180 C3E7C4C5 D8E2C340   *.......................CXDEQSC *
0EC60   B8401900 3588B840 0D00880E B8400F00   809EB840 2F48A813 3588581D B089884E   *. ..... ..... ..... ............*
0EC80   282DE09D 28AD282C D090E0BF E802A802   E0EF28AC 77888826 7937E9A2 29307341   *............Y..............Z.....*
0ECA0   132873C1 6900E106 C1069812 7937D98E   F882A80A E0FE28AC 7341A301 73C11128   *...A....A.....F.8.............A..*
0ECC0   29B05388 6900E106 C1068802 F882A871   B8402170 0000D6D0 3C05A87D 50010000   *.........A...8.... ....O.........*
0ECE0   00000000 60760474 C3E7C4C5 D9E3C340   B8401900 3085811E 3982461D 3697B840   *........CXDERTC . ............. *
0ED00   31A2BE20 00008800 368E8107 399C8102   399D11A8 3983399F 399E399A 399B3199   *................................*
0ED20   31A13195 3193A839 B8401900 35888001   B840030E 330AB840 21700000 ECF00004   *......... ....... ..... ......0..*
0ED40   51193199 51153195 B8401091 0082492C   D11049AC 11A8492A 880A4198 16886900   *......... ......J...............*
0ED60   D1026980 492DE1BF 49AD9714 B8401D28   A714A84D 41010000 00000000 60290102   *J............ ....................*
0ED80   C3E7C4C5 C4C5C340 B820F8E8 2928C95C   F1039862 2837D868 C866BC21 9C604729   *CXDEDEC ..8Y..I.1.....Q.H.......*
0EDA0   970147A9 282CF8B8 2837D020 28B7BC20   1490BF20 15B047A8 A70427B5 272611A0   *......8..........................*
0EDC0   7183808D 7881B840 1A8000C1 B8402300   B8401081 00822828 E0EF28A8 33A8A859   *....... ...A. ... ...............*
0EDE0   B8402170 00014D58 0000A865 B900F358   00000815 A86FB900 F3580000 0801A879   *. .............3.........3.......*
0EE00   B900F358 00000818 A8834101 00000000   00000000 60290096 C3E7C4C5 C1D34040   *..3....................CXDEAL  *
0EE20   B8401900 391EC908 8060B840 2F0AA811   090AC982 A80FB840 21700000 00000004   *. ....I.... ......I.... .........*
0EE40   A81B4101 00000000 00000000 60300480   C3E7C4D5 C3D2D740 B8400F78 360E6202   *................CXDNCKP . .......*
0EE60   3D1C3C1D 6800B504 881CB508 8802A80E   B8402170 0000D178 0004B840 35008087   *................. ....J.... ....*
0EE80   B8402F0A A80D8082 A80B4101 00000000   00000000 60300223 C3E7C4D2 D5C4C9D7   *. ......................CXDKNDIP*
0EEA0   B820F6DC B8402170 0000EF98 0000B000   8802A824 3C1DBC00 EEE4B000 8802A810   *..6.. ....................U.......*
0EEC0   62026101 8503A800 B8402168 0008A808   B900F358 00001003 B8402170 0000FB98   *......... .........3...... .......*
0EEE0   0000A845 77A8391C B1028802 A836CD02   A806BF21 9C28A82A 6901B500 8802A808   *................................*
0EF00   C906BF21 9C18A81A CD82A80A D902A806   BF219C04 A80CED02 A808D902 A804BF21   *I..........R...............R.....*
0EF20   9C1CA844 B1038802 A826CD02 A806BF21   9C44A81A 6901B500 8802A808 C906BF21   *...........................I...*
0EF40   9C24A80A CD82A806 D904BF21 9C20A818   6901D90A CD02A806 BF219C54 A80AD908   *........R..........R.............R.*
0EF60   CD82A804 BF219C50 77888818 71014038   880CC906 9704A80D A80280FF A8047702   *............. ...I..............*
0EF80   8000A802 80FF4088 41010000 60300068   C3E7C4D2 C6D4D940 B820EEAE 8000BF20   *...... .........CXDKFMR ........*
0EFA0   00083517 75B09836 351FB840 4B9ABE21   7B5C9802 A81C6D00 391CB102 8812B103   *.......... ......................*
0EFC0   880EB100 880AB900 F3580000 100780FF   A80AB900 F3580000 080680FF A80E4288   *........3...........3............*
0EFE0   B900F358 00001002 248880FF A857BC20   B820F24E 3513882C 3D19CD02 A81CDD9A   *..3...............2..............*
0F000   BC00F02E B7FF8808 BC00F0DA BC00F110   BC00F128 BC00F15C A808B920 3007B840   *..0.......0...1...1...1........ *
0F020   0000A808 B9203007 B8400000 A83F87FF   3D1CB501 8802A826 6D39DD82 A8048701   *........ ........................*
0F040   A81A3D19 ED02A804 8701A810 B920F3D0   14821792 B900F358 50000815 A84CB502   *...............3.......3.........*
0F060   881C3D19 ED02A804 8701A810 B920F3D0   14821792 B900F358 5000080C A82C6D39   *...............3.......3.........*
0F080   DD82A804 8701A822 0D0ADD1C 3D19ED02   A8048701 A810B920 F3D01482 1792B900   *.........................3.......*
0F0A0   F3585000 080CA802 8702B7FF 882AA810   00000000 0000F0D6 BF20F201 B800F0D6   *3......................00..2...00*
0F0C0   B84020B6 0000F1A8 00004001 00300000   F0B00000 F1AC3F9C 40886D2A D580E59F   *. ....1... .....0...1... ...N.V.*
0F0E0   6DAA60A1 60A3652D 3C9D3D9E 652F3C9F   3DA06531 3CA13DA2 65333CA3 3DA4BD20   *................................*
0F100   000D3597 86173E83 6D39E5EF 6DB94088   B7028802 A8106D39 F5E09806 84036CBD   *..........V... ..........5.......*
0F120   D540E5DF 6DB94088 65273711 75B08818   BA00F14A 6C387C80 67278808 BA00F14A   *N V... ............1...........1.*
0F140   55A87C80 371167A7 40880F14 880477F8   FF85BD21 7A406518 57882088 3F193D1C   *........ .......8..... ...........*
0F160   DF94B501 8802A80E B8404F08 17888804   B8400509 A81EBF21 97E477E8 9802A808   *......... ....... .......U.Y....*
0F180   B84010A9 00C2A80C B8404F08 17888804   B8400509 40884101 00000000 60280529   *. ...B... ....... .. ............*
```

```
0F1A0   C3E7C4C2 C1D7C840 B820FBC6 3D18CD02   A808B920 3007B840 00003511 37133791   *CXDBAPH ...F............ .........*
0F1C0   35933D18 D580D503 3D988500 3D9A3D19   F5A0880C DD82A804 8720A802 8700A808   *....N.N.........5................*
0F1E0   B8400509 33A88710 A8434101 00000000   00000000 60290069 C3E7C4C3 D9E2D740   *. ......................CXDCRSP *
0F200   B8210A48 3D18CD62 31110C14 85FF51E0   8802A804 8580A81A 3C0CDC02 A8048500   *.................................*
0F220   A810EC02 A8048540 A808B920 3012B840   00003C1B B8402170 0000F270 0000B100   *....... ....... ..... ....2.....*
0F240   8802A80C BE219C60 B8402158 0008A81A   B5808802 A80AB900 F3580001 080CA80A   *........ ..............3.......*
0F260   B8402170 00010948 0000A86D E1FC15A8   B820F23E BF20F2A0 7101E1FC 51B0880E   *. ...............2...2.........*
0F280   B1FC8806 9704A811 A8028110 A80E7502   8802A806 15888110 A8028100 A82F8818   *.................................*
0F2A0   31410BF8 32410C40 0D410C90 0E410D20   11010DB0 12010D60 1180EFF0 1280FA28   *...8... ...................0....*
0F2C0   A080F2F0 A1410EC8 51800000 52800000   FFFCD7E3 C6500503 00000000 00000000   *..20...H...........PTF...........*
0F2E0   62850364 C3E7C4C2 E2C3D940 D2802A9C   B820F24E 6D2A3C19 CD82A804 EC02A838   *....CXDBSCR K.....2.............*
0F300   D5406DAA B8402170 0000F1A8 0000B700   8802A816 B8402170 0000F520 0000B700   *N ... ....1.......... ....5.....*
0F320   8806B840 050933A8 A80CB720 8802A806   B8400509 33A8A808 B900F358 00010815   *... ............ ........3.....*
0F340   A8534101 00000000 00000000 60290028   C3E7C4C2 E2C4C640 3C0EEC0A B8400509   *................CXDBSDF ..... ..*
0F360   33A88702 A85CD40C 3C8E3519 CC02A80A   B8400509 33A88702 A8481D01 FD0AB840   *......M.......... ............ *
0F380   21700000 F1A80000 33888834 3D19D510   3D993D18 D5043D98 BF00F3E6 1D01FD82   *....1.........N.....N.....3W....*
0F3A0   A8181588 B8404F08 88088740 B8400509   A8028701 33A85188 A8048700 5528A802   *..... ..... . ..................*
0F3C0   87021E00 FE849104 A8029106 C670CE86   BC200000 A800DE06 BD200000 A800DE84   *............F...................*
0F3E0   BF200000 1088B840 0B08BD20 00005588   9802A806 B8400558 30813C1B 3C9F3C1C   *....... ........... ..........*
0F400   3CA03C1D 3CA11503 3C9B3D9C 1C00FC86   BD200000 A8021505 3C9D3D9E 3D18F560   *..............................5.*
0F420   981C85FF 0C143411 54E09802 A80C3413   54E09802 A8048507 A802850A A8028508   *.................................*
0F440   84003597 950A3D83 70884101 00000000   00000000 60290063 C3E7C4C3 C5D9D740   *........................CXDCERP *
0F460   B8400F78 338888A4 3D0DE50F 9802A896   3C0EEC06 B8400509 A88A3C18 F4809880   *. ........V.......... ......4...*
0F480   B502880A A802A806 B5038802 A81AB502   8802A80A B900F358 00018002 A808B900   *......................3.........*
0F4A0   F3580001 800DA856 B5018802 A80AB900   F3580001 8004A846 B5048802 A80AB900   *3...............3...............*
0F4C0   F3580001 800CA836 B5078802 A828B840   21700000 F1A80000 33888818 849B8500   *3............ .....1...........*
0F4E0   35A13D19 D5103D99 B8404F08 9802A804   B8400509 A808B920 3001B840 0000A804   *....N.... ....... .......... ....*
0F500   B8400509 A804B840 4F08A8AD B8403500   41010000 60290065 C3E7C4C3 C9C5C840   *. ..... ..... ..........CXDCIEH *
0F520   B820C4CC BE219C60 6F39F7E0 982ABC00   F562B700 8802A81E 3D18E5A0 8802A812   *..D.......7.....5..........V.....*
0F540   6C2AE4C0 B4C08804 8720A804 BC00F59A   A804BC00 F59AA808 B8400509 33A87728   *..U...........5.....5.... ......*
0F560   A8433D18 E5608808 A802A804 DD02A826   3D0EE5F0 B5108802 A8186527 311115B0   *....V.............V0............*
0F580   8802A80E 65253113 15B08802 A8048700   A8028710 A8028710 40883D18 E5A08802   *......................... ...V...*
0F5A0   A8086521 950165A1 3595B840 4F088804   8740A804 870033A8 40884101 00000000   *.......... ..... ..... ......*
0F5C0   00000000 60290066 C3E7C4C3 D7E2C940   B8400F78 33888802 A808B920 3000B840   *........CXDCPSI . ........... *
0F5E0   0000BF00 F6003388 8812BF00 F62E3388   880AB840 21700000 F6800000 B8403500   *....6.......6...... ....6.... ..*
0F600   3D18CD02 A808B840 050933A8 A81E2C39   F4E08818 E5603C1B B5608802 A808B411   *....... ........4...V...........*
0F620   8802A802 A806B840 050933A8 70883D18   E5608808 A802A804 DD02A830 3C1BB560   *....... ........V...............*
0F640   8802A804 B4118820 35132127 51B08802   A8048100 A810B920 F3D01792 B900F358   *.........................3.....3.*
0F660   10018005 8110A802 8100A810 B920F3D0   1792B900 F3581001 10078110 70880000   *..............3.....3...........*
0F680   B820F5FC 3D18E560 DD02A826 2C2A3D1B   B5118808 A802A804 CC02A80C B8402170   *..5...V.......................  ..*
0F6A0   0000F200 0000A808 B900F358 00010814   A83E2523 95013715 75B0880A B900F358   *..2.......3....................3.*
0F6C0   00012001 A82A25A3 2D2ACD02 A81ACD82   A80CB840 21700000 EEA00000 A808B900   *................. ..............*
0F6E0   F3580001 2005A808 B900F358 00010814   A8734101 00000000 00000000 60290067   *3.........3......................*
0F700   C3E7C4C3 D7E2D640 618A3085 308D3109   A10A995A 351715B0 8802A952 BD219C60   *CXDCPSO .........................*
0F720   5F39F7E0 88205725 351175B0 8802A814   3E18E660 B6608802 A80A3E1B B6118802   *..7...............W.............*
0F740   A802A802 A93E3511 0D148804 55F8FD85   BF217A40 471855C8 7D005598 5598BF21   *..............8..... ...H........*
0F760   7A505798 35110814 04687101 D912C802   A8267702 710151B0 9802A840 A91CA816   *.............R.H............ ....*
0F780   C99E7702 710151B0 99107103 51A8982C   558898B0 A826600A 8101BF00 F8AE600A   *I..........................8...*
0F7A0   62926606 7202E900 AA38880A 649A2488   BF00F8AE 641A6602 6212600A 62926606   *....................8............*
0F7C0   380E0108 E0F0B010 8812618E B920F7D8   618A8121 B800A49A 8106A862 55985598   *.....0.........7Q................*
0F7E0   57987206 7804388C E832D828 B0008802   A8B00812 D802A81A 3818E060 B0208802   *.........Y.Q.........Q...........*
0F800   A810381B B0518806 B0528802 A804BD00   0000A806 BF20003C 7298A810 35130814   *.................................*
```

```
0F820   04685580 8806BF20 00107298 F988B900   96320042 A806B900 96320062 11C86602   *.............9..................H..*
0F840   6212600A 6606380E E0F0B000 8812618E   B920F85C 618A8121 B800A49A 8106A80A   *.........0.........8..............*
0F860   6292B900 9C926212 11C86602 600A6606   618EB920 F87E618A 8121B800 A49A8104   *.........H..........8.............*
0F880   6602600A 6606618E B920F894 618A8121   B800A49A 11C86602 600A8101 BF00F8AE   *..........8..........H.........8.*
0F8A0   600A8101 BF00F8AE 66026212 600A398D   6606618E B920F8C0 1482B900 962C0842   *.......8...............8..........*
0F8C0   00000000 66027088 41010000 60280473   C3E7C3D7 C3E3C940 B820EECE D90CB840   *................CXCPCTI ....R.. *
0F8E0   21700000 ED880000 A80E2F12 CF0CF760   9812F703 9818A820 A823B900 F3580000   *...............7...7..........3...*
0F900   0815A80D B900F358 00000818 A817B900   F3580000 0801A821 BE219C60 61299101   *......3.........3.................*
0F920   61A92E13 CE82A808 D7802F92 8503A816   B8401081 0082D740 2F92B840 21700001   *.........P........ ....P ... ....*
0F940   25300000 33A8A851 50010000 60720439   C3E7C4D2 C1D3D740 B8401900 63016703   *................CXDKALP . ......*
0F960   73B08802 A80486FF A80C7780 8802A804   86F0A802 86006388 B6FF8806 B6008802   *..................0...............*
0F980   A804BE00 F996B6F0 8806B600 8802A804   BE00F9D6 A83F9304 93043501 B4FF8834   *....9..0............9O............*
0F9A0   CC02A806 3202A811 A804CC82 A8173402   41258802 A8084D26 8802A802 A827B840   *................................ *
0F9C0   20B60000 C3300000 64050030 0000C358   A83BA802 60888701 93043501 B4FF8834   *....C.........C...................*
0F9E0   CC02A806 3202A811 A804CC82 A8173402   41238802 A808492D 8802A802 A827B840   *................................ *
0FA00   20B60000 C3300000 64050030 0000C37E   A83BA802 60884101 00000000 60300226   *....C.........C...................*
0FA20   C3E7C4D2 D9C4E240 B8200000 BC00FA5E   33888828 BC00FA76 33888820 6488BE21   *CXDKRDS .........................*
0FA40   7A60B840 21700000 F9580C05 46886F2A   E73F6FAA BC00FA8A BC00FAE8 A8376F2A   *... ....9.......X...........Y....*
0FA60   CF123E19 EE0EB920 F3D01482 B900F358   40018005 40886729 880EB920 F3D01482   *.........3.....3. ... ........3...*
0FA80   B900F358 4001081A 4088B840 21700000   F1A80000 B7008802 A842860E 3E83BF20   *..3. ... .. ....1................*
0FAA0   00043797 A8120000 00000000 00000000   BC200000 B8000000 B84020B6 0000F520   *........................ ....5.*
0FAC0   00000801 00300000 FAA80000 F524B700   8808B920 3005B840 0000A80A B7208802   *............5.......... ........*
0FAE0   A804B840 05094088 076A7701 8802A80A   BE219C60 6F39D710 6FB94088 41010000   *... .. ................P... .....*
0FB00   00000000 60290005 C3E7C4C2 C4D7C840   B8200000 D90CB840 21700000 E7400000   *........CXDBDPH ....R.. ....X ..*
0FB20   A8622F12 CF02A804 CF82A816 CF0AB900   F3580001 0817A8C8 B900F358 00010818   *................3.........3.....*
0FB40   A8422F13 CF82A824 2F15CF16 CF942F12   E77F2F92 BC219C60 4729A701 47A98503   *................X.................*
0FB60   A808B900 F3580001 081AA818 BC00FDD8   3388880A B900F358 0001081A A8062F12   *....3...........Q......3.........*
0FB80   E77F2F92 A8775001 00000000 60720440   C3E7C4D2 C4D3D740 B820EEE2 33888856   *X.............. CXDKDLP ...S....*
0FBA0   B500882C BF200003 57183797 970A3F83   B8400B88 8806B840 05103081 B8402170   *............... ..... ..... ..*
0FBC0   0000F1A8 0000B720 8802A804 BC00FBF8   33888822 B8402170 0000F520 0000B700   *..1............8..... ....5.....*
0FBE0   8814B710 8802A80A B9203005 B8400000   A804BC00 FBF8A861 B8400509 33A84088   *........... .......8... .... .*
0FC00   41010000 60300069 C3E7C4D2 C6D7E740   B8401900 1280B920 FC681081 8001B840   *........CXDKFPX . ............. *
0FC20   03340000 FC68BB20 FC683306 3085BE21   9C60870A 3F82871C 3F8E8700 3F8F6727   *................................*
0FC40   37916725 37933095 3097870B 3F988700   3F993F9A 87013F9B 87023F9C 2180399D   *................................*
0FC60   309F8700 3FA0A859 00800001 0001B4B4   41010000 60300228 C3E7C4D2 D9C7D540   *.......................CXDKRGN *
0FC80   B820FDA8 39203517 A51D8802 A824B101   8802A81E BF2079B2 7D9466A8 BC00FCCC   *................................*
0FCA0   85FF7D94 66888806 B8400520 30818503   A8185508 880AB900 F3580000 1002A808   *......... ...............3.......*
0FCC0   B900F358 0000080C 5528A84D 32883C03   A4139321 35107530 BC876688 8802A812   *..3.............................*
0FCE0   B8400B40 A80CBE20 00006388 3C039304   A81F23E8 BF2079B2 40884101 00000000   *. . ................. .......*
0FD00   00000000 60300435 C3E7C4D2 E2E3C440   B820FDB4 38213922 BE206F48 66888804   *........CXDKSTD ................*
0FD20   61F7A80A B900F358 0000080C 8500A821   41010000 60300284 C3E7C4D2 E2C3C440   *.7....3..................CXDKSCD *
0FD40   B8400F78 33888824 B8402170 0000F520   0000B700 8814B710 8802A80A B9203007   *. ....... ....5..................*
0FD60   B8400000 A804B840 0509A808 B9203000   B8400000 B8403500 41010000 60300070   *. ..... ,......... ... .........*
0FD80   C3E7C4D2 C6D8E740 B820EECE 3920B101   8806B105 8802A81E B1018802 A80CB840   *CXDKFQX ...................... *
0FDA0   21700000 FC800000 A80AB840 21700000   FD100000 A80AB900 F3580000 080C8500   *.......... ...............3.......*
0FDC0   A83B4101 00000000 00000000 60300294   C3E7C4D2 E2E2E54C 61889104 1F00F780   *...............CXDKSSV ......7.*
0FDE0   9826B7FF 8822F704 8804F708 981AF740   9804A81B A8101502 571FCE02 A808DE02   *......7...7...7 ..................*
0FE00   A804FE82 A82DA802 55A85588 8802A83A   2F12D720 2F92B840 10810082 26266707   *..................P.... ........*
0FE20   8802A816 81801008 B8402B00 A802A808   4588BC00 FE4C5488 A80E2E04 CE0AB840   *........ .................... *
0FE40   21700000 FE700000 33A84088 2E04CE0A   B9203006 B8400000 A8004088 41010000   *......... .......... .... .....*
0FE60   00000000 60300052 C3E7C4D2 C4D3D7F1   B8200000 2F12D720 2F92BF20 FEA0278A   *........CXDKDLP1......P.........*
0FE80   26268683 6E816083 B8402300 A81F4101   00000000 60290105 C3E7C4C5 C4D5C940   *........ ...............CXDEDNI *
```

```
0FEA0   2F12E7DF 2F92BF21 2088278A 2D13CD82   A8242D15 E57F2D95 869CB840 21700001   *..X...............V...... ....*
0FEC0   16600000 2D15CD82 A80AB840 21700001   25300000 A80ABE21 9C606729 A70167A9   *.......... ....................*
0FEE0   B8400F00 3388880C 8503B840 21700000   FB980000 0909D902 A80AB840 21700001   *. ........ ..........R.... ....*
0FF00   6E980000 B8403580 41010000 60290106   C3E7C4C5 C4D5E340 2F12E7BF 2F92B840   *..... ..........CXDEDNT ..X.... *
0FF20   0F003388 8870BF21 2088278A 26266707   B6008802 A81AB79E 8802A814 2F12D780   *..............................P.*
0FF40   2F928730 6F816083 B8402300 8503A82A   BE219C60 6729A701 67A98702 44A8B840   *......... ..................... *
0FF60   20B60000 C3300000 04050030 0000C35C   B900F358 00008002 8500B840 21700000   *....C.........C...3........ ....*
0FF80   FB980000 0909D902 A80AB840 21700001   6E980000 A808B920 300DB840 0000B840   *......R.... ................ ... *
0FFA0   35804101 00000000 00000000 60290107   C3E7C4C5 C5D5E340 B820EECE 241A4F12   *................CXDEENT ........*
0FFC0   CF02A842 41261E01 B6308802 A82E1E07   4F04B600 8804CF02 A822271F F7C69812   *............................7F..*
0FFE0   D6A1D740 279F2F3B B7019804 88022FAE   A808B900 F3580000 0818A808 B900F358   *O.P ...................3.........3.*
10000   00000809 A808B900 F3580000 0817A859   41010000 60340310 C3E7C4D2 C3D5E340   *........3..................CXDKCNT *
10020   B821225E 1288BC01 00BC2188 521F8100   B0008802 A80ABC01 00D8BC01 00F8A802   *.........................Q...8..*
10040   81FFB100 88108703 3FA0B000 8802A806   2780D6A0 7280A818 00000000 00010086   *..................O.............*
10060   B9200000 BA200001 BD218C1C B8010086   B84020B6 0000F520 00001301 00300001   *................. ....5..........*
10080   00580000 F524B700 8808B920 3005B840   0000B000 8802A81E B100881A 26805288   *....5.......... ................*
100A0   8701B840 20B60000 C3300000 30050030   0000C35C 6280529F 33A8A89D 8180B840   *... ....C.........C............. *
100C0   21700000 FC102205 87133F83 BF200009   3797571D 379F4088 2780E7BF E6BFCF04   *..................... ...X.W...*
100E0   E65EA810 0909D902 A808521A 29179101   29978100 72804088 6707E6F1 8802A81E   *W.....R................ ...W1....*
10100   B7BD8814 B7AD8804 81FFA80A 87023FA0   2780D6A0 7280A804 87013FA0 A80281FF   *..................O..............*
10120   40884101 00000000 00000000 60340308   C3E7C4D2 C3D5C440 B8200000 241A4F12   * ................CXDKCND ........*
10140   CF02A846 4E13CE16 CE82A834 41261E01   1F07B630 8802A828 B7008802 A822271F   *................................*
10160   F7849812 D6A1D780 CF82A802 D640279F   23A633A8 A808B900 F3580000 0818A808   *7...O.P.....O ..........3.......*
10180   B900F358 00000809 A808B900 F3580000   0817A85D 41010000 00000000 60340315   *..3.........3...................*
101A0   C3E7C4D2 C4C3E340 B82109E0 BE010208   3C12E4F3 D4083C92 34882C4E 4688B840   *CXDKDCT ..........U3M........... *
101C0   0BA08824 BC8B6081 BE010238 2D24ED82   A804BE01 1A08B840 4C41B100 8804BE01   *....................... ........*
101E0   025E7388 A82DA81E 3D12E5F3 D5043D92   2D24ED82 A804BE01 1A08B840 4C41B100   *..........V3N................. ....*
10200   8804B840 0509A861 37882C4E 8501B840   0B28BF20 00008804 9501A80F 54389808   *... ............ ..................*
10220   B9203009 B8400000 B4008802 A808B920   3008B840 00006088 8001B840 030E370A   *..... ............... ....... ....*
10240   70853513 E4F37593 35157595 35177597   840E8506 7583708D B8400655 60883C12   *....U3..................... ......*
10260   E40CB408 8802A80C 84023C8D B8401081   00C2A804 B8400509 60884101 00000000   *U........... ...B... ...........*
10280   00000000 60290030 C3E7C4C2 E2C5C740   B821043E 2D24ED82 A80AB840 21700001   *........CXDBSEG ............ ....*
102A0   19600000 3D0EED02 A8283D18 CD02A822   BE010320 3388881A BE010350 BE01036C   *................................*
102C0   3D0E4C2D FD82A80A CC02A806 B8400509   33A83388 88484D2C EDBAB840 4F089802   *............ .................. ....*
102E0   A830B101 8802A80A B900F358 00018004   A820B102 880AA802 A806B103 8802A80A   *..........3.....................*
10300   B900F358 00018002 A808B920 3003B840   0000A80A B8402170 00000000 0000A891   *..3............ ..... ..........*
10320   4D2F881C 3D19FD82 A8164D2D E5BF4DAD   85004DB0 45889510 57018804 B8401D18   *.............V................ ..*
10340   3D19B501 8802A806 B8400509 33A86088   4D2D3C0E DD02A80C FC8A3C19 D401E5DF   *......... ..................M.V.*
10360   4DADA804 3C19E4FE 3C996088 3D18E560   B5608802 A8663D18 ED82A804 3C1FA802   *.......U.......V................*
10380   3C1BB431 8802A826 4C2CE4EF 3D19DD9A   D4804D2D E5BF4DAD 85004DB0 2D24ED82   *..........U.....M...V...........*
103A0   A80840BB B9200001 41B94CAC A82EB432   8802A808 4C2CE477 4CACA820 B4A18802   *.. ......................U.........*
103C0   A81A4C2D E47F4CAD 2C24EC82 A80E40BB   B9200001 41B94C2D E4E14CAD 60885001   *....U.......... ..........U........*
103E0   00000000 61020078 C3E7C4C3 C2C9C140   B8400F78 33888864 2E24EE82 A804BF01   *........CXDCBIA . ................*
10400   19C0BF01 0460B100 8802A850 B8402170   00010510 00002E4D CE02A80E 3388880A   *............ ...................*
10420   B8402170 00011CE0 00003388 882EB701   8802A80C B8402170 00010290 0000A81C   *. ................. ..........*
10440   B7028802 A80CB840 21700001 06280000   A80AB840 21700001 06D00000 B8403500   *....... ............ ......... ..*
10460   3D0DE50F 8858B502 880AA802 A806B503   8802A840 3D12E50C B50C880C B5088808   *..V.............. ..V..........*
10480   B8400509 33A8A820 2D24ED82 A80C3515   3C953D94 3D05E5FE 3D85B921 0E54178A   *. ....................V.........*
104A0   B9010E00 10008002 33888804 8100A802   8110A808 B9203001 B8400000 A8503D14   *......................... ......*
104C0   3C15B500 8822B400 8802A81C B9210E54   178AB901 0E001000 8005B840 21700001   *........................... ....*
104E0   05584005 8110A826 B5008820 B501881C   B9210E54 178AB901 0E001000 8004B840   *.. ............................ *
10500   21700001 05584005 8110A802 81007088   B8210416 36883513 E40FD410 658FB840   *.......................U.M.... *
```

```
10520   21700001 05800000 33888824 35176595   3503A404 95046583 55A86388 69031518   *................................*
10540   B8400B20 BE200000 8802A811 A50A3597   A843E738 77787778 B8401900 33888818   *. ................X...... ......*
10560   2924E982 A804BE01 1A08B840 4C411188   8804B840 050933A8 A8232298 22982411   *..Z........ ....... ............*
10580   B8210528 3915B100 8802A810 BD219C60   55276591 251D6593 8703A874 2D24DD02   *................................*
105A0   A8282456 4D01CD82 A81C4800 10388810   CD0ABD20 00045498 A817A802 55A8A804   *................................*
105C0   44024525 A80255A8 A812251D 1518B840   4BDBBC21 88848802 A80255A8 55888802   *............... ................*
105E0   A814B901 0E000000 8005B840 21700001   05580004 A81A6593 3D148802 A80CBD21   *........... ....................*
10600   9C605527 65918702 A806452B 65918701   A8935001 00000000 00000000 61450396   *................................*
10620   C3E7C4C3 C2C9C440 B8210450 2D24ED82   A80AB840 21700001 18780000 3D0EED02   *CXDCBID ........... ............*
10640   A8403D18 CD02A83A E560B560 8802A832   3D18ED82 A8043C1F A8023C1B B40D8802   *. ......V.......................*
10660   A80E4C28 E4EF3D19 DD82D480 4CA8A812   B40E8802 A80C4C28 E4F73D19 DD82E47F   *....U.....M.............U7....U.*
10680   4CA8B840 4F089802 A830B101 8802A80A   B900F358 00018004 A820B102 880AA802   *... ..............3.............*
106A0   A806B103 8802A80A B900F358 00018000   A808B920 3003B840 0000A895 41010000   *..........3............ ........*
106C0   00000000 60290052 C3E7C4C3 C2C9D340   B821045C 3D18CD02 A83AE560 B5608802   *........CXDCBIL ..........V.....*
106E0   A8323D18 ED82A804 3C1FA802 3C1BB411   8802A80E 2C4CE4BF 3D19DD82 D4802CCC   *......................U.....M...*
10700   A812B412 8802A80C 2C4CE4DF 3D19DD82   E47F2CCC B8404F08 9802A830 B1018802   *..........U.....U.... ..........*
10720   A80AB900 F3580001 8004A820 B102880A   A802A806 B1038802 A80AB900 F3580001   *....3.......................3...*
10740   8002A808 B9203003 B8400000 A87F4101   00000000 60290053 C3E7C4C3 C2C9D740   *......... ..............CXDCBIP *
10760   2488BA20 001024A8 B8400F78 338888F8   44284D2E B500880A B8402170 00010870   *......... .....8......... ......*
10780   00003388 88DC3213 462B3F0E E7FCB71C   8802A882 3818C820 D802A81C C882A818   *............X.........H.Q...H...*
107A0   42222824 E882A804 311541B7 B8402170   0000F200 0000A85C 62B08802 A846C836   *....Y........ ....2...........H.*
107C0   4D2CCD02 A81E4222 2824E882 A80AB840   21700001 1A500000 B8402170 000108B0   *..........Y.... ......... ......*
107E0   0000A810 B920F3D0 1482158A B900F358   60008005 A80C4222 B8402170 00010948   *......3.......3.......... ......*
10800   0000A810 B920F3D0 1482158A B900F358   60008005 A828E7F0 B7108812 B920F3D0   *......3.......3.......X0......3.*
10820   1482158A B900F358 60008006 A810B920   F3D01482 158AB900 F3586000 80073388   *......3.........3.......3.......*
10840   881A3919 FC02A804 D101A802 E1FE3999   4222B840 21700001 02900000 B8401F38   *........J.......... ......... ..*
10860   A804B840 1FB8A804 B8401FB8 B8403540   B8210782 3818492D 3D0EC82E FDACC982   *... ..... ... . ..........H...I.*
10880   A80AB840 10B900C4 33A8A81E 4F2E4D30   95015738 8802A802 D4024F2F 57388802   *... ...D................M.......*
108A0   A806D140 49AD5528 4DB0A83D 00000488   B82107E2 3819F882 A850F0A0 8802D884   *..J ...............S..8...0...Q.*
108C0   F0A09840 8001B840 030E360A 31153211   37136085 61956293 6791800A 810D6183   *0.. ... ........................*
108E0   801C688E 00288103 6197688F 689A8083   81016199 B8404F20 8808B920 3010B840   *..................... ......... *
10900   0000A806 492DD120 49AD3919 FC02A804   D101A802 E1FE3999 4222B840 21700001   *......J.........J.......... ....*
10920   09480000 A877D7E3 C6500504 00000000   00000000 00000000 63430413 C3E7C4C3   *......PTF...................CXDC*
10940   C2D6C140 000009B6 B8210CFC 3D0EE5F0   B5108802 A88E2D4D CD02A80A B8402170   *BOA ..........V0............. ..*
10960   00012000 00003388 88783688 35039404   A5046583 31173515 659785FF 0C143713   *................................*
10980   57E08802 A8048500 A8028501 6D95251D   371157A0 8802A804 6F94A804 4F316F94   *................................*
109A0   350FE40F D4206593 26512D24 ED849106   A8029102 16B0981E ED82A804 BE011A08   *..U.M...........................*
109C0   B8404C41 B100980C 880A8402 3C8DB840   108100C2 A80AB840 21700001 01A80000   *. ............. ...B... ........*
109E0   33A8A808 B9203007 B8400000 A8A74101   00000000 60290057 C3E7C4C3 C2D6C440   *......... ..............CXDCBOD *
10A00   2488BE21 9C60B840 0F783388 88A83D0E   3C193918 E5FCB51C 8802A882 F4019874   *....... ............V.......4...*
10A20   62273613 62B08802 A8604222 D902A81A   C982A816 2924E982 A8043115 41B3B840   *............R...I.....Z........ *
10A40   21700000 F2000000 A83ECD32 4928F180   980AB900 F3580001 8005A820 2924E982   *....2.........1.....3.........Z.*
10A60   A810390E F982A806 311541B3 A8043115   41B5B840 21700001 09480000 A80AB840   *....9.............. ........... *
10A80   21700001 09480000 A808B900 F3580001   8005A808 B900F358 00014008 A818E5F0   *............3.........3... ...V0*
10AA0   B510880A B900F358 00018006 A808B900   F3580001 8007B840 35004101 00000000   *......3.........3...... ........*
10AC0   00000000 60290058 C3E7C4C3 C2D6D340   BD20003C 52A8BE21 9C60B840 0F783388   *........CXDCBOL ........... ....*
10AE0   888E2D24 3C1BED82 A812B411 880EB412   880AB900 F3580001 1007A874 3D0E3C18   *....................3...........*
10B00   E5FCB51C 8802A850 37136127 17B08802   A83CCC82 A810DC02 A80CB840 21700000   *V.......................... ....*
10B20   F2000000 A826CC1A 2D4CCD0A B900F358   00018005 A80AB840 21700001 09480000   *2.............3....... ........*
10B40   A80AB840 21700001 09480000 A808B900   F3580001 8005A818 E5F0B510 880AB900   *... ............3.......V0......*
10B60   F3580001 8006A808 B900F358 00018007   B8403500 41010000 00000000 60290059   *3.........3...... ..............*
10B80   C3E7C4C3 C2D6D740 BE2005A8 618A6606   30853903 3812E808 B1069804 8802A808   *CXDCBOP ..............Y.........*
```

```
10BA0   F802A816 B1099812 3912E1F0 B1208802   A8048100 A8028106 A8028104 398D9814   *Y..........0....................*
10BC0   618EB921 0BCE1582 B900962C 08420001   8C1CA80E 618EB921 0BE2618A 8121B800   *.........................S......*
10BE0   A49A6602 600A5001 00000000 61020075   C3E7C3D7 C3C2C940 B820F24E 4D2CF590   *................CXCPCBI ..2...5.*
10C00   98043613 46AB3113 472B71B0 8802A812   D5104DAC 4222B840 21700001 09480000   *...............N...... ........*
10C20   A808B900 F3580001 0805A835 41010000   00000000 60290033 C3E7C4C2 E2C9C140   *....3...................CXDBSIA *
10C40   B8200000 492CF180 881E3113 472B71B0   8802A814 4F2CD708 4FAC4222 B8402170   *......1...............P....... ..*
10C60   00010948 0000A808 B900F358 00018005   A833D7E3 C6500501 00000000 00000000   *...........3.......PTF..........*
10C80   62050447 C3E7C4C2 E2E3C140 46166F0F   B820F24E 4D283113 672771B0 8802A860   *....CXDBSTA ......2.............*
10CA0   3C1CB401 8802A82E 85104DA8 4D2CE505   4DAC8500 4DB04D2D E53F4DAD BD200010   *..............V.........V.......*
10CC0   4598B840 0FD8BF20 00007788 8806B840   0529A813 A816B402 8802A806 D5104DA8   *... .Q........ ...........N...*
10CE0   A80AB900 F3580001 100333A8 3388880E   4222B840 21700001 09480000 A800A808   *....3........... .............*
10D00   B900F358 00018005 A87B4101 00000000   00000000 60290034 C3E7C4C2 E2C9D340   *..3.....................CXDBSIL *
10D20   B8200000 31136727 71B08802 A8144F28   D7084FA8 4222B840 21700001 09480000   *...............P...... ........*
10D40   A808B900 F3580001 8005A82D 41010000   00000000 60290040 C3E7C4C2 E2E3D340   *....3................... CXDBSTL *
10D60   B8200000 31136727 71B08802 A8242F4C   D7202FCC 2F24EF82 A80CB840 21700001   *...............P.......... ....*
10D80   18B80000 A80AB840 21700001 09480000   A808B900 F3580001 8005A83D 41010000   *....... ..............3............*
10DA0   00000000 60290041 C3E7C4C2 E2E3D740   B820F24E 2D4C3113 6727F5C0 880671B0   *.........CXDBSTP ..2........5.....*
10DC0   8802A822 D5402DCC 2D24ED82 A80CB840   21700001 19000000 A80AB840 21700001   *....N ......... ........... ....*
10DE0   09480000 A808B900 F3580001 8005A841   41010000 60290035 C3E7C4C2 E2C9D740   *.........3................CXDBSIP *
10E00   3C12EC0A B8400509 33A88702 A838D40C   3C923519 CC02A80A B8400509 33A88702   *..... ........M........... ......*
10E20   A824B840 21700001 0F800000 33888814   3D19D510 3D993D18 D5043D98 BF010E62   *... ................N.....N.......*
10E40   8700A802 87021E00 FE849104 A8029106   C630DE06 BD200000 A800DE84 BF200000   *................F...............*
10E60   1088B840 0B08BD20 00005588 9802A806   B8400558 30813C1B 3C9F3C1C 3CA03C1D   *... .......... ............*
10E80   3CA11503 3C9B3D9C 1C00FC86 BD200000   A8021505 3C9D3D9E 3D18F560 980E3C15   *..........................5.....*
10EA0   8802A804 8510A802 850DA802 850E3D83   70884101 00000000 00000000 60290062   *................................*
10EC0   C3E7C4C3 C5D9C240 B8200000 472DCE02   A85A4588 9510B840 0D58BE20 00008846   *CXDCERB .......... ........*
10EE0   690EF982 A830B840 13A0BA20 00002288   881E290E F982A806 2688A817 A810B840   *..9.... ............9........ *
10F00   169C00C0 BA200000 B8400501 A829A804   BD010F36 A80EB840 0FD8BA20 0000B840   *........ .............. .Q..... *
10F20   0501A84F A804BD01 0F36A808 B900F358   00018005 A86FE6E7 E79FD780 47AD8700   *..............3.......WXX.P......*
10F40   4FB04222 A8120000 00000000 00000000   BD200000 B8000000 B84020B6 00010948   *........................ .......*
10F60   00001001 00300001 0F480001 094C5088   41010000 60290013 C3E7C4C2 D3C3D740   *........................CXDBLCP *
10F80   B8200000 3F023C12 E4F03D18 CD08A802   A804B420 8802A804 B70E8808 B9203007   *........U0......................*
10FA0   B8400000 3D143F15 3F943D95 3D18D583   3D988500 3D9A3D19 F5A0880C DD82A804   *. ............N.........5.......*
10FC0   8720A802 8700A808 B8400509 33A88710   A8534101 00000000 00000000 60290068   *.......... ......................*
10FE0   C3E7C4C3 D9E2C240 B820EECE BC0110B0   77888802 A89C3788 3488851C 97200907   *CXDCRSB .........................*
11000   95025138 98068804 9702A810 B8400B10   BF200000 88068500 74889704 88427188   *...................................*
11020   7701B840 4BEBBF21 8CEC882E 67827722   8802A820 670272A2 17886901 D1406981   *... ......................J ..*
11040   A401880A B9200004 1698A84F A80477A8   8503A804 BF200801 A804BF20 0806A804   *................................*
11060   BF200806 7788882A A8120000 00000000   00000000 BF200000 B8000000 B84020B6   *............................. ..*
11080   00011160 00004001 00300001 106C0001   11647788 8818B920 F3D01792 B900F358   *...... ..................3.....3.*
110A0   10000000 33888806 3E9B3F9C 55A8A8C9   D902A82E C882A82A E882A826 26566D01   *...............IR...H...Y.......*
110C0   CD9A3C20 88102D54 45389804 77A8A804   BF200812 A804BF20 080CA804 BF200801   *................................*
110E0   A804BF20 080C4088 41010000 60290078   C3E7C4C4 C1D5C140 B8200000 D902A81A   *...... .........CXDDANA ....R...*
11100   C882A816 E882A812 26566D01 CD82A804   77A8A804 BF200809 A804BF20 080C7788   *H...Y...........................*
11120   881AB920 F3D01792 B900F358 10000000   33888806 3E9B3F9C 55A8A80C B8402170   *....3.....3..................  ..*
11140   00011160 00008503 A8534101 00000000   00000000 60290082 C3E7C4C4 C6D5C140   *........................CXDDFNA *
11160   B8200000 27567D01 CD82A810 760260A2   7D01E5BF 7D81CD04 9704A817 A81F4101   *...............V...............*
11180   00000000 60290083 C3E7C4C4 C6D5F140   B820EECE D902A844 C882A840 E882A83C   *........CXDDFN1 ....R...H.. Y...*
111A0   55A877A8 3E293F2A 71880D07 56883C22   0D0DCD0A EC82A806 BF20080C A81CEC82   *................................*
111C0   A804A702 A802A706 980C67B0 980821D1   718877A8 A804BF20 0820A804 BF20080C   *...............J................*
111E0   7788881A B920F3D0 1792B900 F3581000   00003388 88063E9B 3F9C55A8 A82CE406   *.......3.....3..................U.*
11200   2D24E5F8 45582DA4 61A89806 9701A809   A8022FCE 3D242DAE 3D252DB1 2D35E5EF   *..V8......................V.*
```

```
11220   3C26E410 45582DB5 8503A89D 41010000   00000000 60300293 C3E7C4D2 E2E2D740   *..U.....................CXDKSSP *
11240   B820FECE D902A846 E802A842 E882A83E   26228834 67567D01 CD82A826 710212B8   *....R...Y...Y...................*
11260   880ECD06 9704A813 A804BF20 0820A810   3C216D24 ED82A802 94017C80 2CB177A8   *................................*
11280   A804BF20 081AA804 BF20081A A804BF20   080C7788 881AB920 F3D01792 B900F358   *........................3.....3.*
112A0   10000000 33888806 3E9B3F9C 55A8A822   3C222CAF 3C232CAE 27889710 3C24FC82   *................................*
112C0   A808B840 1AA800C0 A806B840 1AA800C1   8503A895 41010000 00000000 60300291   *... ....... ...A................*
112E0   C3E7C4D2 E2E2D340 B8200000 D902A83A   C802A836 E882A832 2D15CD02 A812BC00   *CXDKSSL ....R...H...Y...........*
11300   FDD83388 8808B900 F3580001 081AA818   CD82A80C DD8AB840 21700001 25300000   *.Q......3.............. ........*
11320   B900F358 00010809 A808B900 F3580001   080CA84D 41010000 00000000 60290074   *..3.........3...................*
11340   C3E7C4C4 C1C2C340 B8200000 3F1DCF02   A80AC780 3F9DBE01 13AAA84C D902A802   *CXDDABC ..........G.........R...*
11360   E886BF20 080CA824 2912C906 BF200817   A81A2915 D902A806 BF200815 A80EC902   *Y.........I.........R.........I.*
11380   A806BF20 0801A804 BE0113AA 77889802   A816B920 F3D01792 B900F358 10000000   *....................3.....3.....*
113A0   33888804 3E9B3F9C A8632915 D982A838   3C1DA810 00000000 00000000 BE200000   *............R...................*
113C0   B8000000 B84020B6 00011708 00002001   00300001 13B40001 170CB700 8806BF20   *..... ..........................*
113E0   0801A802 77A8A8AA D1202995 25119501   B8404BDB BD200000 8802A808 B920300B   *........J........ ..............*
11400   B8400000 39205998 3821C882 A82AA810   00000000 00000000 BE200000 B8000000   *. ........H.....................*
11420   B84020B6 00012530 00002001 00300001   14100001 2534A856 B9211618 218A2426   *. ..............................*
11440   8001B840 030E350A 950445A2 37889724   74883188 0F079704 71183E23 563014B8   *... ............................*
11460   8802A80A B8400B88 B9200004 14984710   5730BE97 24263922 4788A703 7980B920   *..... ..........................*
11480   00804183 4880818F 4981B840 23008503   77A86088 41010000 00000000 60290084   *........... ....................*
114A0   C3E7C4C4 C9C1D340 B820EECE D902A802   E88AB900 F3580000 080CA834 2912C90A   *CXDDIAL ....R...Y...3.........I.*
114C0   B900F358 00000817 A8262915 C982A80A   B900F358 00000815 A816D140 2995F1A0   *..3.........I.....3.......J ..1.*
114E0   8802A80A B8402170 00012530 00008503   A84B4101 00000000 00000000 60290075   *..... ..........................*
11500   C3E7C4C4 C1C3D740 B821164A 25119501   B8404BDB BD218C1C 9808B920 300BB840   *CXDDACP ......... ............. *
11520   0000571F D6A1D702 579FBF21 2088278A   26268730 6F816083 B8402300 A8374101   *....O.P.................. ......*
11540   00000000 60330382 C3E7C4E7 C9C4C940   B82122B4 571FE7FD E6BE579F 6107E0F1   *........CXDXIDI ......X.W......1*
11560   B1BF8802 A86EB000 8802A868 090A6413   D9844498 44984E03 8184B840 21700C00   *................R.......... ....*
11580   FC105A05 B8400611 81123983 B9200008   61183197 2711379F A8160000 00000000   *..... ..........................*
115A0   000115C6 BA218CC4 BD218C1C B80115C6   B84020B6 0000F520 00001201 00300001   *...F...D.......F. ....5.........*
115C0   159C0000 F524B700 8808B920 3005B840   0000A82E 8701A814 00000000 00000000   *....5.......... ................*
115E0   BA200000 BD200000 B8000000 B84020B6   00012400 00001201 00300001 15D80001   *............. ...............Q..*
11600   240433A8 A8B74101 00000000 60330383   C3E7C4E7 C9C4E340 2915D98A 26266722   *................CXDXIDT ..R.....*
11620   A704B840 0528E1CF 2995869E B8402170   00011660 00008802 A8102915 D1802995   *... ......... ..............J...*
11640   B8402170 00011508 0000B840 35804101   00000000 60290091 C3E7C4C4 E2C3E340   *. ......... ............CXDDSCT *
11660   B8211636 26266907 6804C804 B1E0982A   25888702 B90116C4 2815E0BF 28952812   *..........H............D........*
11680   C802A812 E07F2892 BC219C60 4529A501   45A98702 A8028702 A8281638 8802A804   *H...............................*
116A0   8700A81E 25119501 B8404BDB BD200000   9808B920 300BB840 00008701 B90116C4   *......... ............. .......D*
116C0   8701A865 A8160000 00000000 00000000   B9200000 BA200000 B8000000 B84020B6   *............................. ..*
116E0   00012400 00000301 00300001 16C80001   24041088 41010000 00000000 60290085   *.............H..................*
11700   C3E7C4C4 C9D6E340 B8200000 B40E8802   A806BC01 1770A818 D902A802 E88AB900   *CXDDIOT ................R...Y...*
11720   F3580000 080CA808 2D15B417 8804A828   A82BCD8A B900F358 00000816 A818DD82   *3......................3.........*
11740   A808DD06 BC011770 A80287FF B7008806   E5BF2D95 8503A829 DD0487FF A804BC01   *................V...............*
11760   1770B700 8808B900 F3580000 0816A841   81801008 B8402B00 A812B921 17A0218A   *........3............ ..........*
11780   B8401081 00827728 33A84088 87FF4088   41010000 60290076 C3E7C4C4 C1C4C940   *. ........ ... .........CXDDADI *
117A0   B8400F00 33888802 A808B920 300DB840   0000868C A8120000 00000000 00000000   *. ............. ................*
117C0   BB200000 B8000000 B84020B6 00011660   00000401 00300001 17B80001 16648802   *......... ......................*
117E0   A8048600 A80286FF 3C1D2D15 B40E8802   A81CE5EF 2D95B600 8802A810 D4803C9D   *..................V.........M...*
11800   B8402170 00011348 00006628 A824B417   8802A806 E5BF6628 A812DD8E 26263488   *. ..................V...........*
11820   6322A304 B8400508 4388E5DF E5EF2D95   8503B600 8802A81E B8402170 0000FB98   *..... ....V.V............ ......*
11840   00002915 D90EC982 A80AB840 21700001   25300000 A808B900 F3580001 0822B840   *....R.I.... ............3...... *
11860   35804101 00000000 00000000 60290077   C3E7C4C4 C1C4E340 B821063C 390E3818   *................CXDDADT ........*
11880   E902A814 C802A810 F982A806 45333595   A8044535 3595A80E 453F3595 E982A806   *Z...H...9...................Z...*
```

```
118A0   950145BF A800A831 41010000 60300521   C3E7C4D7 C9C9D340 B8200000 294CC902   *................CXDPIIL .......I.*
118C0   A816B920 00043197 910A3983 B8402170   0000F1A8 0000A8C8 B900F358 0000081A   *.............. .....1.......3.....*
118E0   B8402170 000106D0 0000A835 41010000   00000000 60290042 C3E7C4C2 E2E3F140   *. .......................CXDBST1 *
11900   B8210DD8 391C381D B1018802 A82CB001   8802A826 84088540 BF20001D 37987D80   *...Q.................... .........*
11920   9701BC87 B920000D 3197910A 3983B840   21700000 F1A80000 A808B900 F3580000   *.............. .....1.......3...*
11940   0821B840 21700001 06D00000 A84F4101   00000000 60290036 C3E7C4C2 E2C9F140   *... .....................CXDBSI1 *
11960   B82102A4 390E3818 F982A81E E902A80A   C802A806 45373595 A80E453F 3595E982   *.........9...Z...H..............Z.*
11980   A8069501 45BFA800 A804BE01 1990A831   E902A80A C802A806 453D3595 A80E4539   *................Z...H...........*
119A0   3595E982 A8069501 45B9A800 60884101   00000000 60300529 C3E7C4D7 D8C9C140   *..Z....................CXDPQIA *
119C0   3503A404 95043583 30933D16 E50FD520   3D923C17 CC108500 3D94CC88 B9203017   *............V.N..................*
119E0   B8400000 A8048501 3D94E43F 94013C95   70884101 00000000 00000000 60300520   *. .........U.....................*
11A00   C3E7C4D7 C6F3F240 35039404 A5043583   3D12E50F D5303D96 3C143D15 8802A804   *CXDPF32 ..........V.N...........*
11A20   D440A802 D4C0A401 3C972D4D CD02A80C   3D16ED82 A8063D05 D5013D85 60885001   *M ..M...................N.......*
11A40   00000000 61450398 C3E7C4D7 C6F2F340   B82107D8 3715390E F982A804 47B7A820   *........CXDPF23 ...Q....9.......*
11A60   47BD413B 910171B0 8802A804 47BBA810   B920F3D0 1482158A B900F358 60022001   *................3.......3.....*
11A80   A8334101 00000000 00000000 60300530   C3E7C4D7 D8D6C140 BE2005A8 618A6606   *................CXDPQOA .........*
11AA0   30853803 3916E908 B0029804 8802A808   E902A814 B0C59810 E1F0B130 8802A804   *......Z..............Z.........0......*
11AC0   8100A802 8106A802 8104398D 9814618E   B9211ADC 1582B900 962C0842 00018830   *................................*
11AE0   A80E618E B9211AF0 618A8121 B800A49A   6602600A 50010000 00000000 61020076   *.......0........................*
11B00   C3E7C3D7 C3C2C9F1 B8211D28 3918C930   492DE92A E982A810 B920F3D0 1482B900   *CXCPCBI1......I...Z.Z.....3.....*
11B20   F3584000 2003A814 380EE00C B00C8802   A804D108 49AD391A D180399A A800A84A   *3. ................J.....J.......*
11B40   492DE982 A806BE01 1B8CA83E D982A80C   E1EF49AD B8400509 33A8A82E F902A80C   *..Z.........R........ ......9...*
11B60   B8402170 00011BC0 0000A81E 3819D882   A818381B 391CBE20 081361B0 8802A808   *. ............Q..................*
11B80   492DE1E1 49ADA800 A800A885 3819D8A4   E908D108 E1FB49AD A818E07F 3898B920   *..............Q.Z.J..............*
11BA0   F3D01482 B900F358 40022003 3818D080   3898A804 E1E149AD 6088419F 4103BD20   *3.....3. ........................*
11BC0   B8200000 45889510 B8400D58 BE200000   8834691A C926B840 13A0BF20 00007788   *.......... ..........I.. ........*
11BE0   8816791A C9067688 A815A80A B840169C   00C0BF20 0000A802 77A8A808 B8400FD8   *....I....... ............... .Q*
11C00   BF200000 A80277A8 3919D982 A832482D   E0FD48AD 73C837C8 73C83388 881CB920   *..........R..........H.H.H......*
11C20   F3D01482 1792B900 F3585000 0813781B   389B711D 319D781E 389EB840 0529A87E   *3.......3.................. ....*
11C40   492DE906 77888802 A8623918 E13F3998   391AD180 399AB920 00033197 91CA3983   *..Z..............J.............*
11C60   31133511 31913593 492DD110 49ADA810   00000000 00000000 BF200000 B8000000   *..........J......................*
11C80   B84020B6 00010948 00004001 00300001   1C700001 094C7388 3388880E B920F3D0   *. ........ ..................3.*
11CA0   1482B900 F3584000 0813A812 B8400509   7388B840 21700001 09480000 33A8A901   *....3. ...... ..... ............*
11CC0   D7E3C650 05020000 00000000 00000000   62310491 C3E7C4D7 C2D4F240 00F46602   *PTF.................CXDPBM2 .4..*
11CE0   B821042A BE219C60 B7018802 A86E4D2C   CD164D28 CD02A808 87026527 3591A806   *................................*
11D00   B8400509 33A8A852 3D0F3C18 492DED02   A836F460 8804F902 A82EF982 A82AA810   *. ..................4...9...9.....*
11D20   00000000 00011D46 BF218001 B8011D46   B84020B6 00011B08 00004001 00300001   *.................. ......... .....*
11D40   1D200001 1B0CA812 E50CB504 8802A80A   F982A806 E904D108 49ADA800 A87F4101   *........V.......9...Z.J..........*
11D60   00000000 60300526 C3E7C4D7 D7C3C940   B8212074 3D1A4C2D CD02A856 EC02A81E   *........CXDPPCI ................*
11D80   FC1CB920 F3D01482 B900F358 40000813   B8402170 00010290 000033A8 A832FC18   *....3.....3. .... ...............*
11DA0   BE011DD8 BE200010 4698B840 10A10090   D4024CAD 7388A818 DC92CD90 3D19CD04   *...Q....... .....M...............*
11DC0   DD02A806 DD84D404 A802D408 E4FD4CAD   A804BE01 1E12A869 8001B840 030E370A   *......M....M.U............... ....*
11DE0   800A810E 71837085 310D718D 310F718F   31117191 31137193 31157195 B9200004   *................................*
11E00   7197804B 81807199 8000789A 80F8789B   6088EC02 A80ACD82 A804E4F7 4CADA838   *............8...........U7....*
11E20   B920F3D0 1482B900 F3584000 2003A810   00000000 00000000 BE200000 B8000000   *..3.....3. ......................*
11E40   B84020B6 00010290 00002001 00300001   1E300001 029433A8 6088A8E2 62926396   *. ........................S....*
11E60   B821205E 391B482C B1318802 A88EC802   A80AB900 F3580000 0815A872 391C381D   *..............H.....3...........*
11E80   3D1E3C1F 3F203E21 B1018802 A858B002   8802A852 B5028802 A84CCC4A FC48CF82   *................................*
11EA0   A844F7B0 9840CEBE 3922F1C0 9838F123   9834DE02 A824FC82 A816F10C 9812DE90   *..7.. ....1...1...........1.....*
11EC0   D98E492D D101E1E1 49ADBF01 1F24A808   B900F358 00000821 A80A492D E1E049AD   *R...J..............3............*
11EE0   BF011F24 A808B900 F3580000 0821B840   21700001 02900000 33A8A826 B1328802   *........3...... ................*
11F00   A820C802 A806BF01 1F24A808 B900F358   0000081A B8402170 00010290 000033A8   *..H...........3...... ..........*
```

```
11F20    A800A8C5 B8400B08 BD200000 55889802    A808B840 05583081 A800A810 00000000    *...E. ........... ..............*
11F40    00011F62 BF211ECE B8011F62 B84020B6    0000F1A8 00004001 00300001 1F3C0000    *........... ....1... ...........*
11F60    F1ACB920 00043197 910A3983 70884101    00000000 60300522 C3E7C4D7 D3E4F140    *1.....................CXDPLU1 *
11F80    B8212048 3D1BB50D 8806B50E 8802A85C    B50D8802 A8303C1C 3D1DB401 8802A81C    *..............................*
11FA0    B5018802 A8168705 86003797 970A3F83    B8402170 0000F1A8 0000A808 B900F358    *.............. ....1.......3.*
11FC0    00000821 A81A4C28 CC02A80C B8402170    0000F1A8 0000A808 B900F358 0000081A    *........... ....1......3.....*
11FE0    B8402170 00010628 000033A8 A86F4101    00000000 60300528 C3E7C4D7 D7E4F140    *. ....................CXDPPU1 *
12000    B8210966 3D18CD20 ED82A81C B8402170    0000F1A8 00003388 880CB840 21700001    *........... ....1....... ....*
12020    02900000 33A8A84C 85FF0C14 371357E0    8802A816 3D18CD82 A80EDD02 A80AB840    *............................ *
12040    21700001 1F800000 A82A3D18 CD82A810    DD02A80C B8402170 00011E60 0000A814    *............... ..........*
12060    CD92DD10 4D2DFD82 A80AB840 21700001    1D700000 A8774101 00000000 60300527    *......... ...................*
12080    C3E7C4D7 D7C3D640 2912D902 A80EB840    21700000 FE700000 8700A89E 26266907    *CXDPPCO ..R.... ...............*
120A0    6804B1B0 8802A81A 641E4402 B84020B6    0000C330 00000004 00300000 C37E87FF    *.......... ....C........C...*
120C0    A878B184 8802A804 87FFA86E B1F08802    A81E2F13 CF82A818 651E5701 E7FC75A8    *............0.............X...*
120E0    5506B840 21700001 23000205 8700A834    C804B1E0 9808BF01 21508700 A826691C    *... ..........H..............*
12100    F982A80C B8402170 00012218 0205A814    BF0122EC 651E5502 B8402170 00012300    *9.... .................. ......*
12120    020587FF 09092812 D902A80E D882A80A    B8402170 00016E08 0000B7FF 8802A80C    *........R...Q.... ...............*
12140    26266083 81306981 B8402300 B8403580    2D12E57F 2D92BD21 9C605129 A10151A9    *......... ... ....V............*
12160    11282997 25887188 8702A818 00000000    00000000 B9200000 BA200000 BE200000    *..............................*
12180    B8000000 B84020B6 00012400 00002301    00300001 216C0001 24041788 2913C982    *..... ....................I.*
121A0    A8342915 E1BF2995 C902A82A A8120000    00000000 00000000 BF200000 B8000000    *........I.....................*
121C0    B84020B6 0000FE70 00004001 00300001    21B00000 FE742311 B8404B8B BD200000    *. ...... .................. ......*
121E0    980AB920 300BB840 0000A824 24889504    5101C806 B0FF8802 A802A812 C882A80C    *....... ..........H..........H...*
12200    5202B840 21700001 23605805 A8214288    70887901 9702678A B8401900 651E6820    *... ...................... ......*
12220    05185502 8018B840 283BA802 A808B920    3011B840 0000691C B1058802 A80EB840    *....... ......... ........... *
12240    21700000 00000000 87FFA874 B1418802    A8108000 B8402170 00010020 000087FF    *................... ...........*
12260    A85EB181 8806B1C1 8802A838 A8120000    00000000 00000000 BA200000 B8000000    *.......A......................*
12280    B84020B6 000124A0 00000201 00300001    22700001 24A42E13 CE02A804 87FFA802    *. ............................*
122A0    8700A81C B1038802 A80EB840 21700001    15500000 87FFA808 B920300A B8400000    *.......... ................ ..*
122C0    A8120000 00000000 000122EA BF2000FF    B80122EA B84020B6 0000FB98 00004001    *........... ............... .*
122E0    00300001 22C40000 FB9CA8D5 65078802    A808B920 300AB840 00007088 02CA01CE    *.....D.....N........... ........*
12300    B8401900 5920D982 A8146907 B1808802    A80CB840 21700000 00000000 A80287FF    *. ....R............ ...........*
12320    B700883A 8701A814 00000000 00000000    BD200000 BE200000 B8000000 B84020B6    *............................ ..*
12340    00012400 00003001 00300001 23280001    24045288 B8402170 00012360 0004A861    *................... ...........*
12360    B8401900 211FF882 A85E33A8 F1048804    2326A83C F1808802 2326F140 883280FF    *. ....8.....1.......1.....1 ....*
12380    2588A814 00000000 00000000 BB200000    BE200000 B8000000 B84020B6 00010020    *......................... ......*
123A0    00002401 00300001 23840001 00245288    33888814 B900F358 0000800D 8500B840    *......................3........ *
123C0    21700000 FB980000 84A08501 259F2D20    E5EF2DA0 2D35E5BF 2DB58018 2588B840    *...............V.....V........ *
123E0    283BA802 A808B920 3011B840 0000A891    41010000 60300229 C3E7C4D2 D9D5E340    *.......... ............CXDKRNT *
12400    B8200000 8181B840 21700000 FC104005    3FA0B701 8802A804 521DA812 B7028802    *...... ..... ...................*
12420    A8045211 A808B920 300CB840 0000329F    81133983 BA200009 32977008 A8160000    *.......... .....................*
12440    00000000 00000000 B9200000 BD200000    B8000000 B84020B6 0000F520 00001101    *.................. ....5.....*
12460    00300001 24400000 F524B700 8808B920    3005B840 00005288 0708B840 20B60000    *..... ..5........... ....... ....*
12480    C3300000 00040030 0000C35C A88F4101    00000000 60300071 C3E7C4D2 C9D5D740    *C........C.............CXDKINP *
124A0    B8200000 5326571F E73FE6BF B7018802    A802E6FE 579F6707 E6F1B796 8806B7BD    *........X.W.......W.....W1......*
124C0    8802A804 B600880A 33888804 BC0124D6    A8028503 A8378701 A81A0000 00000000    *..............O..............*
124E0    00000000 BB200000 BC200000 BE200000    B8000000 B84020B6 00012400 00002C01    *.................. .........*
12500    00300001 24DC0001 2404B920 F3D01482    B900F358 4000800D 85004088 41010000    *............3.....3. ..... .....*
12520    00000000 60300058 C3E7C4D2 C4E3E340    B82114EE 26262912 C982A80A B920FF18    *........CXDKDTT ........I.......*
12540    218A6083 A832B921 1618218A 2915D110    2995D91E 25119501 B8404BDB BD218C1C    *.............J...R...... ......*
12560    8802A80A B920300B B8400000 A80481FF    5998BD20 00806583 11286980 818D6981    *........ ......................*
12580    B8402300 A8574101 00000000 60290177    C3E7C4C5 D5C1C240 BD20786C 5A19F2F0    *. .............CXDENAB ......20*
```

```
125A0   981C5099 509BB920 0001218A 208EB921   25C411F8 11F82191 82032A86 2A87B800   *.................D.8.8..........*
125C0   BA400000 CB88BB23 FFFF238E A817BB23   FFF02102 881113E8 9815218E 11901190   *. ...............0.....Y........*
125E0   11901190 BD20786C 599AB921 25F82A0B   92012A8B A8450000 DA9EEA02 A8390A36   *.............8..................*
12600   CA0ABD00 C610A843 A845A808 BD00C5F0   A84DA84F 8301A80C 21020362 A30213B8   *....F.........E0................*
12620   985D8300 BD20786C 5A183780 9601B604   88065E98 980AA873 2091D302 A80D7718   *..........................L.....*
12640   BE855E19 6758FB06 2E0B9601 2E8B5F99   218E2218 2218FB86 25185182 A8A7571D   *................................*
12660   71D0571F 25185181 5783A8B5 BD20786C   53192268 88B95097 54155493 5A1A2358   *................................*
12680   5B998204 2A869516 258AA8CF 41010000   00000000 60290282 C3E7C4C9 C1E3E240   *........................CXDIATS *
126A0   B8200000 3721B603 8806B608 8802A832   E77FB608 8802A806 B7488802 A8241788   *................X...............*
126C0   8001B840 030E340A 8005B840 50117188   D908C802 A8022E28 A8022E12 C80EA8E2   *... ....... ....R.H.........H..S*
126E0   A843B900 F3580000 1001A80D 3521B403   8802A85E F682984E E57FB505 8806B507   *....3...............6...V.......*
12700   8802A81E 2726B840 21700001 28904D05   B5008802 A80AB840 21700001 29D00000   *....... ............... ........*
12720   A812FE82 A8068505 2726A808 B900F358   00000809 B5058802 A80AB840 21700001   *..............3............ ....*
12740   29880000 A80AB840 21700001 29D00000   A860FE82 A8543188 43888505 A8120000   *....... ........................*
12760   00000000 00000000 B9200000 B8000000   B84020B6 0000FB98 00000101 00300001   *................. ..............*
12780   27600000 FB9C44A8 1388B901 285E3521   B8402170 000129E8 0000B101 8802A806   *................. .....Y........*
127A0   38A28500 A80233A8 A808B900 F3580000   08164488 880AB500 8802A804 B8400511   *............3................ ..*
127C0   A8E3C904 D902C882 A876B901 33F0B700   8802A86C 3E1CB603 88563188 43888505   *.TI.R.H......0..................*
127E0   A8120000 00000000 00000000 B9200000   B8000000 B84020B6 0000FB98 00000101   *..................... ..........*
12800   00300001 27E40000 FB9C1388 44A8B840   21700001 32380000 B1018802 A80E389A   *.....U......... ................*
12820   B8402170 00013378 00008101 33A8A80E   25889508 B8401099 00C24388 8505A961   *. ................... ...B......*
12840   B8400508 4388FE82 A80AB900 F3580000   0809A808 B900F358 0000080C A8213E0E   *. ..........3.........3.........*
12860   E6FD3E8E 37113789 37133791 37093793   30898600 3E998682 3E9D1088 41010000   *W...............................*
12880   00000000 60300062 C3E7C4D2 C5E3D77C   B8401900 76316501 F50198E8 D5016581   *........CXDKETP.. ......5..YN...*
128A0   7D41D50C 7DC11580 7953E141 B1418804   8003A802 8005B840 030E360A 5180BC20   *..N..A................. ........*
128C0   00046498 748E8600 87304388 3630BF85   65015598 55989504 53F833F8 43A342AA   *.........................8.8....*
128E0   54888200 83183318 4230BB85 83A85B85   BB207E68 538A5B09 D3805B89 23265391   *........................L.......*
12900   340E5496 A5043F53 E741B741 8802A862   951C87A8 5F85BC20 7E68548A 5F09D780   *........X.....................P.*
12920   5F898718 5F883323 53915788 A71CB840   0BA83631 6701D701 67813F41 D70C3FC1   *............... ......P.....P..A*
12940   BF200004 74985496 348E8600 87304688   6630BF85 55F855F8 45A342AA BF200004   *.....................8.8........*
12960   74A84501 55985598 3596BF20 04005783   331F5401 44984498 3496BB20 04004383   *................................*
12980   8505A802 8500A8F9 B8200000 7C53E441   B4418802 A8083D21 CD02A802 7723760E   *.......9......U.................*
129A0   66236698 66981580 B901285E B84010A1   00C25180 D9082C28 D4012CA8 A8062C12   *............. ...B..R...M.......*
129C0   D4012C92 85054388 A84322F8 02CBA811   B8200000 B8400509 438844A8 B900F358   *M..........8......... ........3.*
129E0   00000815 A81722F8 B8200000 27267853   E041B041 8802A806 CD02A802 7723750E   *.......8........................*
12A00   56236698 66986701 77987798 880AB840   10A10082 8100A814 580FE882 A80AB840   *............... ..........Y.... *
12A20   10A10080 8100A804 80E88101 B1008802   A8065717 D7015797 A8534101 00000000   *.........Y..........P...........*
12A40   00000000 60300093 C3E7C4D2 D3E3D97C   252E3488 21359104 21B5391D F982A86A   *........CXDKLTR.............9...*
12A60   B8400F00 8001B840 030EB840 108100C2   330A2928 D10229A8 41885488 57258812   *. ..... ... ...B....J...........*
12A80   B84020B6 0000C330 00007505 00300000   C3581488 B920001A 31839304 33F833F8   *. ....C.........C............8.8*
12AA0   53A55325 33983398 3688800D 30819302   B8872126 10931B53 CB02A806 6B0ED380   *..............................L.*
12AC0   6B8E21F8 11F8619F A80E2928 F1028816   56256698 66986099 80E8489A 77A844F8   *...8.8......1............Y.....8*
12AE0   44F8649D AAD4B840 0F008088 389AA810   00000000 00000000 BD200000 B8000000   *.8...M. ........................*
12B00   B84020B6 00013378 00001001 00300001   2AF00001 337C592D D14259AD B8403540   *. ...............0......J.... . *
12B20   350E9504 358E5502 9508B840 109900C2   B8403500 621F2298 2298B840 0F003085   *........... ...B. ......... ....*
12B40   8002B840 030EB840 108100C2 330A3488   3085BA20 20004283 8408611D 11981198   *... ... ...B....................*
12B60   12153295 91029302 BC8BCD04 8120499A   43013398 3398621F 22982298 11A8FD9A   *................................*
12B80   22262113 11981198 88102093 11F811F8   3181211B 22192298 2298911A 41A1840D   *.............8.8................*
12BA0   94016188 A1041203 32839102 9302BC8B   4388621F 22982298 A81A0000 00000000   *................................*
12BC0   00000000 BD200000 BE200000 BF200000   B8000000 B84020B6 00013378 00007001   *..................... ..........*
12BE0   00300001 2BBC0001 337CCD02 A8D0621F   22982298 641D4498 44988020 4882F580   *..............................5.*
12C00   983CF502 98B8FDB6 641D4498 44986388   A3042226 21131198 11982219 22982298   *..5.............................*
```

```
12C20   11808806 11F811F8 3181B840 0508212E   10A52928 E1FD29A8 B8400D00 881E4301   *.....8.8... ............. ......*
12C40   33983398 8804B840 05084081 40A1B920   20004183 B8400D00 881ACD04 B800CFC0   *....... .. . ........ ..........*
12C60   252E592C E1EF59AC B8400F00 B8400508   B8403540 438880FE 389AA810 00000000   *......... ... ... . ............*
12C80   00000000 BF200000 B8000000 B84020B6   00013378 00004001 00300001 2C7C0001   *............. ........ .........*
12CA0   337C7388 8060389A B8402170 00013378   00002388 9314B840 1D08B840 3540BC01   *......... ............. ... . ..*
12CC0   309E11A8 CC184108 1198B10C 9802A822   1098A918 A9A3A8EB A818AAB2 ABFCE47F   *..............................U.*
12CE0   417811F8 11F8E1FE E40F6388 4318B10E   98048580 A9C31098 A838A80A A810A82F   *...8.8..U............C..........*
12D00   A818A87E A8809308 39005158 A8089308   39005158 51483980 A85D3800 690C5158   *................................*
12D20   A0013880 98048802 5148698C A8713D80   A8756188 5118BC01 309E659B BC01309E   *................................*
12D40   5280BD20 F1881403 24E08820 24C08826   55785578 F982C4EE 93083900 4168C4EE   *....1...............9.D.......D.*
12D60   45685158 621F2298 2298A857 621B1401   24E08823 A827621B 140124E0 24C0882D   *................................*
12D80   A83381FE A8028101 93083C00 F982C4FF   5180BC01 309E1068 8802A8DF 67196599   *............9.D.................*
12DA0   57A0983E 88B511A8 692071A0 980A6722   97041798 69A0A826 5788641D 44984498   *................................*
12DC0   972055A8 0D0757B0 980C57A0 44014498   449888E3 A8116FA0 64A24798 97047501   *...................T............*
12DE0   A9216422 692071A0 1780A82B 690FE1E1   698FCD06 CD86DD06 A808A8E0 A936D108   *..............................J.*
12E00   698F621F 22982298 2226B920 01002183   2D80BC01 309E2C81 2C024558 2D82BC01   *................................*
12E20   309E2C83 11A86A0F F2089920 C2015118   B5FF894A D202BC01 309E2F01 C78D980A   *........2...B.......K.......G...*
12E40   11809804 BD20FF00 25976519 1590FA02   95019501 E5FE6599 55A80D07 64226B20   *....................V...........*
12E60   2608E603 C6038802 93014B82 47F877F8   278F5788 372817B0 984CFA82 A1012B01   *..W.F........8.8................*
12E80   22192298 2298B39B 88042B2C EB861108   88029101 49832226 E2FC6A8F 4101619B   *........................S.......*
12EA0   64A24081 23133398 33988806 2093B840   05082219 22982298 2135A104 21B5B840   *.. ............ ............... *
12EC0   2300B840 35404F83 44014498 449889DF   71A05780 17B09813 4083A863 BC01309E   *... . .................. .......*
12EE0   5188B00D 8810B00F 8832BC01 309EB840   2803A836 AA39619B BB200204 11A84428   *............... ................*
12F00   0D075118 940131B8 98092226 294869A4   2CC82219 22982298 611BA833 22266B24   *.................H..............*
12F20   2BC82219 22982298 A841E984 8004A814   8008A810 BC01309E 5188B840 2B00A802   *.H........Z................ ....*
12F40   AA85800C 690F0158 698FAA8F 22192298   2298B840 0F003085 8001B840 030EB840   *................... ....... ... *
12F60   108100C2 330A2226 500823A2 30309001   0078BC01 309E3430 3530B88B A8CDBC01   *...B............................*
12F80   309E4118 B4FF895B D201E2FD A955621F   22982298 B8400F00 30858400 5488B840   *........K.S.......... ......... *
12FA0   2C810050 690FD10C 698F2135 A10421B5   B8403580 252E5625 66986698 23012703   *......J.......... ..............*
12FC0   73B0882A 592CE1EF 59AC6422 611B4181   B8400F00 B8400F00 3788641D 44984498   *................. ... ..........*
12FE0   22266924 29C82219 22982298 ABB16422   6E0FEE04 611B4181 22262904 6992EEE8   *.....H.........................Y*
13000   E6FD2313 883E2535 5C00CC82 A8342307   B3E09802 A82E11C8 E31E880A B3168806   *W......................HT.......*
13020   8101DC02 91012307 F3E08808 231B31B0   8812A80E B8402170 00013138 7C050658   *........3............ ..........*
13040   A802D602 6E8FF608 881E2322 3900B1FF   8802A80E 39016988 39026989 3903A101   *..O...6.........................*
13060   698A3081 B8400508 21072219 22982298   619155A8 0078E007 BC0130CE 6C94BC01   *..... ..........................*
13080   30C86C95 BC0130C6 6597690F E9046719   AAD9E1F3 698F6719 97026799 AAE56519   *.H.....F....Z....R.3.........V..*
130A0   95026599 97020D07 6C209402 54389810   65225701 77987798 8BC967A2 97048400   *.........................I......*
130C0   6CA07501 40881190 11901190 11908480   E00F8804 55F0B885 4088690F E1EF698F   *.... ................0.. .......*
130E0   61195118 9103E1FE 619B2226 23133398   33988832 3C039304 22192298 22986119   *................................*
13100   54389822 51085078 880EBC01 309E3401   45C09812 9302B88F F1018C5F BC01309E   *........................1.......*
13120   33012438 8C696D0F D5106D8F 671B6799   AB792298 22982598 B8401900 26136698   *........N................ ......*
13140   66988836 251B15A0 88308202 830111C8   0907BC20 00046498 51B09802 51804710   *...............H................*
13160   3738881A 27388816 B98D6601 66986698   88080907 152888C2 A8298000 A812B98E   *................................*
13180   66016698 6698880F 09071528 88158002   A85B6722 00000000 00A80000 008131A4   *................................*
131A0   00000000 B8400F40 B8402170 00013378   0000B840 35005001 00000000 60680399   *..... . . ......... ............*
131C0   C3E7C4C8 D6D3E37C B8401900 2626292C   E99E3188 91228405 87F91E00 76388802   *CXDHOLT.. ......Z........9......*
131E0   A8329101 BC8D6901 B1288802 A826A828   31889122 BF206C61 150157B0 8802A814   *................................*
13200   6107E160 B1608802 A80A6901 B1288808   293FF984 8100A851 391AE1F0 D104399A   *..................9........0J...*
13220   8101A85D 50010000 00000000 61020080   C3E7C4C8 D9D8E340 B8200000 24884222   *................CXDHRQT ........*
13240   88984920 C9022222 B8400D40 BD200000   8882591C B1038802 A87A2626 8080B840   *....I.... . ................... *
13260   2B00A802 A8062135 910421B5 B8401081   00C2800F 55A8B840 2803A800 B8400F90   *............. ...B..... ..... ..*
13280   BD200000 55E88836 809E589A 36885388   A8120000 00000000 00000000 BC200000   *.....Y..........................*
```

```
132A0   B8000000 B84020B6 00013378 00000801   00300001 32940001 337C6388 A8432788   *..... ..........................*
132C0   4288B840 21700000 EBE00405 24887288   8100A89D 80E88101 A8A377A8 11A8492A   *... ...............Y...........*
132E0   880F4198 1202B840 0D40BD20 0000881D   591CB103 8802A808 51153615 16B88810   *....... . .......................*
13300   5788B840 1398BD20 000055E8 883BA821   7788980A B8400F80 BF200000 A80AB840   *... .......Y......... .......... *
13320   168500C0 BF200000 2909A101 298911A8   492A4198 1D00E5FB D5021D80 492CE1BF   *...................V.N.........*
13340   D18049AC 4930A101 49B0809E 389A3688   7388B840 21700001 33780000 63888060   *J..................... .........*
13360   8101A92D 41010000 00000000 60290278   C3E7C4C8 D9E2E340 B8200000 34884103   *...............CXDHRST ........*
13380   A0169116 31834115 31914117 319F4121   910C3197 411B31A3 411D31A1 80008101   *................................*
133A0   319B8003 8182319D BC219C60 41253193   800B8100 3199801C 318F398C 398DB840   *............................... *
133C0   21700000 F5200000 CF8CDF8A DF02A804   B8400509 A808B920 3005B840 0000A869   *....5........... ......... ....*
133E0   41010000 60340314 C3E7C4D2 C3E5C640   37883521 B4038802 A804B504 980EB408   *.........CXDKCVF ...............*
13400   8802A804 B5488804 87011088 759D3517   A50CB500 982E75A1 3523759B 351F7597   *................................*
13420   35157599 35137595 708D768E 3503A516   94167583 3509A50C 75897093 7091709F   *................................*
13440   8700A808 B9203007 B8400000 A8454101   00000000 60340313 C3E7C4D2 C3E5C240   *......... ..............CXDKCVB *
13460   B8401900 BD213464 2F2CFF86 BF200144   A804BF20 01BC27B5 24AE2226 77A84F34   *. ..............................*
13480   972C4798 27A28710 2F81BF20 0008D780   2783208F BB217C00 3F003E01 93024920   *.............P..................*
134A0   B1CC8808 B14C8804 73187728 23966718   97142F94 22192298 2298B840 2300A861   *.......................... ....*
134C0   BF217C00 79001718 83407B82 9701BB20   79B28004 EC0134EA 93028005 BA204040   *......... ..............      *
134E0   BC0134EC 81407981 A88B3201 72839302   9702B88B 40885001 00000000 61330453   *..... ............. ...........*
13500   C3E7C4C9 C3E2D57C 2726491E F1208806   B9200400 16D07901 B1108802 A806B920   *CXDICSN.....1...................*
13520   800016D8 391DF103 8806B920 002016D8   391EC180 9806B920 000216D8 7901B110   *...Q..1........Q..A.........Q....*
13540   8802DDCC 292CF948 340E4402 55A84D34   883EB920 000816D8 45984920 B1488802   *......9...............Q.........*
13560   A80A310E 1900F101 88029504 952C7596   A5025901 381EE806 7994B800 E1629101   *......1...............Y.........*
13580   7994293F D11029BF B9200200 16D8A817   391EE902 A81DB920 000416D8 A8258001   *....J........Q....Z.........Q....*
135A0   B840030E 340AB840 32114388 3085B840   10B90082 B8400F38 34014498 44984488   *. ..... ....... ..... ..........*
135C0   8804B840 05503081 64134498 4498B840   06118100 3983611B 31A1381A E060D001   *... ........... ................*
135E0   B8402F0A B800CFC0 4C20E47F C446980E   4C2DE420 88082C38 D4082CB8 A8263C1E   *. ........U.D.....U.....M........*
13600   E403C401 980C2D38 E5089806 B9200001   17D03C1E E406C406 880AE402 880C2D38   *U.D.....V...........U.D...U.....*
13620   E5088806 B9200006 17D06783 3D1EF520   88166D01 B5288802 A80A2D2C F5028804   *V.............5...............5...*
13640   B800D972 B800D92E 2D3FF520 9804B800   D972B840 20B60001 53500000 02050030   *..R...R...5.....R.. .............*
13660   000153EA B800D972 D7E3C650 05040000   00000000 00000000 63270492 C3E7C4C2   *......R.PTF..................CXDB*
13680   C2E6C97C 981B5A53 35218804 B800D222   850435A1 3D833588 39021518 95042E28   *BWI...........K..................*
136A0   56302E37 56302E2C 56302E36 5630B800   D1D84101 00000000 00000000 60300434   *...............JQ...............*
136C0   C3E7C4D2 E2E3C1D3 390DF110 88722501   880A090A F1109804 55985598 27222920   *CXDKSTAL..1..........1...........*
136E0   F1809802 77227126 1107E11E B118980A   390DE1F7 398DB801 767C292D F1409811   *1.................7.........1 ..*
13700   390DF108 980E8001 B840030E 340A4085   B8403211 5588880C 51078808 B8401499   *..1...... .... .. ........... ..*
13720   0080A806 B8401081 0082390D F108980C   D108398D 43888002 B800D1FA B800D178   *..... ......1...J..........J...J.*
13740   2920F140 98068087 8095A812 212DF004   88048084 A808F002 9822D986 808BB800   *..1 ..........0.......0...R.....*
13760   D1DA2501 090AD984 55985598 B8401499   0080292D D12029AD B800D178 27222920   *J.....R...... ......J.....J.....*
13780   F1809802 77227838 D00878B8 2D2C7126   1107E11E B1148808 B1128804 B80177E6   *1..............................W*
137A0   B80177EC D7E3C650 05020000 00000000   62320135 C3E7C4C5 D9C3D440 4780E7F0   *....PTF.............CXDERCM ..X0*
137C0   34884E02 96046318 11A82927 88022198   B4188856 4E208802 A80C4E21 B603880E   *................................*
137E0   11A8B602 8824BE01 37FAB800 D2321188   9818BE01 37FAB800 D21A2E2D D6022EAD   *.............K...........K...O...*
13800   4E1BD680 4E9B4388 60883610 3710EE02   A808BE01 37FAB800 D23827AF 11888804   *..O........................K.......*
13820   37101F88 4388B801 49C0272F 36303730   11888812 1F083730 87038600 43884F83   *................................*
13840   47A1B800 D1D88702 A811D7E3 C6500504   00000000 00000000 63430422 C3E7C4D2   *....JQ....PTF.................CXDK*
13860   E2C4D440 31B89866 77A82F28 880E2798   3C208810 BC0138F2 B800D232 BC0138F2   *SDM ..................2..K.....2*
13880   B800D21A 3C218815 B4038819 11A83902   91043198 12882510 CD82A802 DD06B402   *..K.............................*
138A0   880AA83A BC0138F2 B800D238 CD02A80D   11A82110 B1008815 02762C00 1438981D   *.......2..K......................*
138C0   11981198 21981688 7900E10F 6010E0F0   01587130 80036110 7130B887 A7047900   *................0...............*
138E0   CD84DD06 A808D180 A802E17F 7980B801   49C0282D D00228AD 381BD080 389B4088   *......J...................... .*
13900   41010000 60290366 C3E7C4D2 C2C8D940   3091B405 88443D0D CD82A804 85043D9C   *.........CXDKBHR .................*
```

```
13920   37218832 2D28ED0A 262E884C 682CF802   A8463D1A FDC2D501 3D9A2D2C 21889114   *..............8......BN.........*
13940   1288B840 10810082 FD04B840 1D008508   3D9CB800 D178B800 D2228520 2836E020   *... ....... ........J...K.......*
13960   8802D580 2837E010 8802D540 24885008   BA013A9A 4288A82C 30912488 BA013AB2   *..N.......N ....................*
13980   4288C88A 2937F110 881AC110 A80E2836   E020880C 2937F110 980AD110 29B7A804   *..H...1...A...........1...J.....*
139A0   B800D21A 2D2CFD02 A870B405 88C03F0D   D7203F8D 254E2688 DF083711 97023791   *..K.............P...............*
139C0   A818BA01 3AB2B002 8804B801 3A4ABA01   3AB25900 01388802 A870BA01 3AB2DF04   *................................*
139E0   5881A806 59000138 98600608 B8402170   00013B08 3005B100 8804B800 D2383F0D   *............. ..............K...*
13A00   DF0C2188 51A82588 5185B800 D1D8E7DF   3F8DB920 00013191 A863FD84 262EA81C   *............JQX.................*
13A20   2F44CF82 A81D264A ED82A810 11A8692A   61981E00 CE82A804 B8013B90 B405881C   *................................*
13A40   2488BA01 3AB2B001 8804B800 D238BA01   3ABCBA01 3AD4BA01 3ADAA853 8001BA01   *............K........M..........*
13A60   3A9AB840 21700001 47800004 A8658002   254EBA01 3A9A5800 BA013A9A 58010608   *... ............................*
13A80   BA013A9A 5106A12C 1688B840 21700001   47805005 9504BE95 A891B840 3C880081   *........... ............... ....*
13AA0   C902A802 2088B840 21700001 48582B05   A80FB840 3A08C902 A8712088 3D0DD520   *I...... ........... ..I.......N.*
13AC0   3D8DB840 21700001 46100A05 B1008802   A8892088 3D0DE5DF A81B4141 3F0DEF04   *... ..................V.........*
13AE0   EF8C2088 A101E7F7 3F8D41C1 20889101   E7FB3F8D 41C12688 41889114 1288B840   *......X7...A....X....A......... *
13B00   1D006088 BE200020 B8401900 6488BA01   3AB2BA01 3AB20708 BA013AB2 01087008   *......... ......................*
13B20   1688B840 31A2BE20 00008848 6800C882   A8426602 3111A103 3191B840 21700001   *... ..........H............ ....*
13B40   46105805 B1008802 A8430708 31117118   31913F0D DF02A804 BECDA812 6188912C   *................................*
13B60   51869504 BA013ADA BE885087 52888100   A86BA867 81FFA871 00004101 00000000   *................................*
13B80   00000000 60300288 C3E7C4D2 E2C9C940   1402B405 89CEBA01 3C9AB000 8802A8EA   *........CXDKSII ................*
13BA0   BA013C76 37110718 37918602 0408BA01   3C9ABE89 05084101 15B098CE 3F0D4588   *................................*
13BC0   95045901 C902A804 D7803F8D BA013C9A   0608BA01 3C9AC882 A804D708 3F8DDF08   *....I...P.............H...P.....*
13BE0   5E805881 EF8EA83C C806CF06 9502A84E   CF02A896 BA013C9A 0708BA01 3C9A0108   *........H.......................*
13C00   70086288 1688B840 31A2BE20 0000881F   3F0DDF1C 58016602 56822688 59011058   *....... ........................*
13C20   58819502 9502BA01 3C9A5030 BE89A816   6800D704 3F8D9504 C882A84E 26883111   *..................P.....H.......*
13C40   61183191 6518EF06 9503E5FC A883E7F7   3F8DDF04 B800D1D8 418815A8 410151B0   *..........V...X7......JQ........*
13C60   982C11A8 81023191 BA013C94 37110718   97023791 A8BB3D0D D5203D8D B8402170   *........................N.... ..*
13C80   00014610 0A05B100 8808B800 D238B800   D2222088 3D0DE5DF A821B840 3A08C902   *............K...K.....V.... ..I.*
13CA0   A8192088 8000BA01 3CFEB840 21700001   47800805 4800BA01 3CFE4801 BA013CFE   *........... ....................*
13CC0   45889504 58000608 BA013CFE 58010708   BA013CFE CF02A810 5602681C BA013CFE   *................................*
13CE0   681DBA01 3CFE9502 95025010 BA013CFE   BE89CF86 9503E5FC A837B800 D1D8B840   *......................V.....JQ. *
13D00   3C880081 C902A802 2088B840 21700001   48587205 20884101 00000000 60300281   *....I...... ....................*
13D20   C3E7C4D2 E2C2E2C3 3091B422 98D8390D   C982A804 8104399C 31889123 16101710   *CXDKSBSC.....Q..I...............*
13D40   211D71B0 8802A89E 37218892 390DD120   398D6488 2688B840 21700001 46100A05   *..............J........ ........*
13D60   B1008802 A680A501 468877A8 57083791   BC013DEE 390D6E00 FE06B000 8820A866   *................................*
13D80   2E20CE06 B0008816 A84C55A8 2D2A2598   5E00DE0A B0008806 808CB800 D1FAD902   *............................J.R.*
13DA0   A820B000 88145E05 BC013DEE 60388802   A834BC01 3DEE0638 982C390D E1DF3091   *................................*
13DC0   A873B000 880C9505 0608BC01 3DEE5030   BE89B800 D1D8BF01 3DF8B800 D21ABF01   *....................JQ...8..K...*
13DE0   3DF8B800 D232BF01 3DF8B800 D238B840   3A08C902 A8114088 2D2DD502 2DAD3D1B   *.8..K....8..K.. ..I... ...N.....*
13E00   D5803D9B 70886488 2688B840 21700001   47800A05 46886E00 FE02A84B 2E20CE02   *N.......... ....................*
13E20   A85155A8 2D2A2598 5E00DE02 A85D5806   90020608 95053F11 A7013F91 B8403C88   *............................. ..*
13E40   00835010 B8403C88 0081C902 A810BE8F   38113091 B8403C88 0083B800 D1D8B840   *..... ....I.......... ......JQ. *
13E60   21700001 48585005 A829D7E3 C6500504   00000000 00000000 62960238 C3E7C4D2   *..........PTF...............CXDK*
13E80   C4E2C9C9 F3088808 340E4402 24B88802   A8044222 A80AB840 0F002928 D11029A8   *DSII3.................. ....J...*
13EA0   42224788 4588792D C90A8099 B8402F08   B800D178 79291518 5900F101 880E381A   *........I.... ....J.......1.....*
13EC0   B0FF8864 8084389B 809FA821 D1015980   81FF399A 792CC982 F9922828 792DC9C8   *............J.........I.9.....IH*
13EE0   D8C6B840 14A900C0 B800D178 E1FE79AC   5900D102 59802828 F008882C E0F728A8   *QF. ......J.......J.....0....7..*
13F00   5900D108 5980B920 128CBD20 142C15A8   A50425B5 B8401081 00C22626 8080B840   *..J.................. ...B..... *
13F20   2B00A84B B800D178 2828E0EF 28A8282C   F00288DA 782CF008 886E3688 25889514   *......J.........0.....0.........*
13F40   B8400D58 BC200000 47B8882E 9530B840   0D58BC20 0000896E 47B88826 4388B840   *. ............. ............... *
13F60   131044E8 896074B8 8802A811 B8401699   00802854 A00128D4 A8162928 E1DF29A8   *...Y......... .........M........*
13F80   A8062854 A00128D4 B8400F98 BC200000   73887929 13183302 38549001 38D49344   *.......M. ...................M..*
```

```
13FA0   B840108A 00826388 254E7188 912C5606   61B88804 9504A80B 95045107 88065106   *. ..............................*
13FC0   5182A80D 11A87929 71985182 254E5801   A0015881 006898A6 20CEA518 56888408   *................................*
13FE0   638E6188 23881D10 3DC49101 9301BC8B   282CD001 E0FD28AC 610621AA 25266109   *........D.......................*
14000   51B58000 589C630E B8400520 A80AB840   21700001 45580004 20C12944 F140880E   *........ .... .........A..1 ..*
14020   244A492C F1809806 11A88101 21C1B840   108100C2 262611A8 69808083 6881B920   *....1........A. ...B...........*
14040   128CBD20 143015A8 A50425B5 B8402300   75887929 15185900 E904B800 D178E1F7   *........... ..........Z...J..7*
14060   5980B840 3540B840 0F002928 D190E1DF   29A82937 E1FB29B7 20AE370E 77027588   *... . . ....J...................*
14080   792A1518 5900D102 59802588 9514B840   1D187929 75881518 26885202 282CF002   *.....,J....... ..............0.*
140A0   882C614E 98065800 D0085880 5688254E   51061180 884461B8 8802A806 7188912C   *................................*
140C0   51869504 A817B920 1013B840 00002937   D12029B7 B8401081 00C2B920 1490BD20   *.......... ....J.... ...B......*
140E0   15B015A8 A50425B5 262611A8 6183818D   6981B840 2300B840 3540282C F804B840   *............... ... . ..8.. *
14100   0F00370E 77027588 79291518 5900F104   881872A2 F1028806 782CD001 78AC1008   *..............1.....1...........*
14120   E1805980 0508381A A81472A2 782DE07F   78ADF938 1008E1F4 59800508 8060B840   *.................9....4....... *
14140   2F082C2C FC0E2928 D19029A8 26266952   D18069D2 27889714 B8401D28 F4028808   *........J.......J..K,.... ..4...*
14160   F5089804 B800D178 B8403540 782CD001   78AC1008 E1F45980 A8415001 00000000   *5.....J.. . .........4..........*
14180   00000000 61320242 C3E7C4C4 C4D3C2E4   340E4402 24B88802 A8044222 A80AB840   *........CXDDDLBU.............. *
141A0   0F002928 D11029A8 47887929 88E08099   792DF180 98DA3121 8818BD20 000251C0   *....J...........1...............*
141C0   8804808F A8CA3123 254351C0 98048091   A8BE8086 2928C902 A8B67588 79291518   *...................I..........*
141E0   5800F001 880E391A B1FF8862 8084389B   809FA89C D0015880 81FF399A 792CC982   *..0..........................I.*
14200   F9902828 792DC9C6 D8C4B840 14A900C0   A882E1FE 79AC5900 D1025980 2828F008   *9.....IFQD. ............J.....0.*
14220   882CE0F7 28A8B840 108100C2 8080B840   2B00A816 5900D108 5980B920 1490BD20   *...7... ...B... ......J.........*
14240   15BC15A8 A50425B5 A84AB840 0F002928   E1EF29A8 26266952 680131A5 610731A7   *.......... .....................*
14260   282CF83C B8401081 00C2B840 21700001   49705E05 252E5788 79291518 5900D140   *..8.. ...B. ..................J *
14280   5980E902 A80EE1F7 5980B840 35408087   B8402F08 4288B800 D178B840 0F00242E   *..Z....7... . ... ......J.. ....*
142A0   3121883E 2C2C3723 B84031EE BA200000   88040708 CF068091 4788A83C F4028822   *........ ..................4...*
142C0   2837F004 980C2836 F0089816 80874788   A8264788 781FF008 983E8083 389B809F   *..0.....0..............0........*
142E0   A8164788 70A2B840 20B60001 4E380000   4A050030 00014EC2 75887929 15180068   *...... ..............B.........*
14300   8804389A AA2C5202 5900282C F002988F   B8403540 B8400F00 42A24588 49291518   *............0.... . . ..........*
14320   5602682C F00288EA 6288254E 4188912C   16885106 11808812 61B88802 A80811A8   *....0...........................*
14340   49294198 51869504 A8194222 254E8802   A88C3085 8001B840 030E360A 638E6388   *......................... .......*
14360   84084478 31882788 76451691 91029702   BC8B2828 E0DF28A8 282CD002 E0FE28AC   *................................*
14380   212A3186 26266135 31894829 45880518   5502594C 585029CC 28D08003 28D128D2   *..............................J.K*
143A0   800028D4 28D628D7 28D328D5 28D82788   97447081 70837085 708780A0 7885512A   *...M.O.P.L.N.Q..................*
143C0   562621AA 61352626 61B53588 951C659E   A50425CE 80035880 80005881 330E5E01   *................................*
143E0   96015F00 80AC6738 991D5E81 56889504   BE855086 518861A8 5185A504 4188912C   *................................*
14400   51862856 900128D6 65885801 A0018802   A80C2626 312569D2 68813127 61878000   *.......O................K........*
14420   810231A1 39832143 31A3282C F80AB840   21700001 45580805 492DD180 49AD4829   *............8.. ..........J......*
14440   45880518 5800D080 F852E0FC 58808060   B8402F0A 55025928 D110582C E0028806   *........8........ ......J.......*
14460   482CE844 A804E17F E1DF59A8 2928D110   29A82937 D10429B7 9514B840 1F18A514   *..Y..........J.....J...... .....*
14480   27889714 B8401D28 582CF002 880A254E   5801A001 8802AA05 B8403540 E0FC5880   *..... .....0.......... . ....*
144A0   482CD001 48ACA85B 59A89514 B8400D58   BF200000 47B8883E 9530B840 0D58BF20   *............. .............. ....*
144C0   0000885A 74B88826 7688B840 13A8BF20   000077E8 884874B8 8802A815 B840169C   *.......... .......Y......... ..*
144E0   00C0BF20 00005810 A0015890 A8165810   A0015890 A8065914 E1DF5994 B8400F98   *.............................. ..*
14500   BF200000 25882854 900128D4 9544B840   109D0082 48294588 05185502 A8B3B920   *...........M... ...............*
14520   1013B840 00002788 971420AE B8401D28   47885900 D1045980 5202292C F1028804   *... ......... .......J.......1...*
14540   B80140FA B80140CE 50010000 61320243   C3E7C4C4 E2D3C2E4 B8401900 272E7588   *.. ... ..........CXDDSLBU. .......*
14560   79291518 5502792D C9262788 34889714   9514B840 0D18884A 3805E0F0 B0A09818   *........I......... ........0....*
14580   B8400F18 33E8883A B84010A9 0082A81F   57882588 A82B6388 B8401388 BE200000   *. ...Y... ................ ......*
145A0   66E8881E 6805E0F0 B0A09817 B840169C   00C0BE20 000066E8 8800B840 10AC0082   *.Y.....0..... ...........Y... ....*
145C0   A82B9514 97145900 7980950F 970F5900   E1F37800 E0100158 79809509 97095101   *................3...............*
145E0   7181282C F0028812 95049704 80150078   56017681 95029702 B88B4388 A8A74101   *....0...........................*
14600   00000000 60290086 C3E7C4C4 D3C3C240   B8401900 3D0D8407 37119701 3791DD0E   *........CXDDLCB . ..............*
```

```
14620   BA014756 689CBA01 4756689D A8063711   97023791 BA014756 86FF6F1F FF848600   *................................*
14640   A81ADD18 B0008828 04180608 61889137   1488BA01 47564030 BE89A814 B6008802   *....................... ........*
14660   6E366038 8802A8FE 64183111 61183191   BA014756 FF048600 A8200608 11A86934   *................................*
14680   912C6198 14886008 DD10B000 88286418   BA014756 4030BE89 A81CB600 880A4788   *.................... ...........*
146A0   A7017488 46106F1F 60388802 A8B86418   31116118 3191BA01 4756EF88 B0008878   *................................*
146C0   C808A874 B0008802 C80AA89A 37119703   3791A864 9403DD0D C882A811 060811A8   *H.......H...............H.......*
146E0   69276488 1498682C 692DFE96 D804E1FB   A81EF882 A804E0FE D508C894 C812D080   *...........Q.....8.....N.H.H...*
14700   A80ED804 D104A808 F88CD001 D504E07F   68AC69AD 3D8DBA01 47564884 BA014756   *..Q.J...8...N...................*
14720   4885BA01 47564880 BA014756 45083711   47283791 0418A832 BA014756 692A8802   *................................*
14740   A806B000 8802A81E 45083711 47283791   0418BA21 4760B840 3A08C902 A8272088   *...................... ..I.....*
14760   37914038 880481FF A95B8100 4008A961   41010000 60300439 C3E7C4D2 E5D9D340   *.. ........ ...........CXDKVRL *
14780   B8401900 8000BA01 483C8407 681CBA01   483C681D BA01483C 6F1FFF88 8000BA01   *. .............................*
147A0   483CA818 68360608 BA01483C 61889137   14886418 4010BA01 483CBE89 FF088000   *................................*
147C0   BA01483C A81E11A8 69346488 A101912C   14984010 06086418 BA01483C 4010BA01   *..................... ......... ...*
147E0   483CBE89 8000EF86 BA01483C A82AD080   6F2CFF82 A802D001 BA01483C 940311A8   *................................*
14800   69276488 14984804 BA01483C 4805BA01   483C4800 BA01483C 8000BA01 483C3711   *................................*
14820   47283411 37914008 BA014830 3491A8B1   B8403C88 0083C902 A80EA816 B8403C88   *...... .......... ....I...... ..*
14840   0081C902 A8022088 B8402170 00014858   2B052088 6C00DC0E B8401900 05083288   *..I...... .................. ......*
14860   8001B840 030E340A 43888100 39833982   36882388 B8400BC8 A8044388 A80B6488   *... ................ .H........*
14880   B8400611 23885008 B8403C88 0081A839   41010000 60340311 C3E7C4D2 C3D7E840   *. ....... ..............CXDKCPY *
148A0   B8200000 BE200009 341764A8 8802A818   2C1FF403 8808D906 3C202CB2 A808B900   *.....................4...R.........*
148C0   F3580000 080CA808 B900F358 00001002   B5008802 A8062C2D D4022CAD A83F4101   *3.........3..............M.......*
148E0   00000000 60300056 C3E7C4D2 C4E3D340   B8200000 BE200009 341764A8 8802A852   *........CXDKDTL ................*
14900   2D2CFD02 A8343920 B4028802 A8069101   29D0A824 B4038802 A80CB100 880429D2   *...............................K*
14920   A8028500 A812B404 8802A804 29CCA808   B920300E B8400000 A8028500 B5008802   *....................... ..........*
14940   A80CB900 F3580000 80078500 A8028503   A80AB900 F3580000 80068500 A86F4101   *....3...............3...........*
14960   00000000 60340307 C3E7C4D2 C3D4D740   B8401900 282CF001 9826BE20 1490BF20   *........CXDKCMP . .....0.........*
14980   15B867A8 A70427B5 24268183 4981B840   1A8000C1 B8402300 2928E1EF 29A8A831   *............... ...A. ...........*
149A0   BE20128C BF201428 A8294101 00000000   00000000 60290099 C3E7C4C5 C4C2E240   *........................CXDEDBS *
149C0   B8400BC8 A804B840 051030A1 55283D83   B800D1D8 41010000 00000000 60300063   *. .H... ...........JQ...........*
149E0   C3E7C4D2 C6C2E4C6 B8401A80 00C42937   C12029B7 272E880A 79298806 17187900   *CXDKFBUF. ...D..A...............*
14A00   F9B6B840 0F002426 4107B19E 882EBE21   9C606129 A10161A9 358833A8 44A8B840   *9.. .......................... *
14A20   21700000 C3301005 5388B900 F3580000   80023388 8844A82C B80140FA 2928D180   *....C.......3............. ...J.*
14A40   29A8B840 21700000 F1A80000 B710882A   9806B840 0509A822 3117A102 31973903   *... ....1......... ..............*
14A60   A1023983 B8402170 0000F520 00007708   8808B920 1013B840 0000B840 21700000   *..... ....5........... ... ....*
14A80   D3380004 B8403540 41010000 60290108   C3E7C4C5 C5E34040 2928E91C 23018838   *L.... . .........CXDEET  ..Z.....*
14AA0   33983398 2938C902 A80AB840 0F00B840   0509A824 B8403540 69008802 A80B292C   *......I.... ... ..... . ........*
14AC0   F992491E F9848040 A8028008 B8402B00   A81FA821 B8014CFC B800D3CE 41010000   *9...9.. ..... ............L.....*
14AE0   00000000 60290071 C3E7C4C3 E2C1D77C   292CF912 242E2944 D982A80E 27264C2C   *........CXDCSAP...9.....R.......*
14B00   7C9CB800 CFC0310E 140266A8 222611A8   29802683 4788792A 17987C00 49298802   *................................*
14B20   A8124920 C984F4C0 880AB840 21700001   53506205 F4109860 4222282C F020984C   *....I.4.... .........4.......0...*
14B40   29378010 22260168 88867C00 970627A2   818F2981 DC263C21 7C809701 B8403A4E   *............................ ..*
14B60   00000000 C902A860 A80A9701 B8403A08   C902A854 7880BC8F 3C8330A1 4222B840   *....I........ ..I.............. *
14B80   1A8000C1 B8402300 B8403540 B8402170   00000000 0004A859 818D2981 2603B920   *...A. ... . . ..................*
14BA0   008016D0 7900F110 9808B920 004016D0   A8124920 B1808802 A80A7903 298CB920   *......1...... ..................*
14BC0   000216D0 2683A84D B920000D B8400000   42223588 B8400F00 8001B840 030E330A   *............. ....... ..... ....*
14BE0   B8401083 0082B840 320B3085 30A11128   3983399B 811E3982 30912842 BE014C28   *. ..... .........................*
14C00   2843BE01 4C287900 F1208810 72887C06   97077010 BE014C28 BC892788 8020B840   *........1...................... *
14C20   2F0A4222 2226A891 B8403C88 0081C902   A8026088 B8402170 00014858 7B056088   *.......... ....I...... ..........*
14C40   50010000 60720438 C3E7C4C2 E2C3C940   212E8816 1D298812 B920128C BF201390   *........CXDBSCI ................*
14C60   17A8A704 27B5B800 CFC02726 55287D80   85837D81 B8401A80 00C1B840 2300B840   *.................... ...A. ... *
14C80   35404101 00000000 00000000 60290029   C3E7C4C2 E2C4C940 2D44F510 985ACD06   *. ..............CXDBSDI ..5.....*
```

```
14CA0   A81CB800 D47A2646 F5409808 DD02A80F   B8015498 690B6F0C 17389802 A813244A   *....M...5 .......................*
14CC0   492CF101 9806F140 9808A82B 0909F140   9831F580 88066F0C 97016F8C 24AE2928   *..1...1 ......1 ..5.............*
14CE0   D10829A8 26264C2C 6C9CCC82 FC84B800   D4E233A8 B800D4EE B800D49E 2828F040   *J..............MS....M...M...0 *
14D00   98100909 F140980A 2844F020 9804B800   D3CE8040 B8402B00 A802A828 2828F040   *....1 ....0.....L.. . ........0 *
14D20   98222246 B8400F00 33E88818 2809A001   2889B840 20B60001 4E380000 00040030   *..... ...Y........ ............*
14D40   00014EC2 B8403540 41010000 60290073   C3E7C4C3 E2E6E240 B820EDEA 2928D180   *...B. . ........CXDCSWS ......J.*
14D60   29A82788 9714B840 1D288503 A8174101   00000000 60290097 C3E7C4C5 C1D3E240   *....... ................CXDEALS *
14D80   242E4788 55A84D2A 75985D00 DD8E40A2   2D37CD08 25889514 B8401D18 2D44E5EF   *........... .......... ....V.*
14DA0   2DC47F29 8804B801 40663D1C B508880A   B5078802 A808B800 CFFAB800 CFC0B840   *.D...... ..................... *
14DC0   0F00381A B8402F08 2D28F540 9804B800   D328B800 E9784101 00000000 60290009   *..... ....5 ....L...Z..........*
14DE0   C3E7C4C2 C4E3E240 B8401900 B8402170   0000EC18 1005F982 A8132809 A0012889   *CXDBDTS . ... ........9.........*
14E00   F908B840 168100A0 A804B840 0F00391C   B105880A B1019808 381DB005 9802E5FE   *9.. ....... ..................V.*
14E20   809EB840 2F08A841 41010000 60290109   C3E7C4C5 C6C2C340 B8401900 278811A8   *... ............CXDEFBC . ......*
14E40   792A7198 16886C00 F4028844 A8102788   11A8792A 71981688 6C007422 9808F404   *........4.....................4.*
14E60   8832FC0E A810B502 880C3121 8808F402   98228098 A83F4141 910141C1 B84010A9   *..............4...........A. ..*
14E80   00824288 880AB840 21700000 D3381C05   0028A85D B5028808 B5038818 34219806   *...... ....L...................*
14EA0   DC0E80B9 A86FDC07 11A86905 41B0980F   7422983F 6202B840 21700001 4EF04405   *...... ...................... .....0..*
14EC0   A88B310E 140211A8 492A4198 16886202   B8402170 00014EF0 44050008 88A7391D   *............... ......0........*
14EE0   B14A88AD B8402F08 6900E1FB 6980A8B9   B8401900 8186BF21 4FF27981 1128399B   *..... ............ .......2......*
14F00   391DB14A 8802A808 31218804 8120399B   27889710 7D00DD36 7402391B 88103123   *..............................*
14F20   452F51B0 88047D00 A8248183 399B4914   C902A81A 4428B921 4FF21C81 4930F110   *...............I........2....1.*
14F40   980C4904 F1809806 4930C994 A82E391B   B1838802 A804809F A86BED40 9704A84D   *....1.....I................ ....*
14F60   D902A817 4914E902 A812290B 280C1038   98258827 41121800 8802A82F B8401D10   *R.....Z...................... ..*
14F80   62022909 91012989 B8401081 00826900   D104E1FD 69800028 389BA8AD 29092C08   *........ ......J...............*
14FA0   41389804 4428EDC6 391BB120 8802A806   8183399B A861B921 4FF21801 88068100   *.......F.................2......*
14FC0   399BA8D5 391DC14A 98044923 E99F280A   88062909 01389859 370E7702 7829880A   *...N..A.....Z...................*
14FE0   75880518 5800F001 986B808D A8FF7206   A8E30000 22223D1C 11A8492A 41981688   *......0..........T..............*
15000   6900F110 98226202 6C00B840 0F1033E8   8812B840 20B60001 4E380000 00040030   *..1........ ...Y... ............*
15020   00014EB6 B8403540 B800CE0A 41010000   00000000 60280493 C3E7C4C1 C2F0F040   *..... . ................CXDAB00 *
15040   B8401A80 00C42726 292CF102 8806340E   4402A802 242E4588 492A1518 2844F010   *. ...D....1..................0.*
15060   98247807 B08C8802 A81C7901 C18D9816   283FE0DF 28BF2828 F0408804 B800E9AC   *............A............0 ....Z.*
15080   E0F728A8 A91825AE 33889836 492CF140   98268001 B8400334 00015328 BB215328   *.7............1 ..... ..........*
150A0   3306B840 21700000 D2581005 391ED150   399E811E 3982A804 B8400F10 B8401081   *... ....K.....J.......... ... ..*
150C0   0082391A D906C984 D120399A 309B2844   F0109990 7107399B 000888EA 24AE293F   *....R.I.J.......0..............*
150E0   E1DF29BF 7907E1FE B10E8802 A81C292C   F1048816 2135A104 21B57613 66986698   *................1...............*
15100   8804B840 0520B800 D798B840 21700000   C3307405 2726B840 0F007613 66986698   *... ....P.. ....C...... ........*
15120   8804B840 05202928 E1F729A8 2141A101   21C15900 D1025980 D98240A2 492CD180   *... .....7........A..J...R. ...J.*
15140   F1409804 E1FEA80E 4830A001 8802A804   E1BFD180 48B049AC 80A9389A 49288808   *1 ..............J...............*
15160   8004BE00 0000A836 492DD142 49AD4929   88084588 15185900 F9C4492C D11049AC   *..........J.............9D..J...*
15180   24AEB840 10810082 BF20128C B9201414   71A87503 FD02A104 21B5B800 CFC00909   *... ...........................*
151A0   F120880C B8402170 00016910 0000A80A   11A88114 1298B840 1D00B840 3540D108   *1.... ................. .. . J.*
151C0   5980B801 45267613 66986698 2C28EC02   A822492C 799CF140 881AF101 88162301   *.....................1 ..1.....*
151E0   33983398 B8402170 0000D508 40052135   910821B5 232E3900 F140982A 66888804   *..... ....N. ...........1 ......*
15200   B8400520 2C28F408 883AE4F7 2CA82944   C902A808 2346390C A101398C 7103F902   *. ....4...U7....I.............9.*
15220   A822B801 79987D07 B8402170 00000000   7E051168 98083588 B8400F00 A9192928   *......... ................ ......*
15240   F1089841 2944F110 981AD110 29C4B840   21700000 E6F05005 A80A242E 27262944   *1.....1...J..D. ....W0..........*
15260   F1109890 2C28D420 E4F72CA8 25889514   B8401A98 00C14C2C 4929880A 47881718   *1.....M.U7........ ...A..........*
15280   7900F9F4 2726D40A 23013398 3398791C   C982F9EE 391DC101 981A3788 39021718   *..94...M.........I.9...A.........*
152A0   97042143 71812726 31219102 31A13903   91023983 4930A101 49B0E4BF D4802141   *.......................U.M...*
152C0   A10121C1 2937D98A 292CE986 7852D080   78D22788 9714B840 10AA0082 4CAC24AE   *...A..R...Z.......K..... ........*
152E0   381AB0E6 882CB061 88282828 F0408804   B800E970 B800CFC0 D4024CAC 24AEB801   *...W........0 ....Z.....M.......*
15300   4314391D B1058837 E4FEB104 8853E4EF   A857B840 0F00B840 2F0A2828 F0408804   *.........U.....U.... ... ....0 ..*
```

```
15320   B800E978 B800D328 00000000 00000000   D7E3C650 05040000 00000000 00000000   *..Z...L.........PTF.............*
15340   63380450 C3E7C4C2 E2C3E37C 56050030   B8401900 F4409806 B9202000 21834222   *....CXDBSCT...... ..4 ..........*
15360   F4808814 4820F040 9828F410 8828F440   88247106 7D04A83C 2626293F E1DF29BF   *4.....0 ..4...4 ................*
15380   4820F040 9806B920 0004A856 11A88500   A822F410 880E293F D12029BF F4408851   *..0 ............4.....J...4 ..*
153A0   2626A81F 11A87905 91077198 9103E1FC   1D001102 26266D94 61962944 F110980E   *...........................1...*
153C0   F4108804 4820C8C3 B920000C A80EB920   00084D20 CD866D14 A5016D94 2F3FE7DF   *4.....HC....................X.*
153E0   2FBF6703 17D06783 A89B11A8 492A4198   17887C00 CC02A8A9 F410988B A85BD7E3   *.......................4.....PT*
15400   C6500502 00000000 00000000 00000000   62740042 C3E7C4C2 C9C44040 91141488   *F.................CXDBID  ....*
15420   24884920 F1809802 44224222 8848292C   F982A842 212E883E 2928D93E F110883A   *....1..........9.........R.1...*
15440   2944F110 8830B840 108100C2 B920128C   BF201418 17A827B5 27261128 79802928   *..1.... ...B....................*
15460   E1EF29A8 81837981 B8401A80 00C1B840   2300B800 D1788060 A8028088 B8402F08   *......... ...A. ....J........ ..*
15480   A8115001 00000000 00000000 60730044   C3E7C4C2 C4C3D440 B8400F20 33E88874   *...............CXDBDCM . ...Y..*
154A0   6909A101 6989340E 44024788 492A1718   7900E1FB 79802928 C9186288 B84020B6   *........................I.... ..*
154C0   00014E38 00000004 00300001 4EC2B840   35407900 F986282C D806A818 282CD814   *.............B. . ..9...Q.....Q.*
154E0   808EB840 2F0A492C F140881B 4830A001   48B0A824 24AE42A2 21419101 21C1492C   *... ....1 ..................A..*
15500   2626699C 41884F29 88067118 1900F994   B800D43C 6910D9A4 2D44F540 982A20AE   *..............9...M...R...5 ....*
15520   B800D47A BF20128C B920139C 71A8A104   21B5B840 10810082 B800CFC0 66126908   *..M................. ...........*
15540   68091038 9833A8B1 B8014CBE 41010000   00000000 60290072 C3E7C4C3 E2C3D640   *.......................CXDCSCO *
15560   26262C53 B4008874 2C55B400 8802A8DC   55A82541 8818BB01 59208812 2D28CD2A   *................................*
15580   2D37CDA6 2D28CD82 A804B800 E9788500   2DD32D28 E5F72DA8 2D38DD02 A8082C54   *............Z....L..V7..........*
155A0   B4008802 A847B800 D47A2D53 95012C38   DC862952 15389802 85002DD3 D4202CB8   *........M..................LM...*
155C0   2C28D408 2CA8BD20 14DCBE20 149065A8   A50425B5 B8401D00 B8403540 2D38E5DF   *..M................ ... . ..V.*
155E0   2DB82D54 B5008802 A8584428 2CD52D28   F5088885 55A82D4C 88408001 B8400370   *.............N..5........ ... ..*
15600   0001570C BB21570C 3306882E 3085B840   2CB10001 97D40058 2C28E4F7 D4102CA8   *.............. .....M....U7M...*
15620   2543B840 319ABD20 00008806 358EB840   3540B920 1002B840 00002C28 E4F72CA8   *... .......... . ..... ....U7..*
15640   A8D32C54 2CD52D28 E5F72DA8 27889744   B8400FA8 BC200000 2C552D53 9501A401   *.L...N..V7....... ..............*
15660   2CD58802 A8082C52 45389802 55282DD3   2C54A401 2CD44C35 8804B801 5B904D2D   *.N.............L.....M..........*
15680   F5408822 B8400D10 8866351D B4088802   A85FCD82 A85AB840 0F10B840 21700000   *5 ... ................ ... ....*
156A0   D1784A05 A829B840 0F1033E8 88422D38   D5202DB8 4C2CD402 4CAC2D28 D5202DA8   *J...... ...Y....N.....M.....N...*
156C0   2D28E5F7 2DA8B840 10BA0082 B8401AB8   00C424AE 35139804 B800D43C 25B555A8   *..V7... ..... ...D........M.....*
156E0   3593B840 10810082 B8401D00 B8403540   B84010AA 00822C54 94012CD4 2D53D500   *... ..... ... . . ..........M..N.*
15700   99A32D38 DD02A963 A9ABB840 00000000   00000000 41010000 00000000 60290016   *.......... ....................*
15720   C3E7C4C2 D4E6E240 B8400F38 350E5402   5D00CD86 F58098C0 A8864788 4D20CD02   *CXDBMWS . .........5..........*
15740   44224222 74882D30 CD02A81E B8400509   2C2CFC02 A80E2C58 A4012CD8 8802A802   *........... ..............Q....*
15760   E57FA802 E57F2DB0 A8124D2D F5088806   B8400508 A8068060 B8402F08 4D2CED02   *V...V.......5.... ....... ......*
15780   A84E3D1D B5038806 B50B8802 A8184D2C   E5F74C30 8806D540 E57FA806 F5418802   *...............V7....N V...5...*
157A0   A80B4DAC A81A4D1E DDC22D54 95012DD4   2D38D520 2DB82588 9544B840 149A00C0   *..........B.....M..N........ ....*
157C0   2D28F510 880ADD08 25889514 B8401D18   2D28F540 88122726 7D07880C 2D04CD08   *..5.......... .....5 ...........*
157E0   B8401F38 B800E970 B8403500 B8402170   00016130 0205A839 4288B840 05080D09   *. ....Z.. ... ............. ....*
15800   DD33A845 41010000 00000000 60290193   C3E7C4C6 E3C3E340 2626BD20 00006D80   *................CXDFTCT ........*
15820   60876083 2D2CF504 880A6703 BD208000   57D06783 85286D81 2D28F540 88048501   *......5..................5 ....*
15840   A8022D51 6D94851E 6D8C608F B8401AB8   00C1B840 2300B840 35402D2C F5028824   *............. ...A. ... . ..5...*
15860   26266507 B5968802 A8106D14 88A86C1C   F4808806 A8A0B800 E9786507 B5E09802   *...............4.......Z........*
15880   A830E40E B408882A F5808832 E51EB502   8820B508 881CB50A 8818B518 8814B51C   *..U.....5...V...................*
158A0   8810B50C 8802A816 B4068806 B40E8802   A80CBB01 59208845 33A86D9C 679E651E   *................................*
158C0   5402BD20 002C54A8 24AE8500 2DD86D1C   F5409814 F5019818 6507D400 88064D2C   *.............Q..5 ..5.....M.....*
158E0   CD86FD8C 851C6587 85AC6D81 B800D570   11A84927 41981D00 B504880A B5058806   *..............N.................*
15900   BD2014E4 A804BD20 1564212A 15A89504   25B5B800 D9982D28 F54098A7 B800D328   *...U...............R...5 ....L.*
15920   671E9704 7188A806 970417B8 88147402   98087401 47A8A704 A8134D00 F5809819   *.............................5...*
15940   84013088 880C7801 27889714 B8400FA8   BC200000 44E88858 85004DB3 2D38D520   *............ .......Y........N.*
15960   2DB8B840 1AA800C1 B8400F38 33E8880A   B8401491 00C02535 35934D1E F5108810   *... ...A. ...Y... ...........5...*
15980   F508980C B8402170 00016130 0A05A810   27889744 B84010AA 00822D54 95012DD4   *5.... ............... ..........M*
```

```
159A0   4D2CE5FD 4DAC2D28 E5DF2DA8 F5409804   B800D328 B800E978 391AD906 C984D120   *..V.....V...5 ....L...Z...R.I.J.*
159C0   399A4D20 E57FB54C 8802A822 3D1CB502   8802A81A 3D1DE5F7 B5068802 A8104D2D   *....V.................V7........*
159E0   E5DF4DAD B8400F38 358880A1 A8502D38   E506C506 8822F504 884EB840 0F384928   *V.... ...........V.E...5.... ....*
15A00   88088004 BE000000 A80A381A E060D083   B800DEC6 B8015916 2135A108 21B5B840   *...................F........... *
15A20   0F383588 A800A800 A800A800 A800A800   A800B840 10830082 A800A800 A800A800   *................ ...............*
15A40   A8005388 B8015948 3D1DB504 8831B505   8835B840 0F383588 381AE060 D006A823   *................ ...............*
15A60   D7E3C650 05040000 00000000 00000000   63080589 C3E7C4C2 D5E2E240 A8044D2D   *PTF................CXDBNSS ....*
15A80   25889514 B8400F98 BC200000 4D2CE5FD   4DAC2D28 E5DF2DA8 B8400F80 BF200000   *..... .........V.....V.... ......*
15AA0   3601880E 0D0ADD84 66986698 B8400520   308130A1 55A83D83 308577A8 4F34A702   *.......... ....................*
15AC0   4188912C 179855A8 7D00B840 2CB10001   97D40058 B800CFC0 2D2CF502 88264D20   *.......... .....M........5.....*
15AE0   B5878820 4D1EF520 881A6507 B51E8802   A8123D1D FD0EBD20 1490BF20 155057A8   *......5.........................*
15B00   A70427B5 B800CFC0 00000000 00000000   41010000 60290190 C3E7C4C6 C2D9D440   *........................CXDFBRM *
15B20   378855A8 3D029504 57987D06 E53F5568   981E7D05 E50F482D F0208808 B5088826   *............V.......V...0........*
15B40   E0DF48AD B5028802 A8068465 3C9AA812   4D2DD540 E5DF4DAD 80EA389A 4F32A701   *.................N V.............*
15B60   4FB3B800 DBD2283F E0F7D001 28BF0028   388330A1 2135A108 21B5B800 CFC04101   *.....K...7.......................*
15B80   00000000 60290037 C3E7C4C2 E2D6C840   B8400F10 33E8880A B8402170 0000D178   *........CXDBSOH . ...Y... ....J.*
15BA0   0A0577A8 4F354798 76886E05 B6008802   A8206F04 6F86A81A B84014A9 00C0B840   *......................... ..... *
15BC0   109D0082 2E55A601 98022ED5 2F539701   2FD36E05 96016E85 6F066738 98566588   *...........N.....L...............*
15BE0   9508B840 0F98BF20 0000B840 0F2833E8   8835792D F1429841 6D04A501 6D846509   *... ....... ...Y....1...........*
15C00   55E88810 25889544 B840149A 00C07488   B80156AE 2D54A501 2DD42C55 A4019802   *.Y....... ................M......*
15C20   2CD555A8 6D854D2C F501881F 4D2CE57F   4DACA827 2F532E52 76389802 A80477A8   *.N......5.....V.................*
15C40   2FD377A8 6F852588 9544B840 109A0082   2F549701 2FD44F2C FF942F53 7768980A   *.L......... .........M...........*
15C60   2F38F720 9804B800 D47AB801 55600F09   CF994F2D F742981F 8001B840 03340001   *..7.....M............7...... ....*
15C80   5CB0BB21 5CB03306 3085B840 21700000   D2581005 77A8861E 37838701 3F9C8703   *.......... ....K................*
15CA0   3F9D3093 24AE2C38 D4202CB8 B800D43C   84051D00 A8043C1C 41010000 60290010   *........M.....M..................*
15CC0   C3E7C4C2 C4E6E240 2626242E B8402170   0000E6F0 00042F3E B7008808 23013398   *CXDBDWS ..... ....WO.............*
15CE0   3398A806 630F3398 339833E8 98142301   98178001 B8400334 00016086 BB216086   *...........Y......... ..........*
15D00   33064F2C F7018814 2741A701 27C14F2C   E7FED78A 4FAC2F28 E7F72FA8 6F01B728   *....7.........A..X.P.....X7......*
15D20   8802A822 27019808 3085B840 14B900C0   B8402170 0000D258 10053F04 D7803F84   *.......... ..... .....K.....P...*
15D40   2F3FD701 2FBFBF21 31C87788 8812B840   21700001 31C80E05 88062F28 D7022FA8   *..P......H..... .....H......P...*
15D60   671B37A1 2F3E9701 2FBEB701 8812650F   55985598 55E89804 30A1A80E B8400659   *.......................Y....... ..*
15D80   67073F9B E79EC710 88047728 2FBE6707   D600889E 2F3FFFC6 370E7502 4F2CD701   *....X.G..........O......F......P.*
15DA0   E7754FAC 27419701 27C15488 471D3797   3F1EE7AF 3F9E4F2C F7088806 86013E9C   *X.........A.........X.....7.......*
15DC0   A846D708 E7EF4FAC F7408810 27884288   B8402170 0000D6D0 7C057288 A82A6F06   *..P.X...7 ....... .....O.........*
15DE0   880AB840 21700000 C3302E05 458877A8   4F277598 5F008605 379D471D 3797472D   *... ....C.........................*
15E00   D740D610 E6F547AD 6F07E79E B7108802   A804B800 DC06B840 0F008718 6F874F35   *P O.W5....X............... ........*
15E20   880480AB A8068703 3F9D80A1 B8402F0A   AA386707 E71EB718 89E83F1E D7502E3F   *............. .......X....Y..P...*
15E40   FE82E7AF 3F9E4F20 B7C88882 2E3FFE8E   45882F28 F7029888 370E7502 A81CB840   *..X.......H...........7.......... *
15E60   21700001 60902E05 55E8888F 571D3117   71B08846 3F04E7DF 3F84571D 37973F1D   *.........Y..............X.........*
15E80   B7058842 5F2CF708 9850D788 5FAC77A8   D7053F9C 5F2CE7EF 5FACF740 88102788   *......7...P.....P.....X...7 ....*
15EA0   5288B840 21700000 D6D07C05 7288B840   21700001 61303E05 A8263F04 F7208847   *... ....O...... .............7...*
15EC0   E7DF3F84 A8E95F2C F708980E A812B840   21700000 00004C05 A87377A8 D7013F9C   *X....Z..7....... ..............P...*
15EE0   293FD101 6707E71E C7129808 29BFA808   B800CFC0 E1FE29BF B8400F00 35888001   *..J...X.G................. ......*
15F00   B840031E 530A3085 B840320B 6707E71E   C712980C 77A84F27 47987105 3199A806   *. ....... ....X.G..................*
15F20   4F20B7C8 8813B840 148100C0 53886707   E71EC712 980A3F1D B705880A 87183F9B   *...H... .........X.G..................*
15F40   87033F9D A81C3717 B84031EA BF200000   88C87D2C F508981D 85043D9D 8718D780   *......... .......H..5..........P.*
15F60   3F9B2135 A10821B5 6707E7E0 B7608802   A8823788 55A86D0C 95045798 7D00B56C   *..........X......................*
15F80   8802A870 7D01B5D9 8802A868 7D06E53F   7C05E40F 3717B840 31EABF20 0000887A   *.......R......V...U.... .........*
15FA0   55689806 8065B402 880C7D2D F5409838   D5407DAD 80EA7C2D F4208826 E4DF7CAD   *............5 ..N ......4...U...*
15FC0   1688B840 0FA8BD20 00005715 37955717   37975719 3799571D 379DB840 05196188   *... ...................... ....*
15FE0   2626B840 2F0BA8F9 B8400509 B8400D00   30A1AA17 2F28F702 8812381A 2D3FFD84   *... ...9. ... ........7..........*
16000   D020A810 D060E7FD 2FA8A808 80622F3F   FF828022 B8402F0A A92BB920 1010B840   *......X.............. ......... *
```

```
16020   0000B840 0F004F2C E7F54FAC 458877A8   4F277598 5F00B706 881EB705 881A4F2C   *... ....X5......................*
16040   D7104FAC 87053F9C 471D3797 77A83F9E   8062B840 2F0AA812 B8400509 4F2CD701   *P................ ..... ....P.*
16060   E77F4FAC 27419701 27C12F28 E7FD2FA8   F7408804 B800E978 27889714 B8401AA8   *X........A..X...7 ....Z...... ..*
16080   00C1B800 D3280000 00000000 00008806   B8401900 658811A8 49351498 3288690C   *.A..L........... ...............*
160A0   46029104 129877A8 87012900 B16C8802   A81A2901 B1D98802 A8123904 D1203984   *.....................R......J...*
160C0   5907E19E B1108842 2904A806 B161881A   2901D9D8 E10F1718 77987798 67987288   *.................RQ.............*
160E0   BD217AC0 57B89818 A8203121 D000981A   B1058802 A8142903 28041048 980CA82F   *................................*
16100   75025722 660276B8 881E55A8 44024402   42222F28 F7028889 55888808 5F2DD740   *.....................7.........P *
16120   5FADA895 4588A899 328EA821 9710A85D   B8401900 11A84935 B1008802 A8044588   *................. ...............*
16140   44222F54 97012FD4 77A84F35 47989708   B84010AB 00824F04 CF102788 9744B840   *.......M......... ............. *
16160   10AA0082 29549101 29D411A8 49351498   49049101 4984592C E1FD59AC 2938D120   *.........M.....................J.*
16180   29B8A855 D7E3C650 05040000 00000000   63280359 C3E7C4C2 C4D9E37C 0004B840   *....PTF..............CXDBDRT.... *
161A0   242E2626 B8400F00 B8402170 0000C330   75054D20 B5C88830 B5CF8896 B5D08892   *..... ... ....C......H...........*
161C0   6507F4F9 9822F402 9810B508 8884B50E   8880A814 85A93D9A A833F404 9802A86C   *..49..4..................4......*
161E0   B51E8858 B51A8832 4D2DD540 4DAD381A   B0A98802 80A1B840 2F08B0A9 88182788   *..........N ........... ........*
16200   97144D04 CD04B801 5958B840 0FA8BD20   000055E8 9811B800 D3283D1A B5A98802   *.......... .......Y....L........*
16220   A8302588 9514B840 149A00C0 4D2CD58A   E5BF4DAC 2D28D520 2DA8A816 B8401081   *....... .......N.V.....N...... ..*
16240   00822135 A10821B5 B8015948 B5088802   A86B3588 8001B840 031E330A B840320B   *.................... ...... ..*
16260   30858001 8103319D 8150399E 11A831A1   801E3183 B8402170 0000D508 500580A5   *................... ....N.....*
16280   B8402F19 B8401481 00C0B800 CFC0B840   0F00B840 05092D28 CD8C2588 9514B840   *. ... ........ ... ........... *
162A0   1D18B840 3540B800 E9784101 00000000   00000000 60290004 C3E7C4C2 C4C5D940   *... . ..Z...............CXDBDER *
162C0   B8200000 B8400F00 33E8880D B8404F08   8804B840 0508A815 41010000 60280515   *..... ...Y... ..... .............*
162E0   C3E7C4C1 D5E2E740 B8200000 8001B840   03340001 633CBB21 633C3306 3085B921   *CXDANSX ....... ...............*
16300   633C1081 811D398E 8100398F BE219C60   61273191 61253193 3095B920 00053197   *................................*
16320   910A3983 810A3982 812B3998 81003999   399A8107 399B693D 399CA855 00000000   *................................*
16340   00000000 41010000 00000000 60330301   C3E7C4C1 D5E2C240 BE219C60 6939C90E   *................CXDANSB .......I.*
16360   C98CB840 21700001 62C00000 A8B20809   C982A8AC F02098A8 D0200889 BD2017C4   *I.. ............I...0..........D*
16380   55278814 5219090A D9842298 22988014   55A8B840 2803A800 056A5101 885EA502   *.........R.......... ............*
163A0   570171B8 88141198 1198910C 1598B840   21700001 6C080000 A8066F3C D7806FBC   *............... ............P...*
163C0   BF219794 880EB840 0F6833E8 8806B840   0509A80F 0F0AEF82 A812B840 20B60001   *....... ...Y... ........... ....*
163E0   34600000 00040030 000134C0 056A9502   B8402170 00016490 0000A824 9506B840   *................. .............. *
16400   21700001 6C080000 693CC902 A80CB840   21700001 64380000 A806693C D14069BC   *..........I.... ............J ..*
16420   B8403580 41010000 00000000 60280507   C3E7C4C1 D5E2D440 B8200000 6C3CE41F   *. ..............CXDANSM ......U.*
16440   6CBC0C09 E4DF0C89 6C39E4BF 6CB9B840   21700001 62E80000 BA2197E4 6C39CC16   *....U.....U.... .....Y.....U....*
16460   B8404F08 8804B840 0508B840 21700001   62C00000 A806B840 148100C0 A8474101   *. ..... ... ........... ........*
16480   00000000 60280512 C3E7C4C1 D5E2E340   B8200000 66289504 5F00B7FF 88C8CF02   *........CXDANST ..............H..*
164A0   A8C05202 24262F28 4A014107 9802A806   FF84B283 8804F2FF 9810FF8E B8402170   *.....................2...... ..*
164C0   00016578 0000D601 A866F703 88402B28   A81A0000 00000000 00000000 BA200000   *......O...7.. ..................*
164E0   BE200000 BF200000 B8000000 B84020B6   00016F48 00006201 00300001 64D40001   *........... .................M..*
16500   6F4CB000 8802A804 D603A802 D601B840   21700001 67C80000 F6019814 B8402170   *........O...O.. .....H..6.... ..*
16520   000165D8 0000B840 21700001 66580000   F6029804 F609982A A8120000 00000000   *...Q... .........6...6............*
16540   00000000 BD200000 B8000000 B84020B6   00016910 00001001 00300001 653C0001   *........... .....................*
16560   6914A8D1 A80AB840 21700001 66B00000   A8E34D2D F5208804 B8200000 53889304   *...J... .........T..5............*
16580   3F00F740 884AB7FF 8846A810 00000000   00000000 BB200000 B8000000 B84020B6   *..7 .......................... ..*
165A0   000167E0 00000401 00300001 658C0001   67E45202 F704880C B8402170 000166D8   *................U..7.... .....Q*
165C0   0000A80A B8402170 00016758 0000A853   A85B8802 A804B800 B8200000 53889304   *..... ..........................*
165E0   3F00F740 8870B7FF 886CA810 00000000   00000000 BB200000 B8000000 B84020B6   *..7 ........................ .`.*
16600   000167E0 00000401 00300001 65EC0001   67E45202 3402491E 482CD902 A81C4904   *................U........R.....*
16620   C918F816 E802A812 292CF902 A8062958   910129D8 2930D180 29B0F704 880CB840   *I.8.Y.....9.........Q..J...7.... *
16640   21700001 66D80000 A80AB840 21700001   67B00000 A879A881 B8200000 2A37EA02   *.....Q..... ......................*
16660   A80AB840 21700001 73C87005 D608F2A0   8802A838 24264107 9802A822 2F04CF02   *... ......H..O.2..................*
16680   A8144900 F1F8980C 80804880 00288006   818C4187 A8062F18 CF02E6F7 A80E4900   *....18.....................W7....*
```

```
166A0   F1F89808 8080B840 2B00A825 A8572D38   B8200000 6F3CD720 6FBC633F 8802A814   *18..... ................P.........*
166C0   CF02A80C B8402170 00016438 0000A804   D7406FBC A827AA87 B8200000 3402492C   *..... ...........P ..............*
166E0   E902A81C F902A80C B8402170 000167B0   0000A80A B8402170 00016758 0000A852   *Z...9.... .......... ...........*
16700   F1418844 FF02A822 41228802 A8104288   B8402170 000175D8 7C055202 A80AB840   *1............... .....Q....... *
16720   21700001 67B00000 A81C2828 E802A80C   B8402170 000167B0 0000A80A B8402170   *............Y.... ........... ..*
16740   00016758 0000A80A B8402170 00016758   0000A87D 2DBFB800 B8200000 34024929   *......... ......................*
16760   881C4F2D 00281498 4800F884 CF02A80C   D604B840 21700001 67C80000 3402F604   *..........8.....O.. .....H....6.*
16780   982AA810 00000000 00000000 BB200000   B8000000 B84020B6 000168D0 00000401   *.......................... .......*
167A0   00300001 67840001 68D4A802 E6FBA859   B8200000 482CD080 48AC482D D04048AD   *..........M..W................ ..*
167C0   482BE0FE 48ABA819 B8200000 2F38CF0A   D7802FB8 613F9101 613FA815 2D2CED86   *................P...............*
167E0   B8200000 32022388 9308B840 0FC8BA20   000022E8 8806B840 0500A813 A81F5001   *........... .H.....Y... ........*
16800   00000000 61320244 C3E7C4C8 C1D5E240   B8402170 00016830 0000B840 35404101   *........CXDHANS . ......... . ..*
16820   00000000 60280496 C3E7C4C1 D5E2C440   B8200000 BE219C60 2938C902 A87EA810   *........CXDANSD ..........I.....*
16840   00000000 00000000 BE200000 B8000000   B84020B6 00016A60 00002001 00300001   *................................*
16860   68400001 6A642938 E17F29B8 633FA301   63BF9802 A808B920 3025B840 00008802   *. ........................ ....*
16880   A83A683C D802A834 C802A82C A8120000   00000000 00000000 BA200000 B8000000   *....Q...H........................*
168A0   B84020B6 00016438 00000201 00300001   68900001 643CA804 D04068BC A88F4101   *. ..............................*
168C0   00000000 60280498 C3E7C4C1 D5E2C540   B8200000 B8400F10 33E88806 B8400509   *........CXDANSE ..... ...Y... ..*
168E0   A80F492D E1BD49AD 492CE1BE E902A804   E1EFA802 D11049AC 810049B0 A82F4101   *.............Z.......J..........*
16900   00000000 60280499 C3E7C4C1 D5E2C640   B8200000 2743B840 31AABD20 00008802   *........CXDANSF ....... .........*
16920   A808B920 1002B840 00002930 F180989C   2937E982 A82AA810 00000000 00000000   *....... ....1.....Z.............*
16940   BE200000 B8000000 B84020B6 00000000   00002001 00300001 69380000 0000A86C   *....... ........................*
16960   292CF982 A8342944 D9862928 F902A81E   242EBB01 69CE2830 C892B920 01BCA104   *..9.....R...9...........H.......*
16980   21B52126 87831F81 B8402300 A80AB840   21700001 68300000 A8325904 B1FF8814   *......... ..... ................*
169A0   C982A810 95045402 BB0169CE 2830C882   A819A818 2115880A 0F0ADF84 11981198   *I.............H.................*
169C0   21AEB840 21700001 68300000 A8BF492B   F9F877A8 4F29880A 47987900 F982A802   *... .............98..........9...*
169E0   A868492D C902A81C 4920C902 44222788   42222938 C90AD180 29B8613F 910161BF   *....I.....I..........I.J.........*
16A00   7288A846 A8120000 00000000 00000000   BB200000 B8000000 B84020B6 000168D0   *.......................... ......*
16A20   00000401 00300001 6A080001 68D42928   F918F996 491FC902 A810B840 21700001   *.............M..9.9...I.... ....*
16A40   34601605 2830D040 28B03088 41010000   00000000 60280500 C3E7C4C1 D5E2C940   *....... .................CXDANSI *
16A60   B8200000 2928F103 8802A80D B8400F00   33888804 B8400509 B9200014 1298B840   *......1...... ....... .......... *
16A80   0F0012A8 2938E1F7 29B82928 E1DFD110   29A81128 29BB29BE 20C1292C F982A816   *.......7......J...........A..9...*
16AA0   2944E1EF 29C4242E 880ABB01 6B4A20AE   BF016B1A A862F90C 242EBB01 6B4ABF01   *.....D.................9.........*
16AC0   6B1AA854 293FE1BF 29BF2938 E1DF29B8   11A829D3 29D429D5 21AEB920 00441298   *.................L.M.N.........*
16AE0   B8400F00 33E88802 A80B12A8 2343B840   318ABD20 00008802 A80AB920 1002B840   *. ...Y........................ *
16B00   0000A814 95045900 C982A80C B1FF8808   5402BB01 6B4AA815 A8BB431D B840318A   *.........I.......................*
16B20   BD200000 8802A808 B9201002 B8400000   95045900 C982A810 B1FF880C 54024920   *............. .......I...........*
16B40   C906BB01 6B4AA819 70881128 49B349B0   492CE1B4 D11049AC 492DE1B9 49AD492B   *I..................J..............*
16B60   E1FE49AB B8400F90 BE200000 66888806   B8400521 A813491F F982A824 49358820   *..... .......... ......9.........*
16B80   468811A8 49351698 6085B920 00081698   3188B840 0F2033E8 8802A80B 1388A822   *................. ...Y..........*
16BA0   11A8492A 881C4688 16986900 E1FBD102   6980D98E 4920C902 A808292C F982A802   *.............J...R...I.....9...*
16BC0   40A23088 50010000 00000000 60730062   C3E7C4C1 D5E2E940 2F30E7BF 2FB0242E   * .............CXDANSZ ..X.....*
16BE0   4F2BD701 4FABB840 21700001 69100000   B8403540 41010000 00000000 60280508   *..P.... ......... . ............*
16C00   C3E7C4C1 D5E2D540 B8200000 60C15301   B2FF88BA CA08B920 3026B840 00005202   *CXDANSN .....A............. ....*
16C20   2E13CE82 A8062E15 E6BF2E95 5488A810   00000000 00000000 BC200000 B8000000   *........W.........................*
16C40   B84020B6 00016CE0 00000801 00300001   6C300001 6CE42F12 CF56CF84 DF02A806   *. .................U.............*
16C60   B9016D78 A848FF82 A8442B12 54C845C8   54C8A818 00000000 00000000 BA200000   *............H.H.H...............*
16C80   BC200000 BE200000 B8000000 B84020B6   00016F48 00002A01 00300001 6C740001   *........... ......................*
16CA0   6F4C4588 B0018802 A804B901 6D78A81A   28178806 B9016D78 A8102E13 CE82A80A   *.................................*
16CC0   B8402170 00016D88 0000A8BF A80A6741   98066E3C D6806EBC A8D3A81C 11A83902   *. ..................O....L.......*
16CE0   B8200000 11282997 95045301 B2FF8864   CA82A860 54022F12 CF02A83C 471FCE02   *...................................*
16D00   A804FE82 A832CE0A D6A1D780 479F40A6   A820CF1E CF82A80A D640D780 479F40A6   *........O.P... ..........O P... .*
```

```
16D20   A810B705 880CB703 8808B920 3027B840    00002917 91012997 4788B901 6DE44924   *............... .............U..*
16D40   F986973C B9016DE4 B8402170 00016D58    0000A86B A8770140 B8200000 95045301   *9......U. ............. ........*
16D60   B2FF8812 EA02A80E 5702B901 6DE49710    B9016DE4 A81BA821 67419701 67C12F12   *.............U.....U.........A..*
16D80   D7102F92 1088D7E3 B8200000 23262F12    2E153901 DF0AB130 8806DE04 DE82A842   *P.....PT........................*
16DA0   DF3CB130 8802A81A D7202F92 38078810    B920FEA0 218A8083 38813083 B8402300   *........P.................... ..*
16DC0   A806B921 6F08218A 38003901 B183880E    B080880A 81801008 B8402B00 A800B901   *......................... ......*
16DE0   6D78A85D B8400F68 33E88806 B8400508    A80F1088 50010000 00000000 61320240   *..... ...Y... ................. *
16E00   C3E7C4C1 D5E2E240 B8200000 28178804    A0012897 B0008802 A8682913 C902A82C   *CXDANSS ....................I...*
16E20   A8120000 00000000 00000000 BF200000    B8000000 B84020B6 00016E98 00004001   *..................... ........ .*
16E40   00300001 6E240001 6E9CA836 25119501    B8404BDB BA2000C0 8802A80A B920300B   *................. ..............*
16E60   B8400000 A80AB840 21700001 11600000    221A2912 D90AB840 21700000 FE700000   *. ..... ............R.. ........*
16E80   7728A87D 41010000 00000000 60280510    C3E7C4C1 D5E2D940 B8200000 BE219C60   *................CXDANSR ........*
16EA0   2C12DC82 A84EE4EF 2C926541 A5019802    A808B920 3025B840 000065C1 8802A834   *......U................ ...A....*
16EC0   6C3CCC82 A82AA810 00000000 00000000    BA200000 B8000000 B84020B6 00016438   *......................... ......*
16EE0   00000201 00300001 6EC80001 643CA804    D4806CBC A85F4101 00000000 60280495   *.........H......M...............*
16F00   C3E7C4C1 D5E2C340 2626B840 0F003388    8804B840 05092D15 DD02A80A DD886322   *CXDANSC ... ....... ............*
16F20   A304B840 0508E5CF 2D95B840 21700000    FE700000 B8403580 41010000 60280514   *... ..V.... ......... ..........*
16F40   C3E7C4C1 D5E2E640 B8200000 8000FB82    A8740F12 E7F00F92 2426470E 5301790F   *CXDANSW ............X0..........*
16F60   DB062643 D101A804 2611E1FE 798F7317    FB8CB840 21700001 6FF80000 A8028001   *....J.............. .....8......*
16F80   4F53CF82 A806DF04 4423A833 B0008802    A8325701 DF02A814 2913C982 A80CB840   *..........................I.... *
16FA0   21700000 FE700000 8001A818 292CF982    A812BF20 01BCA704 27B58783 4F81B840   *..............9................ *
16FC0   23008001 A830272E 23018802 A810761D    222EB840 21700001 6FF80000 A8182303   *................... .....8......*
16FE0   37B08804 8001A80E 761D222E B8402170    00016FF8 0000A8B1 B8200000 1788A810   *............. .....8............*
17000   00000000 00000000 BE200000 B8000000    B84020B6 000162E8 00002001 00300001   *................. .....Y........*
17020   70000001 62EC3117 91073197 39039107    39833918 E1DF3998 369F3111 3193BE21   *................................*
17040   9C606625 3691B920 00013195 8001389B    8103399C 8101399D 80088148 56884D53   *................................*
17060   CD82A806 DD02A802 D18031A1 30A311A8    810C3189 65885101 A81E0000 00000000   *........J.......................*
17080   00000000 BA200000 BC200000 BD200000    BF200000 B8000000 B84020B6 000126A0   *......................... ......*
170A0   00005A01 00300001 707C0001 26A46008    33888806 B8400509 A808B100 8802A802   *..................... ..........*
170C0   8001A8CD D7E3C650 05020000 00000000    62300398 C3E7C4C1 D5E2D340 61284088   *....PTF.............CXDANSL .. .*
170E0   B8200000 4219090A D9842298 2298470E    790FF9A6 4953C982 A814D902 A804441F   *........R.........9...I...R.....*
17100   A8024423 470E7117 F982A802 A82FB840    21700001 6E080000 A822292C F98CB840   *........9...... ............9.. *
17120   21700001 68300000 A812B920 01BCA104    21B52725 80837881 B8402300 A85F4101   *......................... ......*
17140   00000000 60280509 C3E7C4C1 D5E2D640    B8401900 242E2626 6107F108 880A4920   *........CXDANSO . ........1.....*
17160   B180884A B1828842 6511883E 090AF110    98045598 5598690D 8802A802 09071518   *..............1.................*
17180   95035D00 B5158802 A820292C F98AB920    1490BD20 15CCA808 B920128C BD201440   *............9.................. *
171A0   15A8A504 25B58415 A85B8400 A85F6735    7F00B71C 880DA851 242E2626 B8400D10   *............................. ..*
171C0   8806391C B1018838 552811A8 69208830    6D806DA0 6C58880A 95014128 88049802   *................................*
171E0   A80B6D94 412FF102 880A2938 F1018804    8117A802 81276981 B8402300 B8403540   *......1.....1............ ... . *
17200   B800D328 41010000 00000000 60290079    C3E7C4C4 C3D9C940 2626242E 6107B11C   *..L.............CXDDCRI ........*
17220   88702D38 F501886A 452FF502 8864F504    8804B19A 880AB1F0 8806B188 8802A852   *....5.....5...5........0........*
17240   8001B840 03300001 72ACBB21 72AC3306    8844B840 21700000 ECF00004 4D2DD540   *... ............... .....0....N *
17260   4DAD8177 399C1128 399DBE21 9C606127    31952626 6107B19A 8802A804 80F3A80E   *.............................3..*
17280   412FE1FD 41AF492D D10249AD 80ECB840    2F08B800 CDB02135 A10421B5 B8401A80   *........J...... ............. ..*
172A0   00C0B840 1D00B840 35404D2D 00000000    00000000 41010000 00000000 60330337   *... ... . ......................*
172C0   C3E7C4C4 C3D9E340 B8401900 242E412F    F1048808 B59A8816 B5948812 F902A81E   *CXDDCRT . ......1...........9...*
172E0   B5F0880E B588880A B59C8806 A81080D3    A80280CC 472FFF88 E7FD47AF A8028000   *.0.............L........X.......*
17300   A83BD7E3 C6500504 00000000 00000000    63430419 C3E7C4C4 E6C1E340 0405282D   *..PTF...............CXDDWAT ....*
17320   B8401900 26266507 412FF104 880E4920    B180886A B1828802 A806A80A F938A85A   *. ........1.................9...*
17340   B1858802 A82CB538 8806B518 8836A822    67118830 090AF110 98047798 7798690D   *......................1.........*
17360   8802A802 09071718 97037900 B1158802    A812B594 880EB5F0 880EB588 880AB59C   *.......................0........*
17380   8806A816 80F3A80A 80EC472F FF84E7FD    47AF492D D14049AD A8028000 A87F6735   *.....3........X.....J ..........*
```

```
173A0   7F00B71C 8861B700 8865A83B D7E3C650   05040000 00000000 63430417 C3E7C4C4   *............PTF.............CXDD*
173C0   D9C1E340 44E88814 B8401900 212A2535   51981102 BD2174B8 51B88802 A83011A8   *RAT .Y... ......................*
173E0   8080B840 2B00A802 A823E908 2937F102   9802A82D 2937E1F5 29B7242E 472FFF84   *... ......Z...1.........5........*
17400   E7FD47AF 27889714 B8401D28 A8472937   D10229B7 A84F2626 2937D108 29B72928   *X....... ......J.........J......*
17420   D11029A8 B9200800 6183242E 4920B180   882EB182 88348112 6981608F 292CF98A   *J.............................9.*
17440   B9201490 BD2015C4 A808B920 128CBD20   143815A8 A50425B5 B8402300 B8403540   *.......D............... ... .  *
17460   67357F00 B71C8802 A8356107 D000981E   E11EB118 8818E00E B0068812 6901B1AC   *................................*
17480   8808C90A E10FB107 88048112 A85711A8   4934912C 419861A2 8110A865 D7E3C650   *..I.........................PTF.*
174A0   05040000 00000000 63430416 C3E7C4C4   D4E2C940 399B3199 2937F102 981A2626   *............CXDDMSI ......1.....*
174C0   6107B190 8802A80C 8020B840 2B00A808   B8403540 B800CFC0 B8402170 000173C8   *.......... ..... . ..... .....H*
174E0   0004B840 35404101 00000000 60290087   C3E7C4C4 D4D4C940 2626242E 2937E1F7   *... . ..........CXDDMMI .......7*
17500   29B76107 B18C8810 B1908882 B19A8802   A810412F E98CA876 472FFFF2 E7FD47AF   *..................Z.......2X...*
17520   A86C8001 B8400330 000175B0 BB2175B0   33068866 B8402170 0000ECF0 0004492D   *..... ................ .....0....*
17540   D14049AD 8177399C 1128399D BE219C60   61273195 26266107 399BB19A 8806B194   *J ..............................*
17560   8802A804 80F3A810 80ECB1F0 880AB188   8806B19C 880280A2 4F2DD702 4FADB0A2   *.....3.....0...............P.....*
17580   8808472F FF84E7FD 47AFB840 2F082928   C984B800 D328B800 E9782135 A10421B5   *......X.... ....I...L...Z.......*
175A0   B8401A80 00C0B840 1D00B840 35400096   00000000 00000000 D7E3C650 05040000   *. ..... ... . ..........PTF.....*
175C0   00000000 00000000 63430415 C3E7C4C4   D4D4E340 00000004 B8401900 248811A8   *............CXDDMMT ..... ......*
175E0   492A4198 1202471D 4D2CB840 21700001   4DE80905 4DAC1C00 E4FBD402 1C80A829   *.......... .....Y......U.M.....*
17600   50010000 61950696 C3E7C4D5 E2C7E340   2829880E 27880718 7800F001 8804808B   *.........CXDNSGT ..........0.....*
17620   A8A4B444 88102D2C F504880A 390DF110   98048084 A890381F F802A806 292DD101   *.........5.....1.........8.....J.*
17640   29AD2722 2820C802 77227788 882A292D   F1409828 2D2CF508 99462920 C1CC9818   *......H..........1 ....5.....A...*
17660   712E21B8 8802A810 7101880C 391DB144   8952B150 8966A968 CDD0FDCE 390DE1EF   *................................*
17680   398D7788 88067938 E1F779B8 B8402170   0000EC50 0405B840 21700000 EBE00605   *.........7... ......... ........*
176A0   292BE1C0 9806282C E0FB28AC 29AB7788   880C7928 F1108806 9714B840 1D288060   *...................1...... ....*
176C0   2C2DE4FE 2CADB800 D1FA360E 6900E106   C1068926 7828E802 A85F7426 4901B1AC   *..U.....J.......A.....Y.........*
176E0   8802A804 8080A812 792CF90C F98A291E   F982A804 8008A802 8040B840 20B60001   *..........9.9...9........ . ....*
17700   78280000 00040030 0001783E 7904F180   984A7918 F1809814 792CF102 8822441E   *...............1.....1.....1.....*
17720   4402B920 002C14A8 24B8880E 7928E1FB   79A87426 81004980 A8BF391D B1448884   *................................*
17740   7928F104 9816B444 887AB442 8832B460   882EB450 8802A804 808BA897 D580D504   *..1.........................N.N.*
17760   7828D040 78A84108 E1BF29AB B4608810   B442880C B8401081 00822DAC B800D178   *... ................... ........J.*
17780   390DD110 398DF540 8868B840 0D40BC20   00008821 41078825 B8401491 0080A827   *..J...5 ... . ........... ......*
177A0   FD102904 F1809808 291EF120 8802A83C   A937B460 882AB442 88267928 F1109945   *....1.....1...................1...*
177C0   B4508818 B8402170 00017828 00047928   F1049877 7904F180 987DA961 B80178A0   *..... ..........1.....1.........*
177E0   390DF110 996B7828 F0109971 390DD110   398DB840 148100C0 A8812722 880A7426   *..1.....0.....J.... ..............*
17800   4901B18D 892DA857 B8402170 000175D8   6605A999 50010000 00000000 61950689   *......... .....Q................*
17820   C3E7C4C1 D9C2C1E2 B8401900 74264801   D854B08F 8802C811 8080D504 2DAC2920   *CXDARBAS. ......Q.....H...N.....*
17840   B18A8802 A80E292F F1028808 B0088802   A8028040 7904F180 983372C8 27C872C8   *.........1.......... ..1....H.H.H*
17860   24264900 88064107 880EA812 B8401A80   00C1B840 2B00A806 2928D104 29A872C8   *............. ...A. ......J....H*
17880   27C872C8 A85F281E F882A855 8010A857   41010000 60290110 C3E7C4C5 C9E74040   *.H.H....8..............CXDEIX  *
178A0   76266901 D9087937 F102983C A826291E   F1018804 8008A802 8040B840 20B60001   *....R...1.......1......... . ....*
178C0   78280000 00040030 0001783E 7928F990   611E880C 2D2DE5FE 2DAD808B B800D1FA   *..............Z.......V.......J.*
178E0   D5042DAC B8017760 B801767C D7E3C650   05020000 00000000 62370952 C3E7C4C1   *N............PTF..............CXDA*
17900   D9C34040 17888804 B8400D10 8860311D   B0088802 A804B150 881E3288 B8401388   *RC   ..... ..................... ..*
17920   BD200000 55E88846 5388311D B0088802   A819B150 8808A81F B8400F10 A806B840   *.....Y..................... .....  *
17940   169000A0 808BB840 2F0A492B E1EF49AB   E1C09806 492CE1FB 49AC7928 F104980A   *....... ....................1...*
17960   7928E1BF 79A8B840 1D28B800 EAAAB920   100EB840 0000D7E3 C6500502 00000000   *........ ............ ..PTF.......*
17980   00000000 00000000 62450434 C3E7C4C5   D9C3C640 D9E2D740 2726790C B11C885C   *.............CXDERCF RSP ........*
179A0   B8400F00 8001B840 030E3688 330AB840   320C3085 B8401484 00C0790C 39A211A8   *. ..... ...... ..... ...........*
179C0   49288820 41981F00 3FA31702 880CB840   21700000 00000004 A8025528 3DA411A8   *.............. ..................*
179E0   8103A802 810131A1 39838004 B8402F0A   63882C28 2726B801 5244A859 481FF001   *............. ................0.*
17A00   8820791D 49B780F0 48B8481F F0028871   77A84F34 972C4798 798080F9 78812726   *.......0....0................9....*
```

```
17A20    A8832135 A10421B5 24AEB801 4B0A4101    00000000 60290015 C3E7C4C2 D4E3C140    *......................CXDBMTA *
17A40    00020001 00000000 00000000 00000000    00000000 80A17A60 48E06F18 FF040404    *................................*
17A60    00650016 00219C60 84017C94 5C017C48    84017D2C 5C017CE0 80017E18 58017D88    *................................*
17A80    58017DD0 84017EC0 5C017E74 84017F58    5C017F0C 84017FF0 5C017FA4 800182F8    *.......................0.......8*
17AA0    50018074 580180CC 5801811C 5801816C    580181BC 4801820C 50018250 580182A8    *................................*
17AC0    FF000000 80218B0C 6021836C 082183C0    082183F4 08218428 0821845C 08218490    *..................4.............*
17AE0    082184C4 082184F8 0821852C 08218560    08218594 082185C8 082185FC 08218630    *...D...8..................H.....*
17B00    08218664 08218698 082186CC 08218700    08218734 08218768 6021879C 082187F0    *...............................0*
17B20    60218830 08218884 082188C4 08218904    08218944 08218984 082189C4 08218A04    *...........D...............D....*
17B40    08218A44 60218A84 08218AD8 84218BE8    64218B40 84218CC4 64218C1C 0C218CEC    *...........Q...Y... ...D........*
17B60    0C218D2C 0C218D6C 0C218DAC 0C218DEC    0C218E2C 0C218E6C 0C218EAC 0C218EEC    *................................*
17B80    0C218F2C 0C218F6C 0C218FAC 0C218FEC    0C21902C 0C21906C 0C2190AC 0C2190EC    *................................*
17BA0    0C21912C 0C21916C 0C2191AC 0C2191EC    0C21922C 0C21926C 0C2192AC 0C2192EC    *................................*
17BC0    0C21932C 0C21936C 0C2193AC 0C2193EC    0C21942C 0C21946C 0C2194AC 0C2194EC    *................................*
17BE0    0C21952C 0C21956C 0C2195AC 0C2195EC    0C21962C 0C21966C 0C2196AC FF000000    *................................*
17C00    161C27F5 C711C3F0 405C40C8 C4D9405C    40E3C5E7 E3405C5C 40404040 40404040    *...5G.C0 . HDR . TEXT ..        *
17C20    40404040 40404040 40404040 C3D9C9E3    E2C9E35A 40E38581 9440F040 6040C1D5    *            CRITSIT. T... 0 . AN*
17C40    E2408285 87A4954B 67AF67AF 00A00000    00000000 04A80000 0400C810 00000000    *S .......................H.....*
17C60    00000000 300203A4 80017C94 00000040    00003800 60000008 01000000 00000000    *............... ................*
17C80    11000002 00000000 00000000 00000000    01000000 00000000 1CA80000 0080CFC0    *................................*
17CA0    00000000 00000000 00000000 18A80000    0A40D3B0 00000000 00007210 8800128C    *................ L.............*
17CC0    61017C48 00000000 01100000 01000200    01000000 00013001 40000000 00017C48    *...................... ........*
17CE0    67FB67FB 00A00000 00000000 04A80000    0400C810 00000000 00000000 300407A4    *...................H............*
17D00    80017D2C 00000040 00003800 60000008    01000000 00000000 11000000 00000000    *...... .........................*
17D20    00000000 00000000 01000000 00000000    1CA80000 0080CFC0 00000000 00000000    *................................*
17D40    00000000 18A80000 0A40D3B0 00000000    00007270 8800128C 61017CE0 00000000    *......... L.....................*
17D60    01100000 01000200 01000000 00013003    40000000 00017CE0 02020000 00017DB4    *................................*
17D80    00017DFC 00080000 00000000 00A00000    00000000 04A80000 0480C810 00000000    *..........................H.....*
17DA0    00000000 30060087 84017E18 0000003E    00000000 B0002028 00000100 0F0002C1    *...............................A*
17DC0    40000301 C1400000 00000000 0000012C    00000000 00A00000 00000000 04A80000    * ...A ..........................*
17DE0    0480C810 00000000 00000000 30070087    84017E18 0000003E 00000000 B0002028    *..H.............................*
17E00    00000100 0F0002C2 40000301 C2400000    00000000 00000100 00000000 1CA80000    *.......B ...B ..................*
17E20    0040CFC0 00000000 00000000 00000000    08A80000 0A40D3B0 00000000 000072D0    *. ................. L.........*
17E40    10001490 42000000 00000000 01200000    16000200 06010000 00003005 00000000    *................................*
17E60    00A00000 00017D78 02030200 00000200    00820000 68806880 00A00000 00000000    *................................*
17E80    04A80000 0400C810 00000000 00000000    300907A4 85017EC0 00000040 00003800    *......H..................... ....*
17EA0    60000008 01000000 00000000 10000000    00000000 00000000 00000000 01000000    *................................*
17EC0    00000000 1CA80000 0080CFC0 00000000    00000000 00000000 18A80000 0A40D3B0    *............................ L.*
17EE0    00000000 00007364 8800128C 41017E74    00000000 01100000 00000000 00000000    *................................*
17F00    00013008 40000000 00017E74 00000000    80A00000 00000000 04A80000 0400C810    *.... ..........................H.*
17F20    00000000 00000000 300B07A4 85017F58    00030040 00003800 AA000008 00000000    *................ ...............*
17F40    00000000 10000000 00000000 00000000    00000000 01000358 6D666D66 1CA80000    *................................*
17F60    0080CFC0 00000000 00000000 5FC35FC3    18A80000 0A80D3B0 00000000 000073F8    *..............C.C......L........8*
17F80    A000128C 41017F0C 00000000 004C0000    01000000 00000000 0000300A 50000000    *................................*
17FA0    00017F0C 00000000 00A00000 00000000    04A80000 0480C810 00000000 00000000    *........................H.......*
17FC0    300D07A4 8A017FF0 00000040 00003800    31000008 00000000 00000000 10000000    *.......0... ....................*
17FE0    00000000 01017A98 00001001 01000000    00000000 1CA80000 0080CFC0 00000000    *................................*
18000    00000000 00000000 18A80000 0A40D3B0    00000000 0000748C 8800128C 41017FA4    *............. L................*
18020    00000000 01280000 01000000 00010000    0001300C 40000000 00017FA4 0C0C9140    *.................. .......... *
18040    000180A0 0001827C 000180F8 000182D4    00018148 00018198 000180A0 0001827C    *...........8...M................*
18060    000181E8 00018238 000182D4 00018198    00300000 00000000 00A00000 00000000    *...Y.......M....................*
18080    04A80000 0480C810 00000000 00000000    300F000D CC0182F8 0000004C 00000000    *......H.................8.......*
```

```
180A0   B0002028 00000100 003C0540 407F7F2D   00017AA0 00000002 00000000 00A00000   *...........  ...................*
180C0   00000000 00000000 00000303 00000000   00A00000 00000000 04A80000 0480C810   *..............................H.*
180E0   00000000 00000000 30101087 4C018074   00000044 00000000 B0002028 00000100   *................................*
18100   12000540 4040402D 00056060 40402D00   00000000 00000000 01040000 00000000   *...    .....  ..................*
18120   00A00000 00000000 04A80000 0480C810   00000000 00000000 30111087 4C018074   *..............H.................*
18140   00000044 00000000 B0002028 00000100   12000540 40C1C12D 00056060 C1C12D00   *...................  AA.....AA..*
18160   00000000 00000000 01000000 00000000   00A00000 00000000 04A80000 0480C810   *..............................H.*
18180   00000000 00000000 30121087 4C018074   00000044 00000000 B0002028 00000100   *................................*
181A0   12000540 40C2C22D 00056060 C2C22D00   00000000 00000000 01000000 00000000   *...  BB.....BB..................*
181C0   00A00000 00000000 04A80000 0480C810   00000000 00000000 30131087 4C018074   *..............H.................*
181E0   00000044 00000000 B0002028 00000100   12000540 40C3C32D 00056060 C3C32D00   *...................  CC.....CC..*
18200   00000000 00000000 01842000 00000000   00A00000 00000000 04A80000 0480C810   *..............................H.*
18220   00000000 00000000 30143083 4C018074   00000000 00000000 B0002020 00000100   *................................*
18240   12000540 40C4C42D 0D056060 C4C42D9C   00000000 00A00000 00000000 04A80000   *...  DD.....DD..................*
18260   0480C810 00000000 00000000 3015000D   CC0182F8 0000004C 00000000 B0002028   *..H................8............*
18280   00000100 003C05C1 C17F7F2D 00017AB8   000000C0 00000000 00A00000 00000000   *.......AA.......................*
182A0   00000000 0000032F 00000000 00A00000   00000000 04A80000 0480C810 00000000   *..........................H.....*
182C0   00000000 30161087 4C018250 00000044   00000000 B0002028 00000100 120005C1   *...............................A*
182E0   C140402D 00056161 40402D00 00000000   00000000 01000000 00000000 1CA80000   *A  .....  ......................*
18300   0040CFC0 00000000 00000000 00000000   08A80000 0A40D3B0 00000000 0000751C   *. ................... L.........*
18320   10001490 46000000 00000000 01200000   16000300 04010000 0000300E 00000000   *................................*
18340   00A00000 0201803C 02090800 00000800   00000930 00000404 0005836C 0009879C   *................................*
18360   000D8830 00118A84 00140000 00000000   00A80000 008103F0 00000000 00000000   *.......................0........*
18380   00000000 C9018B0C 3019A141 00800000   02000000 00000000 00000700 00070000   *....I...........................*
183A0   04000000 000A0000 00000000 00A80000   1E810AD0 00000000 00000300 01090000   *................................*
183C0   00000000 00A80000 00810A00 00000000   00000000 00A80000 08810760 00000000   *................................*
183E0   0001836C 301A0000 00000000 00000202   00010000 00000000 00A80000 00810A00   *................................*
18400   00000000 00000000 00A80000 08810760   00000000 0001836C 301B0000 00000000   *................................*
18420   00000101 00020000 00000000 00A80000   00810A00 00000000 00000000 00A80000   *................................*
18440   08810760 00000000 0001836C 301C0000   00000000 00000707 00030000 00000000   *................................*
18460   00A80000 00810A00 00000000 00000000   00A80000 08810760 00000000 0001836C   *................................*
18480   301D0000 00000000 00000101 000400A2   00000000 00A80000 00810A00 00000000   *................................*
184A0   00000000 00A80000 08810760 00000000   0001836C 301E0000 00000000 00000101   *................................*
184C0   00052000 00000000 00A80000 00810A00   00000000 00000000 00A80000 08810760   *................................*
184E0   00000000 0001836C 301F0000 00000000   00000101 00060000 00000000 00A80000   *................................*
18500   00810A00 00000000 00000000 00A80000   08810760 00000000 0001836C 30200000   *................................*
18520   00000000 00000101 00070000 00000000   00A80000 00810A00 00000000 00000000   *................................*
18540   00A80000 08810760 00000000 0001836C   30210000 00000000 00000101 00080000   *................................*
18560   00000000 00A80000 00810A00 00000000   00000000 00A80000 08810760 00000000   *................................*
18580   0001836C 30220000 00000000 00000101   00090000 00000000 00A80000 00810A00   *................................*
185A0   00000000 00000000 00A80000 08810760   00000000 0001836C 30230000 00000000   *................................*
185C0   00000101 000A0000 00000000 00A80000   00810A00 00000000 00000000 00A80000   *................................*
185E0   08810760 00000000 0001836C 30240000   00000000 00000101 000B0000 00000000   *................................*
18600   00A80000 00810A00 00000000 00000000   00A80000 08810760 00000000 0001836C   *................................*
18620   30250000 00000000 00000101 000C0000   00000000 00A80000 00810A00 00000000   *................................*
18640   00000000 00A80000 08810760 00000000   0001836C 30260000 00000000 00000101   *................................*
18660   000D0000 00000000 00A80000 00810A00   00000000 00000000 00A80000 08810760   *................................*
18680   00000000 0001836C 30270000 00000000   00000101 000E0000 00000000 00A80000   *................................*
186A0   00810A00 00000000 00000000 00A80000   08810760 00000000 0001836C 30280000   *................................*
186C0   00000000 00000101 000F0000 00000000   00A80000 00810A00 00000000 00000000   *................................*
186E0   00A80000 08810760 00000000 0001836C   30290000 00000000 00000101 00100000   *................................*
18700   00000000 00A80000 00810A00 00000000   00000000 00A80000 08810760 00000000   *................................*
```

```
18720    0001836C 302A0000 00000000 00000101    00110000 00000000 00A80000 00810A00    *................................*
18740    00000000 00000000 00A80000 08810760    00000000 0001836C 302B0000 0C000000    *................................*
18760    00000101 00120000 00000000 00A80000    00810A00 00000000 00000000 00A80000    *................................*
18780    08810760 00000000 0001836C 302C0000    00000000 00000101 00130000 00000000    *................................*
187A0    00A80000 008103F0 00000000 00000000    00000000 C2018B0C 302DA141 0C800000    *.......0...........B............*
187C0    04000000 00000000 00000100 00010000    00000000 00000000 00000000 00A80000    *................................*
187E0    1E810AD0 00000000 00000300 01050000    00000000 00A80000 00810A00 00000000    *................................*
18800    0000000C 00A80000 08810760 00000000    0001879C 302E0000 00000000 00000101    *................................*
18820    00010000 00000000 00000000 00000000    00000000 00A80000 008103F0 00000000    *...........................0....*
18840    00000000 00000000 C5018B0C 302F0001    00800002 04000000 88440000 00000700    *........E.......................*
18860    440C0000 04000000 000A0000 00000000    00A80000 1E810AD0 00000000 80800300    *................................*
18880    01050000 00000000 00A80000 00810A00    00000000 00000000 00A80000 08810760    *................................*
188A0    00000000 00018830 30300000 80001001    80090101 00010001 00000001 00020001    *................................*
188C0    00010002 00000000 00A80000 00810A00    00000000 00000000 00A80000 08810760    *................................*
188E0    00000000 00018830 30310000 80000000    00000101 00020001 00000000 00000000    *................................*
18900    00000000 00000000 00A80000 00810A00    00000000 00000000 00A80000 08810760    *................................*
18920    00000000 00018830 30320000 80000000    00000101 00030001 00000000 00000000    *................................*
18940    00000000 00000000 00A80000 00810A00    00000000 00000000 00A80000 08810760    *................................*
18960    00000000 00018830 30330000 80000000    00000101 00040001 00000000 00000000    *................................*
18980    00000000 00000000 00A80000 00810A00    00000000 00000000 00A80000 08810760    *................................*
189A0    00000000 00018830 30340000 80000000    00000101 00050001 00000000 00000000    *................................*
189C0    00000000 00000000 00A80000 00810A00    00000000 00000000 00A80000 08810760    *................................*
189E0    00000000 00018830 30350000 80000000    00000101 00060001 00000000 00000000    *................................*
18A00    00000000 00000000 00A80000 00810A00    00000000 00000000 00A80000 08810760    *................................*
18A20    00000000 00018830 30360000 80000000    00000101 00070001 00000000 00000000    *................................*
18A40    00000000 00000000 00A80000 00810A00    00000000 00000000 00A80000 08810760    *................................*
18A60    00000000 00018830 30370000 80000000    00000101 00080001 00000000 00000000    *................................*
18A80    00000000 00000000 00A80000 008103F0    00000000 00000000 00000000 C3018B0C    *...............0...........C....*
18AA0    3038A001 00800000 02000000 00000000    00000100 00010000 00000000 00000000    *................................*
18AC0    00000000 00A80000 1E810AD0 00000000    00000300 01090000 00000000 00A80000    *................................*
18AE0    00010A00 00000000 00000000 00A80000    08010760 00000000 00018A84 30390000    *................................*
18B00    00000000 00000101 00010000 00000000    00A80000 00412088 00000000 301880A0    *................................*
18B20    00000000 00000000 00000000 00000000    00007604 00000101 00058B40 00080000    *........................... ....*
18B40    00000000 00A80000 008103F0 00000000    00000000 00000000 FF018BE8 303BA001    *...........0...............Y....*
18B60    00800000 24000000 00000000 00000000    00010000 00000000 00000000 00000000    *................................*
18B80    00A80000 1E810AD0 00000000 00000000    00000000 14018B98 00000000 00000000    *................................*
18BA0    00000000 00000000 00000000 00000000    00000000 00000000 00000000 00000000    *................................*

  LINE 18BC0 SAME AS ABOVE
18BE0    00000000 00800000 00000000 00A80000    00411618 00000000 303A8060 00500000    *................................*
18C00    00000000 00000000 00000000 00007678    00000101 00058C1C 00080000 00000000    *................................*
18C20    00A80000 008103F0 00000000 00000000    00000000 C4018CC4 303D0001 00810002    *.......0............D..D.........*
18C40    22000000 44440000 00140700 44070000    00000000 00000000 00000000 00A80000    *................................*
18C60    1E810AD0 00000000 80000300 01090000    14018C74 01418CEC 00000000 00000000    *................................*
18C80    00000000 00000000 00000000 00000000    00000000 00000000 00000000 00000000    *................................*

  LINE 18CA0 SAME AS ABOVE
18CC0    00800000 00000000 00A80000 00412088    00000000 303C8060 00C00000 00000000    *................................*
18CE0    00000000 00000000 000076EC 00000000    00A80000 00810A00 00000000 00000000    *................................*
18D00    00A80000 08010760 00000000 00018C1C    303E0000 80000000 00000101 00010000    *................................*
18D20    00000000 00000000 00000000 00000000    00A80000 00810A00 00000000 00000000    *................................*
18D40    00A80000 08810760 00000000 00000000    303F0000 00000000 00000000 00010000    *................................*
```

18D60	00000000	00000000	00000000	00000000	00A80000	00810A00	00000000	00000000	*................................*
18D80	00A80000	08810760	00000000	00000000	30400000	00000000	00000000	00010000	*................................*
18DA0	00000000	00000000	00000000	00000000	00A80000	00810A00	00000000	00000000	*................................*
18DC0	00A80000	08810760	00000000	00000000	30410000	00000000	00000000	00010000	*................................*
18DE0	00000000	00000000	00000000	00000000	00A80000	00810A00	00000000	00000000	*................................*
18E00	00A80000	08810760	00000000	00000000	30420000	00000000	00000000	00010000	*................................*
18E20	00000000	00000000	00000000	00000000	00A80000	00810A00	00000000	00000000	*................................*
18E40	00A80000	08810760	00000000	00000000	30430000	00000000	00000000	00010000	*................................*
18E60	00000000	00000000	00000000	00000000	00A80000	00810A00	00000000	00000000	*................................*
18E80	00A80000	08810760	00000000	00000000	30440000	00000000	00000000	00010000	*................................*
18EA0	00000000	00000000	00000000	00000000	00A80000	00810A00	00000000	00000000	*................................*
18EC0	00A80000	08810760	00000000	00000000	30450000	00000000	00000000	00010000	*................................*
18EE0	00000000	00000000	00000000	00000000	00A80000	00810A00	00000000	00000000	*................................*
18F00	00A80000	08810760	00000000	00000000	30460000	00000000	00000000	00010000	*................................*
18F20	00000000	00000000	00000000	00000000	00A80000	00810A00	00000000	00000000	*................................*
18F40	00A80000	08810760	00000000	00000000	30470000	00000000	00000000	00010000	*................................*
18F60	00000000	00000000	00000000	00000000	00A80000	00810A00	00000000	00000000	*................................*
18F80	00A80000	08810760	00000000	00000000	30480000	00000000	00000000	00010000	*................................*
18FA0	00000000	00000000	00000000	00000000	00A80000	00810A00	00000000	00000000	*................................*
18FC0	00A80000	08810760	00000000	00000000	30490000	00000000	00000000	00010000	*................................*
18FE0	00000000	00000000	00000000	00000000	00A80000	00810A00	00000000	00000000	*................................*
19000	00A80000	08810760	00000000	00000000	304A0000	00000000	00000000	00010000	*................................*
19020	00000000	00000000	00000000	00000000	00A80000	00810A00	00000000	00000000	*................................*
19040	00A80000	08810760	00000000	00000000	304B0000	00000000	00000000	00010000	*................................*
19060	00000000	00000000	00000000	00000000	00A80000	00810A00	00000000	00000000	*................................*
19080	00A80000	08810760	00000000	00000000	304C0000	00000000	00000000	00010000	*................................*
190A0	00000000	00000000	00000000	00000000	00A80000	00810A00	00000000	00000000	*................................*
190C0	00A80000	08810760	00000000	00000000	304D0000	00000000	00000000	00010000	*................................*
190E0	00000000	00000000	00000000	00000000	00A80000	00810A00	00000000	00000000	*................................*
19100	00A80000	08810760	00000000	00000000	304E0000	00000000	00000000	00010000	*................................*
19120	00000000	00000000	00000000	00000000	00A80000	00810A00	00000000	00000000	*................................*
19140	00A80000	08810760	00000000	00000000	304F0000	00000000	00000000	00010000	*................................*
19160	00000000	00000000	00000000	00000000	00A80000	00810A00	00000000	00000000	*................................*
19180	00A80000	08810760	00000000	00000000	30500000	00000000	00000000	00010000	*................................*
191A0	00000000	00000000	00000000	00000000	00A80000	00810A00	00000000	00000000	*................................*
191C0	00A80000	08810760	00000000	00000000	30510000	00000000	00000000	00010000	*................................*
191E0	00000000	00000000	00000000	00000000	00A80000	00810A00	00000000	00000000	*................................*
19200	00A80000	08810760	00000000	00000000	30520000	00000000	00000000	00010000	*................................*
19220	00000000	00000000	00000000	00000000	00A80000	00810A00	00000000	00000000	*................................*
19240	00A80000	08810760	00000000	00000000	30530000	00000000	00000000	00010000	*................................*
19260	00000000	00000000	00000000	00000000	00A80000	00810A00	00000000	00000000	*................................*
19280	00A80000	08810760	00000000	00000000	30540000	00000000	00000000	00010000	*................................*
192A0	00000000	00000000	00000000	00000000	00A80000	00810A00	00000000	00000000	*................................*
192C0	00A80000	08810760	00000000	00000000	30550000	00000000	00000000	00010000	*................................*
192E0	00000000	00000000	00000000	00000000	00A80000	00810A00	00000000	00000000	*................................*
19300	00A80000	08810760	00000000	00000000	30560000	00000000	00000000	00010000	*................................*
19320	00000000	00000000	00000000	00000000	00A80000	00810A00	00000000	00000000	*................................*
19340	00A80000	08810760	00000000	00000000	30570000	00000000	00000000	00010000	*................................*
19360	00000000	00000000	00000000	00000000	00A80000	00810A00	00000000	00000000	*................................*
19380	00A80000	08810760	00000000	00000000	30580000	00000000	00000000	00010000	*................................*
193A0	00000000	00000000	00000000	00000000	00A80000	00810A00	00000000	00000000	*................................*
193C0	00A80000	08810760	00000000	00000000	30590000	00000000	00000000	00010000	*................................*

```
193E0   00000000 00000000 00000000 00000000   00A80000 00810A00 00000000 00000000   *................................*
19400   00A80000 08810760 00000000 00000000   305A0000 00000000 00000000 00010000   *................................*
19420   00000000 00000000 00000000 00000000   00A80000 00810A00 00000000 00000000   *................................*
19440   00A80000 08810760 00000000 00000000   305B0000 00000000 00000000 00010000   *................................*
19460   00000000 00000000 00000000 00000000   00A80000 00810A00 00000000 00000000   *................................*
19480   00A80000 08810760 00000000 00000000   305C0000 00000000 00000000 00010000   *................................*
194A0   00000000 00000000 00000000 00000000   00A80000 00810A00 00000000 00000000   *................................*
194C0   00A80000 08810760 00000000 00000000   305D0000 00000000 00000000 00010000   *................................*
194E0   00000000 00000000 00000000 00000000   00A80000 00810A00 00000000 00000000   *................................*
19500   00A80000 08810760 00000000 00000000   305E0000 00000000 00000000 00010000   *................................*
19520   00000000 00000000 00000000 00000000   00A80000 00810A00 00000000 00000000   *................................*
19540   00A80000 08810760 00000000 00000000   305F0000 00000000 00000000 00010000   *................................*
19560   00000000 00000000 00000000 00000000   00A80000 00810A00 00000000 00000000   *................................*
19580   00A80000 08810760 00000000 00000000   30600000 00000000 00000000 00010000   *................................*
195A0   00000000 00000000 00000000 00000000   00A80000 00810A00 00000000 00000000   *................................*
195C0   00A80000 08810760 00000000 00000000   30610000 00000000 00000000 00010000   *................................*
195E0   00000000 00000000 00000000 00000000   00A80000 00810A00 00000000 00000000   *................................*
19600   00A80000 08810760 00000000 00000000   30620000 00000000 00000000 00010000   *................................*
19620   00000000 00000000 00000000 00000000   00A80000 00810A00 00000000 00000000   *................................*
19640   00A80000 08810760 00000000 00000000   30630000 00000000 00000000 00010000   *................................*
19660   00000000 00000000 00000000 00000000   00A80000 00810A00 00000000 00000000   *................................*
19680   00A80000 08810760 00000000 00000000   30640000 00000000 00000000 00010000   *................................*
196A0   00000000 00000000 00000000 00000000   00A80000 00810A00 00000000 00000000   *................................*
196C0   00A80000 08810760 00000000 00000000   30650000 00000000 00000000 00010000   *................................*
196E0   00000000 00000000 00000000 4100E658   9A0137C0 180137C0 21013D28 22013D28   *..............W.................*
19700   4A014190 4C013E88 42017610 44017610   50017610 60017610 430136C8 8D013868   *...........................H....*
19720   1C815420 9800ED88 01013688 02013910   05013910 C280E740 00770059 786C78B8   *....................B.X ........*
19740   17C47894 798279B2 1200717C 000197F4   00006F48 000197E4 000197B4 000197A4   *.D.............4.......U........*
19760   000197D4 00019794 00000000 80020000   00000000 00000000 00000000 00019C60   *...M............................*
19780   00017A40 00017A50 80000000 000A000A   00000000 00000000 00A80000 0080EE58   *... ............................*
197A0   00000000 00000000 00A80000 0080BA18   00000000 00000000 00A80000 0080C6F0   *..............................F0*
197C0   00000000 29DE29DE 00A00000 00000000   00A00000 00000000 00A80000 00215728   *................................*
197E0   00000000 00000000 00A80000 00416358   00000000 00000000 00A80000 0020FD40   *............................... *
19800   00000000 00000000 00000000 00000000   00000000 00000000 00000000 00000000   *................................*

        LINES 19820-19BE0 SAME AS ABOVE
19C00   00000000 0100FFB8 02010138 19010FE8   1A0110F8 11811190 1180FD88 11811240   *...............Y...8........... *
19C20   018126A0 018126A0 0A00F8D8 0B00FB10   0E011348 160114A8 17011708 18011708   *..........8Q....................*
19C40   0F8112E8 010126A0 02007A20 03807A20   018148A0 020148F0 030148F0 048148F0   *...Y...................0...0...0*
19C60   00000000 00A80000 0080F5D0 00000000   00000000 00A80000 0880F460 00000000   *..........5...............4.....*
19C80   00060016 30001000 0008C000 D5C3D7F0   F4D44040 00000000 02000000 00000000   *............NCP04M  ............*
19CA0   00000000 A800A800 673D0A14 00000000   00140001 672A1D00 00003000 0000000A   *................................*
19CC0   2B000050 09004C00 7750BB20 7A18BC21   000043B8 9808B920 0525B800 97B00087   *................................*
19CE0   33A80B10 A3010B86 A3020B8F A3010B87   A3010B88 67500A17 20000000 00170001   *................................*
19D00   673D1F00 1000300C 0001000D EB800011   01D5C3D7 F0F4D440 40484983 D1805174   *.................NCP04M  ...J...*
19D20   BB203001 536411A8 4903C108 D1805174   BF203000 5764E17F D1015174 D1105174   *..........A.J...........J...J...*
19D40   67630A0E 20000000 000E0001 67501F00   10003000 00020004 EB8000A0 9FD8015A   *.............................Q..*
19D60   913401E6 BD20084C 1B00CB02 A95CBE20   08BE1B01 B9019DEA 77088804 87407290   *...W... ..................... ..*
19D80   015A9138 01E6BD20 09401B00 67760A10   00000000 00100001 67631E00 10003000   *.....W... ......................*
19DA0   00010006 8B800001 02113000 01F0F361   F0F161F7 F74BF0F6 F0F1F54B F5F14BF2   *.............03.01.77.06015.51.2*
19DC0   F3048710 7290015A 914001E6 BD200B40   1B00CB02 A8F4BE20 67890A10 00000000   *3........ .W... .....4..........*
19DE0   00100001 67761E00 10003000 00020006   8B800001 02113000 05000010 884ABF20   *................................*
```

```
19E00   40047774 BF200010 77944310 EBAC5701   7B21CB02 A8047707 88207316 881C7596   * ...............................*
19E20   7D53FD8C 679C0A10 00000000 00100001   67891E00 10003000 00030006 8B800001   *................................*
19E40   020A3001 87FF1088 BF200010 77944324   03663703 471433A8 4310EBE2 4504A800   *...........................S....*
19E60   4374BB20 F0004344 BB219FC0 34825401   67C20A14 40000000 00140001 679C0E00   *....O............B.. ...........*
19E80   10013002 1001000A 9B800000 089A0000   60000008 A80047D4 A80047D4 A80047E4   *.......................M...M...U*
19EA0   FD8C3D36 D5014C21 CC02E5FE 3DB64516   33F833F8 43994096 BB219FC0 00001E00   *....N.....V......8.8.. .........*
19EC0   80000000 00000000 00017A6C 00000000   10013002 00020000 06000002 0000B920   *................................*
19EE0   00203185 B9209B58 11F811F8 318BB920   A8C03189 618EB900 962C0802 000197C4   *.........8.8...................D*
19F00   B9200038 71F4B920 68470A10 00000000   00100001 67C21E00 10003000 00040006   *.....4...............B..........*
19F20   8B800001 020A3003 4488883E 4145883A   08071028 9802A807 10180B07 03284BB4   *................................*
19F40   7BB48826 0171910A 22489201 31289806   A8092308 00000000 01019F5C 00A80000   *................................*
19F60   00000000 0014D446 7BA8001C 11981330   739D7F0C A8081198 11981198 1198A101   *......M.........................*
19F80   03620362 31B89804 03E2A802 01E211F8   11F811F8 9001BB21 9CA823B8 8810BB21   *.........S...S.8.8.8............*
19FA0   685A0A14 40000000 00140001 67E80E00   10013004 1001000A 9B800000 089A0000   *.... ........Y..................*
19FC0   60000008 50000000 00000000 D6202000   C3E7C6C9 D5C9E340 01010101 01010401   *............O...CXFINIT ........*
19FE0   01010104 04040404 04040404 00001E00   80000000 00000000 00017A74 00000000   *................................*
1A000   10013004 00020000 06000002 00000404   04040404 04040404 00000000 00000000   *................................*
1A020   00000000 00000000 00000000 00000000   00000000 00000000 68210A14 00000000   *................................*
1A040   00140001 680E1E00 10003000 0005000A   8F900080 02000001 020A0000 00000000   *................................*
1A060   00000000 00000000 00000000 00000000   00000000 00000000 00000000 00000000   *................................*
1A080   00000000 686D0A10 00000000 00100001   68211E00 10003000 00060006 8B800001   *................................*
1A0A0   020A3008 00000000 00000000 00000000   00000000 00000000 00000000 00000000   *................................*
1A0C0   00000000 00000000 00000000 00000000   67E80000 0101A0D8 00000000 00000000   *.................Y.....Q........*
1A0E0   1000C392 00000000 00000000 00000000   00000000 00000000 00000000 00000000   *..C.............................*
1A100   00000000 00000000 00000000 00000000   00000000 00000000 00000000 68340000   *................................*
1A120   0101A124 00000000 00000000 4200C518   00017E18 00000000 00000000 00000000   *..............E.................*
1A140   00000000 00000000 00000000 00000000   00000000 00000000 00000000 00000000   *................................*
1A160   00000000 00000000 680E0A2B 0000680E   002B0001 685A1C00 10003000 00010021   *................................*
1A180   0B000001 03813005 002A0005 00000000   8D000000 06F40000 00000000 00000000   *.....................4..........*
1A1A0   00000000 00000000 00000000 00000000   00000000 68930A14 40000000 00140001   *........................ .......*
1A1C0   686D0E00 10013009 1001000A 9B800000   089A0000 60000008 00000000 00000000   *................................*
1A1E0   00000000 00000000 00000000 00000000   00000000 00000000 00000000 00000000   *................................*
1A200   00001E00 80000000 00000000 00017A88   00000000 10013009 00020000 06000002   *................................*
1A220   00000000 00000000 00000000 00000000   00000000 00000000 00000000 00000000   *................................*
1A240   00000000 00000000 00000000 68A60A10   00000000 00100001 68931E00 10003000   *................................*
1A260   00070006 8B800001 020A300A 00000000   00000000 00000000 00000000 00000000   *................................*
1A280   00000000 00000000 00000000 00000000   00000000 00000000 68CC0A14 40000000   *............................ ...*
1A2A0   00140001 68A60E00 1001300B 1001000A   9B800000 089A0000 60000008 00000000   *................................*
1A2C0   00000000 00000000 00000000 00000000   00000000 00000000 00000000 00000000   *................................*
1A2E0   00000000 6D400A14 40000000 00140001   68B90E00 1001300B 0002000A 9B800000   *..... .. .......................*
1A300   06000002 609E0000 00000000 00000000   00000000 00000000 00000000 00000000   *................................*
1A320   00000000 00000000 00000000 00000000   68F20A10 00000000 00100001 68CC1E00   *.................2..............*
1A340   10003000 00080006 8B800001 020A300C   00000000 00000000 00000000 00000000   *................................*
1A360   00000000 00000000 00000000 00000000   00000000 00000000 00000000 69770A14   *................................*
1A380   40000000 00140001 68DF0E00 1001300D   1001000A 9B800000 089A0000 60000008   * ...............................*
1A3A0   00000000 00000000 00000000 00000000   00000000 00000000 00000000 00000000   *................................*
1A3C0   00000000 00000000 69641E00 00000000   00000000 00017A98 00000000 1001300D   *................................*
1A3E0   00000000 05010000 00000000 00000000   00000000 00000000 00000000 00000000   *................................*
1A400   00000000 00000000 00000000 00000000   00000000 69180A14 00000000 00140001   *................................*
1A420   69051E00 10003000 0009000A 8F900080   02000001 020A0000 00000000 00000000   *................................*
1A440   00000000 00000000 00000000 00000000   00000000 00000000 00000000 00000000   *................................*
1A460   692B0A10 00000000 00100001 69181E00   10003000 000A0006 8B800001 020A3018   *................................*
```

```
1A480   00000000 00000000 00000000 00000000   00000000 00000000 00000000 00000000   *................................*
1A4A0   00000000 00000000 00000000 693E0A10   00000000 00100001 692B1E00 10003000   *................................*
1A4C0   000B0006 8B800001 020A303A 00000000   00000000 00000000 00000000 00000000   *................................*
1A4E0   00000000 00000000 00000000 00000000   00000000 00000000 698A0A10 00000000   *................................*
1A500   00100001 693E1E00 10003000 000C0006   8B800001 0216303A 00000000 00000000   *................................*
1A520   00000000 00000000 00000000 00000000   00000000 00000000 00000000 00000000   *................................*
1A540   00000000 68DF0000 0101A54C 00000000   00000000 1000C392 00000000 00000000   *......................C.........*
1A560   00000000 00000000 00000000 00000000   00000000 00000000 00000000 00000000   *................................*
1A580   00000000 00000000 00000000 00000000   69510000 0101A598 00000000 00000000   *................................*
1A5A0   4200C518 000182F8 00000000 00000000   00000000 00000000 00000000 00000000   *..E....8........................*
1A5C0   00000000 00000000 00000000 00000000   00000000 00000000 00000000 69050A2B   *................................*
1A5E0   00006905 002B0001 69771C00 10003000   00020021 0B000001 0381300E 00440005   *................................*
1A600   00000000 8D000000 06F40000 00000000   00000000 00000000 00000000 00000000   *.........4......................*
1A620   00000000 00000000 699D0A10 00000000   00100001 698A1E00 10003000 000D0006   *................................*
1A640   8B800001 020A303C 00000000 00000000   00000000 00000000 00000000 00000000   *................................*
1A660   00000000 00000000 00000000 00000000   00000000 69B00A10 00000000 00100001   *................................*
1A680   699D1E00 10003000 000E0006 8B800001   0216303C 00000000 00000000 00000000   *................................*
1A6A0   00000000 00000000 00000000 00000000   00000000 00000000 00000000 00000000   *................................*
1A6C0   69C30A10 00000000 00100001 69B01E00   10003000 000F0006 8B800001 02113000   *.C..............................*
1A6E0   05000200 00000000 00000000 00000000   00000000 00000000 00000000 00000000   *................................*
1A700   00000000 00000000 00000000 69D60A10   00000000 00100001 69C31E00 10003000   *.............O.......C..........*
1A720   00100006 8B800001 02013019 00000000   00000000 00000000 00000000 00000000   *................................*
1A740   00000000 00000000 00000000 00000000   00000000 00000000 6A220A10 00000000   *................................*
1A760   00100001 69D61E00 10003000 00110006   8B800001 0201302D 00000000 00000000   *.....O..........................*
1A780   00000000 00000000 00000000 00000000   00000000 00000000 00000000 00000000   *................................*
1A7A0   00000000 6A350A10 00000000 00100001   69E91E00 10003000 00120006 8B800001   *.................Z..............*
1A7C0   0201302F 00000000 00000000 00000000   00000000 00000000 00000000 00000000   *................................*
1A7E0   00000000 00000000 00000000 00000000   6A0F0A17 20000000 00170001 69FC1F00   *................................*
1A800   1000302F 0001000D EB800011 01404040   40404040 40000000 00000000 00000000   *.............        ...........*
1A820   00000000 00000000 00000000 00000000   00000000 00000000 00000000 6A480A0F   *................................*
1A840   20000000 000F0001 6A0F1F00 10003030   00010005 EB80000D 01010000 00000000   *................................*
1A860   00000000 00000000 00000000 00000000   00000000 00000000 00000000 00000000   *................................*
1A880   00000000 00000000 69E90000 0101A890   00000000 00000000 220100C8 00000041   *.........Z.................H....*
1A8A0   00007604 00000000 00000000 00000000   00000000 00000000 00000000 00000000   *................................*
1A8C0   00000000 00000000 00000000 00000000   00000000 69FC0A13 00000000 00130001   *................................*
1A8E0   6A351C00 10003000 00030009 0B000001   0280302F 01000000 00000000 00000000   *................................*
1A900   00000000 00000000 00000000 00000000   00000000 00000000 00000000 00000000   *................................*
1A920   6A5B0A0F 20000000 000F0001 6A481F00   10003031 00010005 EB80000D 01010000   *................................*
1A940   00000000 00000000 00000000 00000000   00000000 00000000 00000000 00000000   *................................*
1A960   00000000 00000000 00000000 6A6E0A0F   20000000 000F0001 6A5B1F00 10003032   *................................*
1A980   00010005 EB80000D 01010000 00000000   00000000 00000000 00000000 00000000   *................................*
1A9A0   00000000 00000000 00000000 00000000   00000000 00000000 6A810A0F 20000000   *................................*
1A9C0   000F0001 6A6E1F00 10003033 00010005   EB80000D 01010000 00000000 00000000   *................................*
1A9E0   00000000 00000000 00000000 00000000   00000000 00000000 00000000 00000000   *................................*
1AA00   00000000 6A940A0F 20000000 000F0001   6A811F00 10003034 00010005 EB80000D   *................................*
1AA20   01010000 00000000 00000000 00000000   00000000 00000000 00000000 00000000   *................................*
1AA40   00000000 00000000 00000000 00000000   6AA70A0F 20000000 000F0001 6A941F00   *................................*
1AA60   10003035 00010005 EB80000D 01010000   00000000 00000000 00000000 00000000   *................................*
1AA80   00000000 00000000 00000000 00000000   00000000 00000000 00000000 6ABA0A0F   *................................*
1AAA0   20000000 000F0001 6AA71F00 10003036   00010005 EB80000D 01010000 00000000   *................................*
1AAC0   00000000 00000000 00000000 00000000   00000000 00000000 00000000 00000000   *................................*
1AAE0   00000000 00000000 6AE00A0F 20000000   000F0001 6ABA1F00 10003037 00010005   *................................*
```

```
1AB00   FB80000D 01010000 00000000 00000000   00000000 00000000 00000000 00000000   *................................*
1AB20   00000000 00000000 00000000 00000000   00000000 6B520A0E 20000000 000E0001   *................................*
1AB40   6ACD1F00 10013030 00010004 EB800031   01020271 40200000 01000000 00000000   *.................... ...........*
1AB60   00000000 00000000 000008C4 C2C4C3C3   C9C3E200 00000000 00000000 00000000   *...........DBDCCICS.............*
1AB80   6AF30A0E 00000000 000E0001 6AE01C00   10003030 00000004 0300006D 7C9A0000   *.3..............................*
1ABA0   00000000 00000000 00000000 00000000   00000000 00000000 00000000 00000000   *................................*
1ABC0   00000000 00000000 00000000 6ACD0A15   00000000 00150001 6AF31C00 10003030   *.........................3......*
1ABE0   0001000B 03000001 6C610283 8983A22D   C1000000 00000000 00000000 00000000   *................A...............*
1AC00   00000000 00000000 00000000 00000000   00000000 00000000 6B191236 80806BC4   *...............................D*
1AC20   01490010 08001E00 30302A00 01013AC0   039100F5 C3114040 1D40C5D5 E3C5D940   *...................5C.  . FNTER *
1AC40   E3D9C1D5 E2C1C3E3 C9D6D540 C9C4114B   501DC8C5 D5E3C5D9 7A4040E3 D640C4C9   *TRANSACTION ID....HENTER.  TO DI*
1AC60   E2D7D3C1 6B2C0048 E87A114C 613C4DD4   5C1D4011 4DF01D40 40114F40 1D40D7C6   *SPLA....Y......M.. ..0.  .. . PF*
1AC80   4040F140 7E404DC9 C4F0F15D 40F3F2F7   F040C6E4 D5C3E3C9 D6D5E240 C1D5C440   *  1 . .ID01. 3270 FUNCTIONS AND *
1ACA0   C6C5C1E3 E4D9C5E2 1150501D 404011D1   6BC40048 601D40D7 C64040F2 407E404D   *FEATURES....  .J.D.... PF  2 . .*
1ACC0   D4C6F1F6 5D40D4C1 D5C1C7C5 D4C5D5E3   40E2C1D3 C5E240C1 D5C1D3E8 E2C9E211   *MF16. MANAGEMENT SALES ANALYSIS.*
1ACE0   D2F01D40 4011D440 1D40D7C6 4040F340   7E404DD4 C4F0F25D 40C8D6E2 6B650048   *K0.  .M . PF  3 . .MD02. HOS....*
1AD00   D7C9E3C1 D340C9D5 C6D6D9D4 C1E3C9D6   D540E2E8 E2E3C5D4 11D54F1D 401D4040   *PITAL INFORMATION SYSTEM.N.. .  *
1AD20   11D6601D 40D7C640 40F4407E 404DC9C4   F0F45D40 C1C3C3D6 E4D5E3E2 40D9C5C3   *.O.. PF  4 . .ID04. ACCOUNTS REC*
1AD40   C5C9E5C1 C2D3C511 6B060A0E 00000000   000E0001 6B521C00 10013030 00010004   *EIVABLE.........................*
1AD60   0300806E 91C70000 00000000 00000000   00000000 00000000 00000000 00000000   *.....G..........................*
1AD80   00000000 00000000 00000000 00000000   00000000 6BD70033 D7F01D40 4011D940   *.....................P..P0.  .R *
1ADA0   1D40D7C6 4040F540 7E404DC6 D5F0F35D   40E3C9C3 60E3C1C3 60E3D6C5 115A501D   *. PF  5 . .FN03. TIC.TAC.TOE....*
1ADC0   4040115B 601D4040 1D401300 00000000   00000000 00000000 00000000 00000000   *  ....  . ......................*
1ADE0   6C230A10 00000000 00100001 6B781E00   10003000 00130006 8B800001 0211303D   *................................*
1AE00   03C40200 07078000 00010900 00000000   00000000 00000000 00000000 00000000   *.D..............................*
1AE20   00000000 00000000 00000000 6B9E0A10   00000000 00100001 6B8B1E00 10003000   *................................*
1AE40   00140006 8B800001 0201303D 00000000   00000000 00000000 00000000 00000000   *................................*
1AE60   00000000 00000000 00000000 00000000   00000000 00000000 6C360E12 A0000000   *................................*
1AE80   00160000 64001F00 303D2F00 00000001   6B800011 01010500 00000001 00000000   *................................*
1AEA0   00000000 00000000 00000000 00000000   00000000 00000000 00000000 00000000   *................................*
1AEC0   00000000 6C100A0D 00000000 000D0001   6BB11C00 10013030 00010003 83010000   *................................*
1AEE0   00000000 00000000 00000000 00000000   00000000 00000000 00000000 00000000   *................................*
1AF00   00000000 00000000 00000000 00000000   6B3F1202 80010000 00002200 00000000   *................................*
1AF20   00002600 010136C0 00000000 00000000   00000000 00000000 00000000 00000000   *................................*
1AF40   00000000 00000000 00000000 00000000   00000000 00000000 00000000 6BFD0A0D   *................................*
1AF60   00000000 00050000 00001E00 10013030   00010003 83010003 53000000 00000000   *................................*
1AF80   00000000 00000000 00000000 00000000   00000000 00000000 00000000 00000000   *................................*
1AFA0   00000000 00000000 6B781206 00000000   00000000 00000000 00000000 00000200   *................................*
1AFC0   011000C4 4D630000 00000000 00000000   00000000 00000000 00000000 00000000   *...D............................*
1AFE0   00000000 00000000 00000000 00000000   00000000 6BB10000 0101AFFC 00000000   *................................*
1B000   00000000 5A011584 00018CC4 0001AFA8   00018C1C 00000601 00000000 00000000   *...........D....................*
1B020   00000000 00000000 00000000 00000000   00000000 00000000 00000000 00000000   *................................*
1B040   6BEA0A12 00000000 00180001 6BEA1C00   10003000 0004000E 0B000001 0284303C   *................................*
1B060   00000000 00000000 00000000 00000000   00000000 00000000 00000000 00000000   *................................*
1B080   00000000 00000000 00000000 6B8B0000   0101B094 00000000 00000000 220100C8   *...............................H*
1B0A0   00000041 000076EC 00000000 00000000   00000000 00000000 00000000 00000000   *................................*
1B0C0   00000000 00000000 00000000 00000000   00000000 00000000 6C950A13 00000000   *................................*
1B0E0   00130001 6C361C00 10003000 00050009   0B000001 0280303D 01000000 00000000   *................................*
1B100   00000000 00000000 00000000 00000000   00000000 00000000 00000000 00000000   *................................*
1B120   00000000 6C6F0A10 00000000 00100001   6C491E00 10003000 00150006 8B800001   *................................*
1B140   0219303D 0180303E 00000000 00000000   00000000 00000000 00000000 00000000   *................................*
1B160   00000000 00000000 00000000 00000000   6CA80A10 00000000 00100001 6C5C1E00   *................................*
```

```
1B180    10003000 00160006 8B800001 0211303E    04010101 01000000 00000000 00000000    *................................*
1B1A0    00000000 00000000 00000000 00000000    00000000 00000000 00000000 6C5C0E0C    *................................*
1B1C0    A0000000 00102200 0C001F00 303E2F00    01000001 6B80000D 01010000 00000000    *................................*
1B1E0    00000000 00000000 00000000 00000000    00000000 00000000 00000000 00000000    *................................*
1B200    00000000 00000000 6CBB0A14 40000000    00140001 6C820E00 1002300B 0181000A    *............ ...................*
1B220    9B900000 01035000 A18A0000 00000000    00000000 00000000 00000000 00000000    *................................*
1B240    00000000 00000000 00000000 00000000    00000000 6C490A17 00000000 00170001    *................................*
1B260    6C951F00 1000303D 0001000D EB800011    01404040 40404040 40A5D100 00000000    *.................        .J.....*
1B280    00000000 00000000 00000000 00000000    00000000 00000000 00000000 00000000    *................................*
1B2A0    6D1A0A0F 00000000 000F0001 6CA81F00    1000303E 00010005 EB80000D 01B0B200    *................................*
1B2C0    00000000 00000000 00000000 00000000    00000000 00000000 00000000 00000000    *................................*
1B2E0    00000000 00000000 00000000 6CCE0A14    40000000 00140001 6CBB0E00 1002300B    *................ ...............*
1B300    0002000A 9B800000 08440000 60000000    00000000 00000000 00000000 00000000    *................................*
1B320    00000000 00000000 00000000 00000000    00000000 00000000 6CE10A14 40000000    *............................ ...*
1B340    00140001 6CCE0E00 1002300B 0183000A    9B800000 02020000 6098C5D9 D9D6D940    *..........................ERROR *
1B360    E6C8C5D5 40D9C5C1 C4C9D5C7 40D3D6C7    D6D540D4 C5E2E2C1 C7C51500 00000000    *WHEN READING LOGON MESSAGE......*
1B380    00000000 00000A18 40000000 00180001    6CE10E00 1002300B 0184000E 9B800000    *........ .......................*
1B3A0    01035000 6238A3A2 96150000 00000000    00000000 00000000 00000000 00000000    *................................*
1B3C0    00000000 00000000 00000000 00000000    00000A14 40000000 00140001 6CF40E00    *.................... ........4..*
1B3E0    1002300B 0185000A 9B800000 02021000    6098C9D5 D7E4E340 D5D6E340 D9C5C3D6    *..................INPUT NOT RECO*
1B400    C7D5C9E9 C5C41500 00000000 00000000    00000000 00000000 00000000 68B90000    *GNIZED..........................*
1B420    0101B424 00000000 00000000 1000C392    0001B208 00000000 00000000 00000000    *..............C.................*
1B440    00000000 00000000 00000000 00000000    00000000 00000000 00000000 00000000    *................................*
1B460    00000000 00000000 6D070000 0101B470    00000000 00000000 4200C518 00017F58    *..........................E.....*
1B480    00000000 00000000 00000000 00000000    00000000 00000000 00000000 00000000    *................................*
1B4A0    00000000 00000000 00000000 00000000    00000000 6C820A2B 00006C82 002B0001    *................................*
1B4C0    6D2D1C00 10003000 00060021 0B000001    0381300B 00280005 01035000 28285000    *................................*
1B4E0    088A0000 00000002 000007A4 85000000    00000000 00000000 00000000 00000000    *................................*
1B500    6D530000 0101B508 00000000 00000000    04017696 0001B2EC 00000000 00000000    *................................*
1B520    00000000 00000000 00000000 00000000    00000000 00000000 00000000 00000000    *................................*
1B540    00000000 00000000 00000000 6D2D0000    0101B554 00000000 00000000 060176A0    *................................*
1B560    00017F0C 0001B2EC 00000000 00000000    00000000 00000000 00000000 00000000    *................................*
1B580    00000000 00000000 00000000 00000000    00000000 00000000 00001E00 80000000    *................................*
1B5A0    00000000 00017A90 00000000 1002300B    01860000 01035000 00000000 00000000    *................................*
1B5C0    00000000 00000000 00000000 00000000    00000000 00000000 00000000 00000000    *................................*
1B5E0    00000000 6D8C0A3E 00000000 00000000    00000000 00000000 00000000 00000000    *................................*
1B600    00000000 00000000 00000000 00000000    00000000 00000000 00000000 00000000    *................................*
1B620    00000000 00000000 00000000 00000000    6D9F0048 00000000 00000000 00000000    *................................*
1B640    00000000 00000000 00000000 00000000    00000000 00000000 00000000 00000000    *................................*
1B660    00000000 00000000 00000000 00000000    00000000 00000000 00000000 00000048    *................................*
1B680    00000000 00000000 00000000 00000000    00000000 00000000 00000000 00000000    *................................*

       LINE 1B6A0 SAME AS ABOVE
1B6C0    00000000 00000000 6DC50000 00000000    00000000 00000000 00000000 00000000    *.........E......................*
1B6E0    00000000 00000000 00000000 00000000    00000000 00000000 00000000 00000000    *................................*
1B700    00000000 00000000 00000000 00000000    00000000 6DD80000 00000000 00000000    *.....................Q..........*
1B720    00000000 00000000 00000000 00000000    00000000 00000000 00000000 00000000    *................................*

       LINE 1B740 SAME AS ABOVE
1B760    6DEB0000 00000000 00000000 00000000    00000000 00000000 00000000 00000000    *................................*
1B780    00000000 00000000 00000000 00000000    00000000 00000000 00000000 00000000    *................................*
1B7A0    00000000 00000000 00000000 6DFE0000    00000000 00000000 00000000 00000000    *................................*
```

```
1B7C0   00000000 00000000 00000000 00000000   00000000 00000000 00000000 00000000   *................................*
1B7E0   00000000 00000000 00000000 00000000   00000000 00000000 6E110000 00000000   *................................*
1B800   00000000 00000000 00000000 00000000   00000000 00000000 00000000 00000000   *................................*

        LINE 1B820 SAME AS ABOVE
1B840   00000000 6E240000 00000000 00000000   00000000 00000000 00000000 00000000   *................................*
1B860   00000000 00000000 00000000 00000000   00000000 00000000 00000000 00000000   *................................*
1B880   00000000 00000000 00000000 00000000   6E370000 00000000 00000000 00000000   *................................*
1B8A0   00000000 00000000 00000000 00000000   00000000 00000000 00000000 00000000   *................................*
1B8C0   00000000 00000000 00000000 00000000   00000000 00000000 00000000 6E4A0000   *................................*
1B8E0   00000000 00000000 00000000 00000000   00000000 00000000 00000000 00000000   *................................*

        LINE 1B900 SAME AS ABOVE
1B920   00000000 00000000 6E5D0000 00000000   00000000 00000000 00000000 00000000   *................................*
1B940   00000000 00000000 00000000 00000000   00000000 00000000 00000000 00000000   *................................*
1B960   00000000 00000000 00000000 00000000   00000000 6E700000 00000000 00000000   *................................*
1B980   00000000 00000000 00000000 00000000   00000000 00000000 00000000 00000000   *................................*

        LINE 1B9A0 SAME AS ABOVE
1B9C0   6E830000 00000000 00000000 00000000   00000000 00000000 00000000 00000000   *................................*
1B9E0   00000000 00000000 00000000 00000000   00000000 00000000 00000000 00000000   *................................*
1BA00   00000000 00000000 00000000 6E960000   00000000 00000000 00000000 00000000   *................................*
1BA20   00000000 00000000 00000000 00000000   00000000 00000000 00000000 00000000   *................................*
1BA40   00000000 00000000 00000000 00000000   00000000 00000000 6EA90000 00000000   *................................*
1BA60   00000000 00000000 00000000 00000000   00000000 00000000 00000000 00000000   *................................*

        LINE 1BA80 SAME AS ABOVE
1BAA0   00000000 6EBC0000 00000000 00000000   00000000 00000000 00000000 00000000   *................................*
1BAC0   00000000 00000000 00000000 00000000   00000000 00000000 00000000 00000000   *................................*
1BAE0   00000000 00000000 00000000 00000000   6ECF0000 00000000 00000000 00000000   *................................*
1BB00   00000000 00000000 00000000 00000000   00000000 00000000 00000000 00000000   *................................*
1BB20   00000000 00000000 00000000 00000000   00000000 00000000 00000000 6EE20000   *.............................S..*
1BB40   00000000 00000000 00000000 00000000   00000000 00000000 00000000 00000000   *................................*

        LINE 1BB60 SAME AS ABOVE
1BB80   00000000 00000000 6FF50000 00000000   00000000 00000000 00000000 00000000   *.........5......................*
1BBA0   00000000 00000000 00000000 00000000   00000000 00000000 00000000 00000000   *................................*
1BBC0   00000000 00000000 00000000 00000000   00000000 6F080000 00000000 00000000   *................................*
1BBE0   00000000 00000000 00000000 00000000   00000000 00000000 00000000 00000000   *................................*

        LINE 1BC00 SAME AS ABOVE
1BC20   6F1B0000 00000000 00000000 00000000   00000000 00000000 00000000 00000000   *................................*
1BC40   00000000 00000000 00000000 00000000   00000000 00000000 00000000 00000000   *................................*
1BC60   00000000 00000000 00000000 6F2E0000   00000000 00000000 00000000 00000000   *................................*
1BC80   00000000 00000000 00000000 00000000   00000000 00000000 00000000 00000000   *................................*
1BCA0   00000000 00000000 00000000 00000000   00000000 00000000 6F410000 00000000   *................................*
1BCC0   00000000 00000000 00000000 00000000   00000000 00000000 00000000 00000000   *................................*

        LINE 1BCE0 SAME AS ABOVE
1BD00   00000000 6F540000 00000000 00000000   00000000 00000000 00000000 00000000   *................................*
1BD20   00000000 00000000 00000000 00000000   00000000 00000000 00000000 00000000   *................................*
1BD40   00000000 00000000 00000000 00000000   6F670000 00000000 00000000 00000000   *................................*
```

```
1BD60    00000000 00000000 00000000 00000000    00000000 00000000 00000000 00000000    *................................*
1BD80    00000000 00000000 00000000 00000000    00000000 00000000 00000000 6F7A0000    *................................*
1BDA0    00000000 00000000 00000000 00000000    00000000 00000000 00000000 00000000    *................................*

         LINE 1BDC0 SAME AS ABOVE
1BDE0    00000000 00000000 6F8D0000 00000000    00000000 00000000 00000000 00000000    *................................*
1BE00    00000000 00000000 00000000 00000000    00000000 00000000 00000000 00000000    *................................*
1BE20    00000000 00000000 00000000 00000000    00000000 6FA00000 00000000 00000000    *................................*
1BE40    00000000 00000000 00000000 00000000    00000000 00000000 00000000 00000000    *................................*

         LINE 1BE60 SAME AS ABOVE
1BE80    6FB30000 00000000 00000178 BA200400    B9200080 7194E708 7688B920 00220198    *......................Y.........*
1BEA0    EF048520 A8028508 1D819104 C5381D81    8500BF20 020011A8 A87E716C F0069906    *............E...............0...*
1BEC0    717CF108 9806F130 98BCA813 6FC6F110    989CC9C2 DD0A512C 11889834 DDB8A850    *..1...1......F1...IB............*
1BEE0    250E2488 220ABB20 00EC0398 80283710    4730B887 0188A16C 51A85081 9502A102    *................................*
1BF00    1188980B 6188E108 BB2000D0 73942088    80015134 A858D520 6FD9218E 518CE103    *......................N..R......*
1BF20    298DBB20 80102381 21889108 2182A83E    BF200200 210E7198 218E21B8 88181798    *................................*
1BF40    C7B89808 BB208220 D510A804 BB208800    23812182 A818BB20 90A02381 BB2C8760    *........N.......................*
1BF60    23859128 6FECB920 006C0198 A81D2188    51048020 81005154 BF200400 57446188    *................................*
1BF80    D1365174 A8CD719C F91011A8 67887108    C108D136 D0025174 A8E1717C E916612C    *J.......9.......A.J.........Z...*
1BFA0    D998C916 E894B920 00386174 B9200740    672AA8FB 610CF033 9815B920 000D6164    *R.I.Y.......... ......0.........*
1BFC0    B9200F40 A8176788 EF04E886 A861F802    A865BD20 20007594 2388618E B9200412    *... ......Y...8.................*
1BFE0    618A1382 8144B800 96C40000 0000A825    138A3307 33983398 8806A85F 170107E7    *.........D.....................X*
```

BUFFER POOL

```
19CA8      CHAIN POINTER    19CF4
        673D0A14 00000000 00140001 672A1D00    00003000 0000000A 2B000050 09004C00    *................................*
        7750BB20 7A18BC21 000043B8 9808B920    0525B800 97B00087 33A80B10 A3010B86    *................................*
        A3020B8F A3010B87 A3010B88                                                    *...............................O*

19CF4      CHAIN POINTER    19D40
        67500A17 20000000 00170001 673D1F00    10003000 0001000D EB800011 01D5C3D7    *.............................NCP*
        F0F4D440 40484983 D1805174 BB203001    536411A8 4903C108 D1805174 BF203000    *04M  ...J............A.J.......*
        5764E17F D1015174 D1105174                                                    *....J...J......................O*

19D40      CHAIN POINTER    19D8C
        67630A0E 20000000 000E0001 67501F00    10003000 00020004 EB8000A0 9FD8015A    *............................Q..*
        913401E6 BD200840 1B00CB02 A95CBE20    08BE1B01 B9019DEA 77088804 87407290    *...W...  ...................  ..*
        015A9138 01E6BD20 09401B00                                                    *.....W...  ....................O*

19D8C      CHAIN POINTER    19DD8
        67760A10 00000000 00100001 67631E00    10003000 00010006 8B800001 02113000    *................................*
        01F0F361 F0F161F7 F74BF0F6 F0F1F54B    F5F14BF2 F3048710 7290015A 914001E6    *.03.01.77.06015.51.23......... .W*
        BD200B40 1B00CB02 A8F4BE20                                                    *... .....4.....................O*

19DD8      CHAIN POINTER    19E24
        67890A10 00000000 00100001 67761E00    10003000 00020006 8B800001 02113000    *................................*
        05000010 884ABF20 40047774 BF200010    77944310 EBAC5701 7B21CB02 A8047707    *........ .......................*
        88207316 881C7596 7D53FD8C                                                    *...............................O*

19E24      CHAIN POINTER    19E70
        679C0A10 00000000 00100001 67891E00    10003000 00030006 8B800001 020A3001    *................................*
        87FF1088 BF200010 77944324 03663703    471433A8 4310EBE2 4504A800 4374BB20    *......................S.........*
        F0004344 BB219FC0 34825401                                                    *0..............................O*

19E70      CHAIN POINTER    19F08
        67C20A14 40000000 00140001 679C0E00    10013002 1001000A 9B800000 089A0000    *.B.. ...........................*
        60000008 A80047D4 A80047D4 A80047E4    FD8C3D36 D5014C21 CC02E5FE 3DB64516    *........M...M...U....N.....V.....*
        33F833F8 43994096 BB219FC0                                                    *.8.8.. ........................O*

19EBC      CHAIN POINTER    00000
        00001E00 80000000 00000000 00017A6C    00000000 10013002 00020000 06000002    *................................*
        0000B920 00203185 B9209B58 11F811F8    318BB920 A8C03189 618EB900 962C0802    *..............8.8...............*
        000197C4 B9200038 71F4B920                                                    *...D.....4......................O*

19F08      CHAIN POINTER    1A11C
        68470A10 00000000 00100001 67C21E00    10003000 00040006 8B800001 020A3003    *..............B.................*
        4488883E 4145883A 08071028 9802A807    10180E07 03284BB4 7BB48826 0171910A    *................................*
        22489201 31289806 A8092308                                                    *...............................O*

19F54      CHAIN POINTER    00000
        00000000 01019F5C 00A80000 00000000    0014D446 7BA8001C 11981330 739D7F0C    *.................M.............*
        A8081198 11981198 1198A101 03620362    31B89804 03E2A802 01E211F8 11F811F8    *.....................S...S.8.8.8*
        9001BB21 9CA823B8 8810BB21                                                    *...............................O*
```

```
19FA0    CHAIN POINTER  1A168
         685A0A14 40000000 00140001 67E80E00   10013004 1001000A 9B800000 089A0000   *.... .........Y.................*
         60000008 50000000 00000000 D6202000   C3E7C6C9 D5C9E340 01010101 01010401   *............O...CXFINIT ........*
         01010104 04040404 04040404                                                  *..............................O*

19FEC    CHAIN POINTER  00000
         00001E00 80000000 00000000 00017A74   00000000 10013004 00020000 06000002   *................................*
         00000404 04040404 04040404 00000000   00000000 00000000 00000000 00000000   *................................*
         00000000 00000000 00000000                                                  *..............................O*

1A038    CHAIN POINTER  1A084
         68210A14 00000000 00140001 680E1E00   10003000 0005000A 8F900080 02000001   *................................*
         020A0000 00000000 00000000 00000000   00000000 00000000 00000000 00000000   *................................*
         00000000 00000000 00000000                                                  *..............................O*

1A084    CHAIN POINTER  1A1B4
         686D0A10 09000000 00100001 68211E00   10003000 00060006 8B800001 020A3008   *................................*
         00000000 00000000 00000000 00000000   00000000 00000000 00000000 00000000   *................................*
         00000000 00000000 00000000                                                  *..............................O*

1A0D0    CHAIN POINTER  19FA0
         67E80000 0101A0D8 00000000 00000000   1000C392 00000000 00000000 00000000   *.Y.....Q..........C.............*
         00000000 00000000 00000000 00000000   00000000 00000000 00000000 00000000   *................................*
         00000000 00000000 00000000                                                  *..............................O*

1A11C    CHAIN POINTER  1A0D0
         68340000 0101A124 00000000 00000000   4200C518 00017E18 00000000 00000000   *..................E.............*
         00000000 00000000 00000000 00000000   00000000 00000000 00000000 00000000   *................................*
         00000000 00000000 00000000                                                  *..............................O*

1A168    CHAIN POINTER  1A038
         680E0A2B 0000680E 002B0001 685A1C00   10003000 00010021 0B000001 03813005   *................................*
         002A0005 00000000 8D000000 06F40000   00000000 00000000 00000000 00000000   *..............4.................*
         00000000 00000000 00000000                                                  *..............................O*

1A1B4    CHAIN POINTER  1A24C
         68930A14 40000000 00140001 686D0E00   10013009 1001000A 9B800000 089A0000   *.... ...........................*
         60000008 00000000 00000000 00000000   00000000 00000000 00000000 00000000   *................................*
         00000000 00000000 00000000                                                  *..............................O*

1A200    CHAIN POINTER  00000
         00001E00 80000000 00000000 00017A88   00000000 10013009 00020000 06000002   *................................*
         00000000 00000000 00000000 00000000   00000000 00000000 00000000 00000000   *................................*
         00000000 00000000 00000000                                                  *..............................O*

1A24C    CHAIN POINTER  1A298
         68A60A10 00000000 00100001 68931E00   10003000 00070006 8B800001 020A300A   *................................*
         00000000 00000000 00000000 00000000   00000000 00000000 00000000 00000000   *................................*
         00000000 00000000 00000000                                                  *..............................O*

1A298    CHAIN POINTER  1A330
         68CC0A14 40000000 00140001 68A60E00   1001300B 1001000A 9B800000 089A0000   *.... ...........................*
```

```
         60000008 00000000 00000000 00000000    00000000 00000000 00000000 00000000    *................................*
         00000000 00000000 00000000                                                    *...............................0*

1A2E4      CHAIN POINTER    1B500
         6D400A14 40000000 00140001 68B90E00    1001300B 0002000A 9B800000 06000002    *. .. ...........................*
         609E0000 00000000 00000000 00000000    00000000 00000000 00000000 00000000    *................................*
         00000000 00000000 00000000                                                    *...............................0*

1A330      CHAIN POINTER    1A3C8
         68F20A10 00000000 00100001 68CC1E00    10003000 00080006 8B800001 020A300C    *.2..............................*
         00000000 00000000 00000000 00000000    00000000 00000000 00000000 00000000    *................................*
         00000000 00000000 00000000                                                    *...............................0*

1A37C      CHAIN POINTER    1A5DC
         69770A14 40000000 00140001 68DF0E00    1001300D 1001000A 9B800000 089A0000    *.... ...........................*
         60000008 00000000 00000000 00000000    00000000 00000000 00000000 00000000    *................................*
         00000000 00000000 00000000                                                    *...............................0*

1A3C8      CHAIN POINTER    1A590
         69641F00 00000000 00000000 00017A98    00000000 1001300D 00000000 05010000    *................................*
         00000000 00000000 00000000 00000000    00000000 00000000 00000000 00000000    *................................*
         00000000 00000000 00000000                                                    *...............................0*

1A414      CHAIN POINTER    1A460
         69180A14 00000000 00140001 69051E00    10003000 0009000A 8F900080 02000001    *................................*
         020A0000 00000000 00000000 00000000    00000000 00000000 00000000 00000000    *................................*
         00000000 00000000 00000000                                                    *...............................0*

1A460      CHAIN POINTER    1A4AC
         692B0A10 00000000 00100001 69181E00    10003000 000A0006 8B800001 020A3018    *................................*
         00000000 00000000 00000000 00000000    00000000 00000000 00000000 00000000    *................................*
         00000000 00000000 00000000                                                    *...............................0*

1A4AC      CHAIN POINTER    1A4F8
         693E0A10 00000000 00100001 692B1E00    10003000 000B0006 8B800001 020A303A    *................................*
         00000000 00000000 00000000 00000000    00000000 00000000 00000000 00000000    *................................*
         00000000 00000000 00000000                                                    *...............................0*

1A4F8      CHAIN POINTER    1A628
         698A0A10 00000000 00100001 693E1E00    10003000 000C0006 8B800001 0216303A    *................................*
         00000000 00000000 00000000 00000000    00000000 00000000 00000000 00000000    *................................*
         00000000 00000000 00000000                                                    *...............................0*

1A544      CHAIN POINTER    1A37C
         68DF0000 0101A54C 00000000 00000000    1000C392 00000000 00000000 00000000    *.................C..............*
         00000000 00000000 00000000 00000000    00000000 00000000 00000000 00000000    *................................*
         00000000 00000000 00000000                                                    *...............................0*

1A590      CHAIN POINTER    1A544
         69510000 0101A598 00000000 00000000    4200C518 000182F8 00000000 00000000    *.................E....8.........*
         00000000 00000000 00000000 00000000    00000000 00000000 00000000 00000000    *................................*
         00000000 00000000 00000000                                                    *...............................0*
```

```
1A5DC     CHAIN POINTER    1A414
          69050A2B 00006905 002B0001 69771C00    10003000 00020021 0B000001 0381300E    *................................*
          00440005 00000000 8D000000 06F40000    00000000 00000000 00000000 00000000    *.............4..................*
          00000000 00000000 00000000                                                    *...............................O*

1A628     CHAIN POINTER    1A674
          699D0A10 00000000 00100001 698A1E00    10003000 000D0006 8B800001 020A303C    *................................*
          00000000 00000000 00000000 00000000    00000000 00000000 00000000 00000000    *................................*
          00000000 00000000 00000000                                                    *...............................O*

1A674     CHAIN POINTER    1A6C0
          69B00A10 00000000 00100001 699D1E00    10003000 000E0006 8B800001 0216303C    *................................*
          00000000 00000000 00000000 00000000    00000000 00000000 00000000 00000000    *................................*
          00000000 00000000 00000000                                                    *...............................O*

1A6C0     CHAIN POINTER    1A70C
          69C30A10 00000000 00100001 69B01E00    10003000 000F0006 8B800001 02113000    *.C..............................*
          05000200 00000000 00000000 00000000    00000000 00000000 00000000 00000000    *................................*
          00000000 00000000 00000000                                                    *...............................O*

1A70C     CHAIN POINTER    1A758
          69D60A10 00000000 00100001 69C31E00    10003000 00100006 8B800001 02013019    *.O...........C..................*
          00000000 00000000 00000000 00000000    00000000 00000000 00000000 00000000    *................................*
          00000000 00000000 00000000                                                    *...............................O*

1A758     CHAIN POINTER    1A888
          6A220A10 00000000 00100001 69D61E00    10003000 00110006 8B800001 0201302D    *.............O..................*
          00000000 00000000 00000000 00000000    00000000 00000000 00000000 00000000    *................................*
          00000000 00000000 00000000                                                    *...............................O*

1A7A4     CHAIN POINTER    1A8D4
          6A350A10 00000000 00100001 69E91E00    10003000 00120006 8B800001 0201302F    *.............Z..................*
          00000000 00000000 00000000 00000000    00000000 00000000 00000000 00000000    *................................*
          00000000 00000000 00000000                                                    *...............................O*

1A7F0     CHAIN POINTER    1A83C
          6A0F0A17 20000000 00170001 69FC1F00    1000302F 0001000D EB800011 01404040    *.............................   *
          40404040 40000000 00000000 00000000    00000000 00000000 00000000 00000000    *     ...........................*
          00000000 00000000 00000000                                                    *...............................O*

1A83C     CHAIN POINTER    1A920
          6A480A0F 20000000 000F0001 6A0F1F00    10003030 00010005 EB80000D 01010000    *................................*
          00000000 00000000 00000000 00000000    00000000 00000000 00000000 00000000    *................................*
          00000000 00000000 00000000                                                    *...............................O*

1A888     CHAIN POINTER    1A7A4
          69E90000 0101A890 00000000 00000000    220100C8 00000041 00007604 00000000    *.Z.................H............*
          00000000 00000000 00000000 00000000    00000000 00000000 00000000 00000000    *................................*
          00000000 00000000 00000000                                                    *...............................O*

1A8D4     CHAIN POINTER    1A7F0
          69FC0A13 00000000 00130001 6A351C00    10003000 00030009 0B000001 0280302F    *................................*
```

```
         01000000 00000000 00000000 00000000    00000000 00000000 00000000 00000000    *................................*
         00000000 00000000 00000000                                                    *...............................O*

1A920      CHAIN POINTER    1A96C
         6A5B0A0F 2000000C 000F0001 6A481F00    10003031 00010005 EB80000D 01010000    *................................*
         00000000 00000000 00000000 00000000    00000000 00000000 0000000C 00000000    *................................*
         00000000 00000000 00000000                                                    *...............................O*

1A96C      CHAIN POINTER    1A9B8
         6A6E0A0F 20000000 000F0001 6A5B1F00    10003032 00010005 EB80000D 01010000    *................................*
         00000000 00000000 00000000 00000000    00000000 00000000 00000000 00000000    *................................*
         00000000 00000000 00000000                                                    *...............................O*

1A9B8      CHAIN POINTER    1AA04
         6A810A0F 20000000 000F0001 6A6E1F00    10003033 00010005 EB80000D 01010000    *................................*
         00000000 00000000 00000000 00000000    00000000 00000000 00000000 00000000    *................................*
         00000000 00000000 00000000                                                    *...............................O*

1AA04      CHAIN POINTER    1AA50
         6A940A0F 20000000 000F0001 6A811F00    10003034 00010005 EB80000D 01010000    *................................*
         00000000 00000000 00000000 00000000    00000000 00000000 00000000 00000000    *................................*
         00000000 00000000 00000000                                                    *...............................O*

1AA50      CHAIN POINTER    1AA9C
         6AA70A0F 20000000 000F0001 6A941F00    10003035 00010005 EB80000D 01010000    *................................*
         00000000 00000000 00000000 00000000    00000000 00000000 00000000 00000000    *................................*
         00000000 00000000 00000000                                                    *...............................O*

1AA9C      CHAIN POINTER    1AAE8
         6ABA0A0F 20000000 000F0001 6AA71F00    10003036 00010005 EB80000D 01010000    *................................*
         00000000 00000000 00000000 00000000    00000000 00000000 00000000 00000000    *................................*
         00000000 00000000 00000000                                                    *...............................O*

1AAE8      CHAIN POINTER    1AB80
         6AE00A0F 20000000 000F0001 6ABA1F00    10003037 00010005 EB80000D 01010000    *................................*
         00000000 00000000 00000000 00000000    00000000 00000000 00000000 00000000    *................................*
         00000000 00000000 00000000                                                    *...............................O*

1AB34      CHAIN POINTER    1AD48
         6B520A0E 20000000 000E0001 6ACD1F00    10013030 00010004 EB800031 01020271    *................................*
         40200000 01000000 00000000 00000000    00000000 000008C4 C2C4C3C3 C9C3E200    * ......................DBDCCICS.*
         00000000 00000000 00000000                                                    *...............................O*

1AB80      CHAIN POINTER    1ABCC
         6AF30A0E 00000000 000E0001 6AE01C00    10003030 00000004 0300006D 7C9A0000    *.3..............................*
         00000000 00000000 00000000 00000000    00000000 00000000 00000000 00000000    *................................*
         00000000 00000000 00000000                                                    *...............................O*

1ABCC      CHAIN POINTER    1AB34
         6ACD0A15 00000000 00150001 6AF31C00    10003030 0001000B 03000001 6C610283    *.............3..................*
         8983A22D C1000000 00000000 00000000    00000000 00000000 00000000 00000000    *....A...........................*
         00000000 00000000 00000000                                                    *...............................O*
```

```
1AC18      CHAIN POINTER    1AC64
           6B191236 80806BC4 01490010 08001E00    30302A00 01013AC0 039100F5 C3114040    *.......D...................5C.  *
           1D40C5D5 E3C5D940 E3D9C1D5 E2C1C3E3    C9D6D540 C9C4114B 501DC8C5 D5E3C5D9    *. ENTER TRANSACTION ID....HENTER*
           7A4040E3 D640C4C9 E2D7D3C1                                                     *.  TO DISPLA...................O*

1AC64      CHAIN POINTER    1ACB0
           6B2C0048 E87A114C 613C4DD4 5C1D4011    4DF01D40 40114F40 1D40D7C6 4040F140    *....Y......M.. ..0.  .. . PF  1 *
           7E404DC9 C4F0F15D 40F3F2F7 F040C6E4    D5C3E3C9 D6D5E240 C1D5C440 C6C5C1E3    *. .ID01. 3270 FUNCTIONS AND FEAT*
           E4D9C5E2 1150501D 404011D1                                                     *URES....   .J...................O*

1ACB0      CHAIN POINTER    1AF10
           6BC40048 601D40D7 C64040F2 407E404D    D4C6F1F6 5D40D4C1 D5C1C7C5 D4C5D5E3    *.D.... PF  2 . .MF16. MANAGEMENT*
           40E2C1D3 C5E240C1 D5C1D3E8 E2C9E211    D2F01D40 4011D440 1D40D7C6 4040F340    * SALES ANALYSIS.KO.  .M . PF  3 *
           7E404DD4 C4F0F25D 40C8D6E2                                                     *. .MDQ2. HOS...................O*

1ACFC      CHAIN POINTER    1AD94
           6B650048 D7C9E3C1 D340C9D5 C6D6D9D4    C1E3C9D6 D540E2E8 E2E3C5D4 11D54F1D    *....PITAL INFORMATION SYSTEM.N..*
           401D4040 11D6601D 40D7C640 40F4407E    404DC9C4 F0F45D40 C1C3C3D6 E4D5E3E2    * .  .O.. PF  4 . .ID04. ACCOUNTS*
           40D9C5C3 C5C9E5C1 C2D3C511                                                     * RECEIVABLE....................O*

1AD48      CHAIN POINTER    1AC18
           6B060A0E 00000000 000E0001 6B521C00    10013030 00010004 0300806E 91C70000    *...........................G..*
           00000000 00000000 00000000 00000000    00000000 00000000 00000000 00000000    *................................*
           00000000 00000000 00000000                                                     *...............................O*

1AD94      CHAIN POINTER    1AF5C
           6BD70033 D7F01D40 4011D940 1D40D7C6    4040F540 7E404DC6 D5F0F35D 40E3C9C3    *.P..P0.  .R . PF  5 . .FN03. TIC*
           60E3C1C3 60E3D6C5 115A501D 4040115B    601D4040 1D401300 00000000 00000000    *.TAC.TOE....  ....  . ..........*
           00000000 00000000 00000000                                                     *...............................O*

1ADE0      CHAIN POINTER    1B08C
           6C230A10 00000000 00100001 6B781E00    10003000 00130006 8B800001 0211303D    *................................*
           03C40200 07078000 00010900 00000000    00000000 00000000 00000000 00000000    *.D..............................*
           00000000 00000000 00000000                                                     *...............................O*

1AE2C      CHAIN POINTER    1AE78
           6B9E0A10 00000000 00100001 6B8B1E00    10003000 00140006 8B800001 0201303D    *................................*
           00000000 00000000 00000000 00000000    00000000 00000000 00000000 00000000    *................................*
           00000000 00000000 00000000                                                     *...............................O*

1AE78      CHAIN POINTER    1B0D8
           6C360E12 A0000000 00160000 64001F00    303D2F00 00000001 6B800011 01010500    *................................*
           00000001 00000000 00000000 00000000    00000000 00000000 00000000 00000000    *................................*
           00000000 00000000 00000000                                                     *...............................O*

1AEC4      CHAIN POINTER    1B040
           6C100A0D 0000000C 000D0001 6BB11C00    10013030 00010003 83010000 00000000    *................................*
           00000000 00000000 00000000 00000000    00000000 00000000 00000000 00000000    *................................*
           00000000 00000000 00000000                                                     *...............................O*

1AF10      CHAIN POINTER    1ACFC
           6B3F1202 80010000 00002200 00000000    00002600 010136C0 00000000 00000000    *................................*
```

```
          00000000 00000000 00000000 00000000    00000000 00000000 00000000 00000000    *................................*
          00000000 00000000 00000000                                                    *...............................0*

1AF5C       CHAIN POINTER    1AFF4
          6BFD0A0D 00000000 00050000 00001E00    10013030 00010003 83010003 53000000    *................................*
          00000000 00000000 00000000 00000000    00000000 00000000 00000000 00000000    *................................*
          00000000 00000000 00000000                                                    *...............................0*

1AFA8       CHAIN POINTER    1ADE0
          6B781206 00000000 00000000 00000000    00000000 00000200 011000C4 4D630000    *...........................D....*
          00000000 00000000 00000000 00000000    00000000 00000000 00000000 00000000    *................................*
          00000000 00000000 00000000                                                    *...............................0*

1AFF4       CHAIN POINTER    1AEC4
          6BB10000 0101AFFC 00000000 00000000    5A011584 00018CC4 0001AFA8 00018C1C    *.......................D........*
          00000601 00000000 00000000 00000000    00000000 00000000 00000000 00000000    *................................*
          00000000 00000000 00000000                                                    *...............................0*

1B040       CHAIN POINTER    1AFA8
          6BEA0A12 00000000 00180001 6BEA1C00    10003000 0004000E 0B000001 0284303C    *................................*
          00000000 00000000 00000000 00000000    00000000 00000000 00000000 00000000    *................................*
          00000000 00000000 00000000                                                    *...............................0*

1B08C       CHAIN POINTER    1AE2C
          6B8B0000 0101B094 00000000 00000000    220100C8 00000041 000076EC 00000000    *..................H.............*
          00000000 00000000 00000000 00000000    00000000 00000000 00000000 00000000    *................................*
          00000000 00000000 00000000                                                    *...............................0*

1B0D8       CHAIN POINTER    1B254
          6C950A13 00000000 00130001 6C361C00    10003000 00050009 0B000001 0280303D    *................................*
          01000000 00000000 00000000 00000000    00000000 00000000 00000000 00000000    *................................*
          00000000 00000000 00000000                                                    *...............................0*

1B124       CHAIN POINTER    1B1BC
          6C6F0A10 00000000 00100001 6C491E00    10003000 00150006 8B800001 0219303D    *................................*
          0180303E 00000000 00000000 00000000    00000000 00000000 00000000 00000000    *................................*
          00000000 00000000 00000000                                                    *...............................0*

1B170       CHAIN POINTER    1B2A0
          6CA80A10 00000000 00100001 6C5C1E00    10003000 00160006 8B800001 0211303E    *................................*
          04010101 01000000 00000000 00000000    00000000 00000000 00000000 00000000    *................................*
          00000000 00000000 00000000                                                    *...............................0*

1B1BC       CHAIN POINTER    1B170
          6C5C0E0C A0000000 00102200 0C001F00    303E2F00 01000001 6B80000D 01010000    *................................*
          00000000 00000000 00000000 00000000    00000000 00000000 00000000 00000000    *................................*
          00000000 00000000 00000000                                                    *...............................0*

1B208       CHAIN POINTER    1B2EC
          6CBB0A14 40000000 00140001 6C820E00    1002300B 0181000A 9B900000 01035000    *.... ...........................*
          A18A0000 00000000 00000000 00000000    00000000 00000000 00000000 00000000    *................................*
          00000000 00000000 00000000                                                    *...............................0*
```

```
1B254     CHAIN POINTER   1B124
        6C490A17 00000000 00170001 6C951F00    1000303D 0001000D EB800011 01404040   *...............................   *
        40404040 40A5D100 00000000 00000000    00000000 00000000 00000000 00000000   *      .J........................*
        00000000 00000000 00000000                                                   *..............................O*

1B2A0     CHAIN POINTER   1B468
        6D1A0A0F 00000000 000F0001 6CA81F00    1000303E 00010005 EB80000D 01B0B200   *................................*
        00000000 00000000 00000000 00000000    00000000 00000000 00000000 00000000   *................................*
        00000000 00000000 00000000                                                   *..............................O*

1B2EC     CHAIN POINTER   1B338
        6CCE0A14 40000000 00140001 6CBB0E00    1002300B 0002000A 9B800000 08440000   *.... ...........................*
        60000000 00000000 00000000 00000000    00000000 00000000 00000000 00000000   *................................*
        00000000 00000000 00000000                                                   *..............................O*

1B338     CHAIN POINTER   1B384
        6CE10A14 40000000 00140001 6CCE0E00    1002300B 0183000A 9B800000 02020000   *.... ...........................*
        6098C5D9 D9D6D940 E6C8C5D5 40D9C5C1    C4C9D5C7 40D3D6C7 D6D540D4 C5E2E2C1   *..ERROR WHEN READING LOGON MESSA*
        C7C51500 00000000 00000000                                                   *GE............................O*

1B384     CHAIN POINTER   00000
        00000A18 40000000 00180001 6CE10E00    1002300B 0184000E 9B800000 01035000   *.... ...........................*
        6238A3A2 96150000 00000000 00000000    00000000 00000000 00000000 00000000   *................................*
        00000000 00000000 00000000                                                   *..............................O*

1B3D0     CHAIN POINTER   00000
        00000A14 40000000 00140001 6CF40E00    1002300B 0185000A 9B800000 02021000   *.... ........4..................*
        6098C9D5 D7E4E340 D5D6E340 D9C5C3D6    C7D5C9E9 C5C41500 00000000 00000000   *..INPUT NOT RECOGNIZED..........*
        00000000 00000000 00000000                                                   *..............................O*

1B41C     CHAIN POINTER   1A2E4
        68B90000 0101B424 00000000 00000000    1000C392 0001B208 00000000 00000000   *................C...............*
        00000000 00000000 00000000 00000000    00000000 00000000 00000000 00000000   *................................*
        00000000 00000000 00000000                                                   *..............................O*

1B468     CHAIN POINTER   1B41C
        6D070000 0101B470 00000000 00000000    4200C518 00017F58 00000000 00000000   *................E...............*
        00000000 00000000 00000000 00000000    00000000 00000000 00000000 00000000   *................................*
        00000000 00000000 00000000                                                   *..............................O*

1B4B4     CHAIN POINTER   1B208
        6C820A2B 00006C82 002B0001 6D2D1C00    10003000 00060021 0B000001 0381300B   *...............................:*
        00280005 01035000 28285000 088A0000    00000002 000007A4 85000000 00000000   *................................*
        00000000 00000000 00000000                                                   *..............................O*

1B500     CHAIN POINTER   1B54C
        6D530000 0101B508 00000000 00000000    04017696 0001B2EC 00000000 00000000   *................................*
        00000000 00000000 00000000 00000000    00000000 00000000 00000000 00000000   *................................*
        00000000 00000000 00000000                                                   *..............................O*

1B54C     CHAIN POINTER   1B4B4
        6D2D0000 0101B554 00000000 00000000    060176A0 00017F0C 0001B2EC 00000000   *................................*
```

```
         00000000 00000000 00000000 00000000    00000000 00000000 00000000 00000000    *................................*
         00000000 00000000 00000000                                                    *...............................0*

1B598      CHAIN POINTER    00000
         00001E00 80000000 00000000 00017A90    00000000 1002300B 01860000 01035000    *................................*
         00000000 00000000 00000000 00000000    00000000 00000000 00000000 00000000    *................................*
         00000000 00000000 00000000                                                    *...............................0*

1B5E4      CHAIN POINTER    1B630
         6D8C0A3E 00000000 00000000 00000000    00000000 00000000 00000000 00000000    *................................*
         00000000 00000000 00000000 00000000    00000000 00000000 00000000 00000000    *................................*
         00000000 00000000 00000000                                                    *...............................0*

1B630      CHAIN POINTER    1B67C
         6D9F0048 00000000 00000000 00000000    00000000 00000000 00000000 00000000    *................................*
         00000000 00000000 00000000 00000000    00000000 00000000 00000000 00000000    *................................*
         00000000 00000000 00000000                                                    *...............................0*

1B67C      CHAIN POINTER    00000
         00000048 00000000 00000000 00000000    00000000 00000000 00000000 00000000    *................................*
         00000000 00000000 00000000 00000000    00000000 00000000 00000000 00000000    *................................*
         00000000 00000000 00000000                                                    *...............................0*

1B6C8      CHAIN POINTER    1B714
         6DC50000 00000000 00000000 00000000    00000000 00000000 00000000 00000000    *.E..............................*
         00000000 00000000 00000000 00000000    00000000 00000000 00000000 00000000    *................................*
         00000000 00000000 00000000                                                    *...............................0*

1B714      CHAIN POINTER    1B760
         6DD80000 00000000 00000000 00000000    00000000 00000000 00000000 00000000    *.Q..............................*
         00000000 00000000 00000000 00000000    00000000 00000000 00000000 00000000    *................................*
         00000000 00000000 00000000                                                    *...............................0*

1B760      CHAIN POINTER    1B7AC
         6DEB0000 00000000 00000000 00000000    00000000 00000000 00000000 00000000    *................................*
         00000000 00000000 00000000 00000000    00000000 00000000 00000000 00000000    *................................*
         00000000 00000000 00000000                                                    *...............................0*

1B7AC      CHAIN POINTER    1B7F8
         6DFE0000 00000000 00000000 00000000    00000000 00000000 00000000 00000000    *................................*
         00000000 00000000 00000000 00000000    00000000 00000000 00000000 00000000    *................................*
         00000000 00000000 00000000                                                    *...............................0*

1B7F8      CHAIN POINTER    1B844
         6E110000 00000000 00000000 00000000    00000000 00000000 00000000 00000000    *................................*
         00000000 00000000 00000000 00000000    00000000 00000000 00000000 00000000    *................................*
         00000000 00000000 00000000                                                    *...............................0*

1B844      CHAIN POINTER    1B890
         6E240000 00000000 00000000 00000000    00000000 00000000 00000000 00000000    *................................*
         00000000 00000000 00000000 00000000    00000000 00000000 00000000 00000000    *................................*
         00000000 00000000 00000000                                                    *...............................0*
```

```
1B890     CHAIN POINTER    1B8DC
          6E370000 00000000 00000000 00000000    00000000 00000000 00000000 00000000    *................................*
          00000000 00000000 00000000 00000000    00000000 00000000 00000000 00000000    *................................*
          00000000 00000000 00000000                                                    *...............................O*

1B8DC     CHAIN POINTER    1B928
          6E4A0000 0000000C 00000000 00000000    00000000 00000000 00000000 00000000    *................................*
          00000000 00000000 00000000 00000000    00000000 00000000 00000000 00000000    *................................*
          00000000 00000000 00000000                                                    *...............................O*

1B928     CHAIN POINTER    1B974
          6E5D0000 0000000C 00000000 00000000    00000000 00000000 00000000 00000000    *................................*
          00000000 00000000 00000000 00000000    00000000 00000000 00000000 00000000    *................................*
          00000000 00000000 00000000                                                    *...............................O*

1B974     CHAIN POINTER    1B9C0
          6E700000 00000000 00000000 00000000    00000000 00000000 00000000 00000000    *................................*
          00000000 00000000 00000000 00000000    00000000 00000000 00000000 00000000    *................................*
          00000000 00000000 00000000                                                    *...............................O*

1B9C0     CHAIN POINTER    1BA0C
          6E830000 00000000 00000000 00000000    00000000 00000000 00000000 00000000    *................................*
          00000000 00000000 00000000 00000000    00000000 00000000 00000000 00000000    *................................*
          00000000 00000000 00000000                                                    *...............................O*

1BA0C     CHAIN POINTER    1BA58
          6E960000 00000000 00000000 00000000    00000000 00000000 00000000 00000000    *................................*
          00000000 00000000 00000000 00000000    00000000 00000000 00000000 00000000    *................................*
          00000000 00000000 00000000                                                    *...............................O*

1BA58     CHAIN POINTER    1BAA4
          6EA90000 0000000C 00000000 00000000    00000000 00000000 00000000 00000000    *................................*
          00000000 00000000 00000000 00000000    00000000 00000000 00000000 00000000    *................................*
          00000000 0000000C 00000000                                                    *...............................O*

1BAA4     CHAIN POINTER    1BAF0
          6EBC0000 00000000 00000000 00000000    00000000 00000000 00000000 00000000    *................................*
          00000000 00000000 00000000 00000000    00000000 00000000 00000000 00000000    *................................*
          00000000 00000000 00000000                                                    *...............................O*

1BAF0     CHAIN POINTER    1BB3C
          6ECF0000 00000000 00000000 00000000    00000000 00000000 00000000 00000000    *................................*
          00000000 00000000 00000000 00000000    00000000 00000000 00000000 00000000    *................................*
          00000000 00000000 00000000                                                    *...............................O*

1BB3C     CHAIN POINTER    1BB88
          6EE20000 00000000 00000000 00000000    00000000 00000000 00000000 00000000    *.S..............................*
          00000000 00000000 00000000 00000000    00000000 00000000 00000000 00000000    *................................*
          00000000 00000000 00000000                                                    *...............................O*

1BB88     CHAIN POINTER    1BBD4
          6EF50000 00000000 00000000 00000000    00000000 00000000 00000000 00000000    *.5..............................*
```

```
         00000000 00000000 00000000 00000000    00000000 00000000 00000000 00000000    *................................*
         00000000 00000000 00000000                                                    *...............................O*

1BBD4      CHAIN POINTER     1BC20
         6F080000 00000000 00000000 00000000    00000000 00000000 00000000 00000000    *................................*
         00000000 00000000 00000000 00000000    00000000 00000000 00000000 00000000    *................................*
         00000000 00000000 00000000                                                    *...............................O*

1BC20      CHAIN POINTER     1BC6C
         6F1B0000 00000000 00000000 00000000    00000000 00000000 00000000 00000000    *................................*
         00000000 00000000 00000000 00000000    00000000 00000000 00000000 00000000    *................................*
         00000000 00000000 00000000                                                    *...............................O*

1BC6C      CHAIN POINTER     1BCB8
         6F2E0000 00000000 00000000 00000000    00000000 00000000 00000000 00000000    *................................*
         00000000 00000000 00000000 00000000    00000000 00000000 00000000 00000000    *................................*
         00000000 00000000 00000000                                                    *...............................O*

1BCB8      CHAIN POINTER     1BD04
         6F410000 00000000 00000000 00000000    00000000 00000000 00000000 00000000    *................................*
         00000000 00000000 00000000 00000000    00000000 00000000 00000000 00000000    *................................*
         00000000 00000000 00000000                                                    *...............................O*

1BD04      CHAIN POINTER     1BD50
         6F540000 00000000 00000000 00000000    00000000 00000000 00000000 00000000    *................................*
         00000000 00000000 00000000 00000000    00000000 00000000 00000000 00000000    *................................*
         00000000 00000000 00000000                                                    *...............................O*

1BD50      CHAIN POINTER     1BD9C
         6F670000 00000000 00000000 00000000    00000000 00000000 00000000 00000000    *................................*
         00000000 00000000 00000000 00000000    00000000 00000000 00000000 00000000    *................................*
         00000000 00000000 00000000                                                    *...............................O*

1BD9C      CHAIN POINTER     1BDE8
         6F7A0000 00000000 00000000 00000000    00000000 00000000 00000000 00000000    *................................*
         00000000 00000000 00000000 00000000    00000000 00000000 00000000 00000000    *................................*
         00000000 00000000 00000000                                                    *...............................O*

1BDE8      CHAIN POINTER     1BE34
         6F8D0000 00000000 00000000 00000000    00000000 00000000 00000000 00000000    *................................*
         00000000 00000000 00000000 00000000    00000000 00000000 00000000 00000000    *................................*
         00000000 00000000 00000000                                                    *...............................O*

1BE34      CHAIN POINTER     1BE80
         6FA00000 00000000 00000000 00000000    00000000 00000000 00000000 00000000    *................................*
         00000000 00000000 00000000 00000000    00000000 00000000 00000000 00000000    *................................*
         00000000 00000000 00000000                                                    *...............................O*

1BE80      CHAIN POINTER     1BECC
         6FB30000 00000000 00000178 BA200400    B9200080 7194E708 7688B920 00220198    *......................X.........*
         EF048520 A8028508 1D819104 C5381D81    8500BF20 020011A8 A87E716C F0069906    *............E...............0...*
         717CF108 9806F130 98BCA813                                                    *..1...1........................O*
```

```
1BECC     CHAIN POINTER   1BF18
          6FC6F110 989CC9C2 DD0A512C 11889834   DDB8A850 250E2488 220ABB20 00EC0398   *.F1...IB.........................*
          80283710 4730B887 0188A16C 51A85081   9502A102 1188980B 6188E108 BB2000D0   *.................................*
          73942088 80015134 A858D520                                                 *..........N.....................O*

1BF18     CHAIN POINTER   1BF64
          6FD9218E 518CE103 298DBB20 80102381   21889108 2182A83E BF200200 210E7198   *.R...............................*
          218E21B8 88181798 07B89808 BB208220   D510A804 BB208800 23812182 A818BB20   *...............N.................*
          90A02381 BB2C8760 23859128                                                 *................................O*

1BF64     CHAIN POINTER   1BFB0
          6FECB920 006C0198 A81D2188 51048020   81005154 BF200400 57446188 D1365174   *.............................J...*
          A8CD719C F91011A8 67887108 C108D136   D0025174 A8E1717C E916612C D998C916   *....9.......A.J.........Z...R.I.*
          E894B920 00386174 B9200740                                                 *Y.......... ....................O*

1BFB0     CHAIN POINTER   19CA8
          672AA8FB 610CF033 9815B920 000D6164   B9200F40 A8176788 EF04E886 A861F802   *......0............. ......Y...8.*
          A865BD20 20007594 2388618E B9200412   618A1382 8144B800 96C40000 0000A825   *.........................D......*
          138A3307 33983398 8806A85F                                                 *................................O*
```

Abbreviations

ACB	Adapter control block
APPL	Application
ATB	Address trace block
BCB	Bit control block
BCU	Block control unit
BSC	Binary synchronous
BNN	Boundary network node
CCB	Character control block
CCP	Communications control program
CSP	Character service program
CCW	Channel control word
CDS	Configuration data set
CE	Channel end
CHB	Channel control block
CIC	Channel input chain
COB	Channel operation block
COC	Channel output chain
CPM	Connection point manager
CRP	Check record pool
CSP	Character service program
CUB	Common unit physical block
CW	Channel word
DAF	Destination address field
DLC	Data link control
DVB	Device base control block
ECB	Event control block
EP	Emulation program
FID	Format identification
FIFO	First in/first out
FM	Function management
FME	Function management end
HWE	Extended halfword direct addressables
IAR	Instruction address register
ICW	Interface control word
IPL	Initial program load
LCB	Line control block
LGT	Line group table
LKB	Link control block
LNVT	Line vector table
LOBQ	Link outbound queue
LOSQ	Link outstanding queue
LTCB	Line trace control block

LTCT	Line type command table
LU	Logical unit
LUB	Logical unit control block
LUV	Logical unit vector table
LXB	Link XIO block
NCP	Network control program
NSA	Nonsequenced acknowledgement
OAF	Origin address field
OLLT	Online line test
OLTT	Online terminal test
PC	Path control
PCB	Panel control block
PCI	Program-controlled interrupt
PEP	Partitioned emulation program
PIU	Path information unit
PSB	Physical services block
QCB	Queue control block
RH	Request/response header
RQI	Request initialization
R	Receive ready
RS	Read start (RS0, RS1)
RU	Request/response unit
RVT	Resource vector table
SC	System control
SCB	Station control block
SCRR	System control router table
SDLC	Synchronous data link control
SID	Send identification
SIT	Subarea index table
SM	Status modifier
SNRM	Set normal response mode
SOT	Service order table
SS	Start-stop
SSCP	System services control point
SVC	Supervisor call
SVT	Subarea vector table
TH	Transmission header
UC	Unit check
UE	Unit exception
WS	Write start (WS0, WS1)
XDA	Word direct addressables
XDB	Byte direct addressables
XDH	Halfword direct addressables

Index

International Business Machines Corporation
Data Processing Division
1133 Westchester Avenue, White Plains, N.Y. 10604

IBM World Trade Americas/Far East Corporation
Town of Mount Pleasant, Route 9, North Tarrytown, N.Y., U.S.A. 10591

IBM World Trade Europe/Middle East/Africa Corporation
360 Hamilton Avenue, White Plains, N.Y., U.S.A. 10601

SR20-4513-4

NCP Release 5 Data Flow Student Text   Printed in U.S.A.   SR20-4513-4