IBM

Palo Alto Systems Center

Technical Bulletin

SNA Product Installation Guide

by H.J. Liberty, Jr.
Palo Alto Systems Center

IBM

Palo Alto Systems Center

Technical Bulletin

SNA Product Installation Guide

by H.J. Liberty, Jr.
  Palo Alto Systems Center

Febuary 1979 Edition

This edition is a Major Revision and Replacement of SR20-4567 (VTAM/NCP
Installation Guide).   This guide includes samples for ACF/VTAM,
ACF/NCP, ACF/TCAM, NOSP, and SNA application interfaces. This guide is
also applicable to NCP users of VTAM, TCAM10, and EXTM.

Requests for copies of IBM publications should be made to your IBM
representative or to the IBM branch office serving your locality.
Address comments concerning the contents of this publication to:

> Palo Alto Systems Center
> IBM Corporation (73G/036)
> 1501 California Avenue
> Palo Alto, CA 94304, USA

(C) Copyright International Business Machines Corporation 1979

Preface

The samples contained in this publication are provided for the support of education and installation of SNA products. The job control and sample definitions must be adjusted for each system. The samples have not been submitted to a formal IBM test. The samples are not intended to be implemented as they are shown in this material. These samples are coded to a specific network configuration and terminal features and are not compatible with any other installation configuration or processing requirements.

CONTENTS

The purpose of this guide is to provide information that may help in installing SNA products on either a DOS/VS or OS/VS operating system. This document provides samples which are coded to a specific network configuration and terminal hardware. The samples included in this document are included only as a guide and should be updated for a specific installation.

The samples in this guide will support the following products: IMS/VS, CICS/VS, TSO, JES2(MVS), RTAM(VS1), VTAM, ACF/VTAM, ACF/TCAM, TCAM 9, TCAM 10, NCP/VS (Rel. 5), ACF/NCP/VS, RES (VS1), VSPC, and NOSP. Unless otherwise directed by the specific product guides, these coding samples are recommended for initial system checkout. Every attempt has been made to provide coding samples that are compatible with all of the IBM programs that support SNA.

PRODUCTS SUPPORTED BY THIS DOCUMENT

Advanced Communications Function for the Network Control Program/Virtual Storage (ACF/NCP/VS)

Advanced Communications Function for the Telecommunications Access Method (ACF/TCAM)

Advanced Communications Function for the Virtual Telecommunications Access Method (ACF/VTAM)

Virtual Storage Access Method (VSAM)

Customer Information Control System/Virtual Storage (CICS/VS)

Information Management System/Virtual Storage (IMS/VS)

Virtual Storage Personal Computing (VSPC)

Network Operation Support Program (NOSP)

Disk Operating System/Virtual Stoage (DOS/VS)

Operating System/Virtual Storage 1 (OS/VS1)

  Remote Entry System (RES)

  Remote Terminal Access Method (RTAM)

Operating System/Virtual Storage 2 (OS/VS2)

  Multiple Virtual Storage (MVS)

  Single Virtual Storage (SVS)

  Time Sharing Option (TSO)

  Job Entry Subsystem 2 (JES2)

Telecommunications Access Method (TCAM)

Virtual Telecommunications Access Method (VTAM)

2741 Communications Terminal (2741)

2740 Communications Terminal (2740)

TWX Line Control Type (TWX)

3270 Information Display System (3270)

3600 Finance Communication System (3600)

3650 Retail Store System (3650)

3767 Communication Terminal (3767)

3770 Data Communication System (3770)

3790 Communication System (3790)

3704/3705 Network Control Program/Virtual Storage (NCP/VS)

CHAPTER 2 : DEVELOPMENT ENVIRONMENT

2.1 : HARDWARE CONFIGURATION

In the samples of this publication the following hardware was used:

The central processor is a System/370 Model 158. The DOS/VS system was defined with 8.0 megabytes of real storage and 2.0 megabytes of virtual. Two 3340 drives are defined for the DOS/VS testing and operation. Two 3330's are defined for the OS/VS1 system plus a DASD work pack. The OS/VS2 (MVS) system required two 3330 Model 1's, two 3330 Model 11's, and one 3340 disk drives. The MVS system was defined with 6 Megabytes of real storage. Two 3705's are defined for sample purposes. One has 112K of storage and Channel Adapter Type 2. The second 3705 is a Model 2 with 256K of storage and two Channel Adapter Type 4's. All IBM 3270 products were available, various models of the IBM 377X product family were tested, and a IBM 3790 was used on dial facilities.

2.2 : SOFTWARE RESOURCES

PROGRAMS INSTALLED

NCP/VS

    Network Control Program/VS-OS/VS (Program number 5744-BA2)

    Network Control Program/VS-DOS/VS (Program number 5747-AJ2)

ACF/NCP

    NCP/SSP (Required for ACF/NCP)   (Program number 5747-CH1)

    ACF/NCP SSP   (Program number 5735-XX3)

    ACF/NCP PP   (Program number 5735-XX1)

DOS/VS

    Disk Operating System/VS   (Program Number 5745-010)

OS/VS

    OS/VS1 Release 6.0   (Program number 5/41-VS1)

    OS/VS2 Release 3.7   (Program number 5752-VS2)

VTAM

    VTAM for DOS/VS   (Program Number 5745-010)

    VTAM (MVS) SU 1   (Program number 5752-VS2)

TCAM/VS

    TCAM 9 (MVS) SU 2   (Program number 5752-VS2)

    TCAM 10 (MVS) SU 36   (Program number 5752-VS2)

ACF/TCAM V1

    ACF/TCAM SCP SU59   (Program number 5735-RC1)

    ACF/TCAM BASE SU59   (Program number 5735-RC1)

    ACF/TCAM MSNF SU59   (Program number 5735-RC1)

ACF/VTAMR1

    ACF/VTAM Release 1 (DOS/VS)   (Program Number 5747-RC3)

    VTAM SCP for ACF/VTAM SU 40

    ACF/VTAM SU 35 for MVS   (Program number 5735-RC2)

    ACF/VTAM Mutisystem Networking Facility

    (MSNF) SU 34 for MVS   (Program number 5735-RC2)

NOSP

    Network Operation Support Program

    SU 45   (Program number 5735-XX2)

IMS/VS

    IMS/VS V1 R1.4   (Program number 5740-XX2)

    IMS/VS V1 R1.5   (Program number 5740-XX2)

CICS/VS

    CICS/VS V1R3.0 (PTF 502)   (Program number 5740-XX1)

3.1 : ACCESS METHOD DEPENDENCIES

The following table provides access method dependencies for specific NCP generation macros.

Access Method	PCCU Macro	NCP Macro's BUILD Macro		HOST Macro		
		MAXSUBA	MAXBFRU	UNITSZ	BFRPAD	STATMOD
VTAM/DOS	ONLY	Default=15	REQUIRED	DEFAULT=88	=15	=NO/YES
VTAM/OS	ONLY	DEFAULT=15	REQUIRED	DEFAULT=84	=28	=YES
ACF/VTAM	ONLY	DEFAULT=15	REQUIRED	DEFAULT=64	=0	=YES
TCAM 10 and ACF/TCAM	NA	(INTRO MACRO)		UNITSZ= KEYLEN=>44 (INTRO Macro) 148 to 156(START)	MIN=17	=YES
EXTM	NA	DEFAULT=31 (ETMCFG Macro)	=10 (ETMCFG Macro)	DEFAULT=156 (ETMFCG Macro)	=2	=NO
NCP	NA	NO DEFAULTS		NO DEFAULT	=28	=NO

3.2 : DEVICE MAXDATA VALUES

The following table specifies the MAXDATA value (PU macro) for various
SNA physical units operating on an SDLC link. The MAXDATA operand must
not be defaulted.

DEVICE	VALUE = BYTES
IBM 3271/3275	261 - Maximum Value, Segmentation allowed.
IBM 3274/3276	265 - Maximum Value, Segmentation allowed.
IBM 3600	VARIABLE - Function of buffer size defined in CPGEN(3600).
IBM 3614	265 if not connected to 360X.
IBM 3650	265 - Required value, segmentation not allowed.
IBM 3767	261 - Required value, segmentation not allowed.
IBM 3774/3775	265 - Required value, segmentation not allowed.
IBM 3776/3777	265/521 - Required value, segmentation not allowed. Host application must support same value. The NCP can be generated with 521 and the actual value specified in the Bind for the application to LU session.
IBM 3790	265 - Required value, segmentation not allowed for 'Batch' sessions. Segmentation allowed for DSC LU's.

3.3 : DEVICE ERROR RECOVERY

The following table lists the reccommended values for the RETRIES operand in the NCP 'LINE' and 'PU' macros.

* RETRIES OPERAND

OPERAND

,RETRIES = (m,t,n)
   where m = immediate retries,
         t = pause between retries,
   and n = retry cycles.

for SDLC, if REPLYTO = 1, M = 5, t = 10, n = 3,

then:

retry cycle = ((5 X 1) + 10) X 3) + (5 X 1) = 50 SECONDS

DEVICE	RECOVERY SEQUENCE REQUIREMENT
IBM 3600	- function of 3600 CPGEN, value should be less than 3600 generated time.
IBM 3650	- 50 to less than 60 seconds.
IBM 3767	- greater than 20 seconds.
IBM 3790	- adjust for link quality, 60 seconds as a start.
IBM 3770	" "
IBM 3270 (SDLC)	" "

3.4 : INSTALLATION SEQUENCE (VTAM)

This installation sequence is only a guide and many steps are omitted.

OBTAIN MANUALS.

Order all manuals necessary for the appropriate operating system.

ORDER PROGRAMS

All the programs should be obtained from PID.

SYSTEM INSTALLATION

Determine the hardware configuration required for the system. The system design has to be approached from multiple levels. At least look at it with the following approaches:

* PHYSICAL CONFIGURATION
  It is necessary to plan the hardware configuration in order to generate the NCP load module, the local 3277 definition for VTAM, and the I/O assignments for the system generation phase.

* OPERATING SYSTEM
  The operating system will only be concerned with the devices locally attached to the system. When generating the operating system, special consideration must be given for the VTAM parameters, including the size of the partitions for DOS and the VTAM workspace for OS/VS1.

The following steps should allow the user to bring up the system and allow operation at various check points.

1. SYSTEM DEFINITION
   Unless using OS/VS2, the default buffer parameters should not be used. The samples in this document can be used, providing the network is similar to the samples. Care should be taken in the specification of LFBUF(DOS/VS) and IOBUF(OS/VS) to insure that the values for UNITSZ and MAXBFRU defined in the NCP are used to calculate the buffer values. The quantity of LFBUF or IOBUF must exceed the requirement for MAXBFRU. The MAXSUBA value in the start definition should agree with the NCP value. All SUBAREA values should be checked to insure each major node has an

exclusive value.

2. START CONFIGURATION

If local 3277's are available, the initial configuration should only include the local 3277's and the application definition node. After these two nodes are active, then the NCP portion of the system can be checked out. If VTAM indicates an error in the node definition, it may not be necessary to stop VTAM. If the node did not become active, the node definition can be updated, and varied active by the console operator. If the node was activated by VTAM, the node must be varied inactive. In addition, if the system is OS/VS, the node name must be deleted from the SYS1.VTAMOBJ data set. Otherwise, when the node is activated again, the old defintion will still be used even though the definition source was updated.

3. LOCAL 3270 DEFINITION

For the first testing phase, the local definition should not include a LOGTAB or a LOGAPPL statement. All unavailable 3277's or 328x's should be defined with an ISTATUS=INACTIVE. Only one 3277 is required to check out that VTAM has initialized and that a VTAM user application works. before the 'LOGTAB' operand is added, an Interpret table must be assembled, link-edited and stored in SYS1.VTAMLIB, if OS/VS, or the core-image library, if DOS. The 'LOGAPPL' operand may be used, if the application name is 'NETSOL' or the application name is defined in the application definition. The application program need not be available.

GENERAL HINTS

NRZI defaults to yes on a SDLC line. Normally, NRZI can be used with most modems. IBM integrated modems and the IBM 3872 require NRZI=YES. When in doubt, specify NRZI=NO, and monitor MDR recordings for line errors and change if required. All SDLC PU types 1 and 2 will work without NRZI.

NETSOL can be used to check out most basic devices before trying them with an application program. It may easily be modified to provide special test messages. NETSOL can be run in its own region if appropriate JCL is generated.

Remote 3270's will not be polled unless they are logged on to an application program.

Dial ports will disconnect if not logged on to an application program before being used.

To help determine the error condition, the use of line trace on the failing line should be considered. Also, before varying the cluster active, start IO trace on the NCP and the cluster.

GENERAL OPERATING CONSIDERATIONS

Retain information should always be obtained for VTAM and NCP. There are problems described in Retain that can be bypassed by controlling operating procedures.

The 370X, if required, will always be loaded when activated by VTAM if ANS is not specified in the NCP 'BUILD' macro and the NCP was not deactivated normally. If using PEP, ANS must be specified if VTAM is not to load the 370X. If the 370X does not contain the desired NCP load module, VTAM will load the 370X with out operator intervention.

Use of the 'F TPRINT' command to print trace records during production should be avoided because 'TPRINT' will degrade the DOS/VS system. In fact, most DOS and VTAM operations appear to wait until the TPRINT operation is completed.   It may be necessary to develop a print application program that operates in one of the other partitions, instead of having VTAM do this function.

If you give a command to activate a NCP that is already active, VTAM will try to activate all elements of the network defined to VTAM. This can cause a considerable slowdown as the NCP tries to activate terminals, clusters, etc., that may not be operational. It is recommended that you define to VTAM only those resources that are physically available.

An application programmer should expect one character messages from 3270's and test for 'CLEAR' and 'PF' keys.

When using the 3600, the 3600 must respond to the 'CLEAR' and the 'UNBIND' in order to terminate a session. An application program running under DOS VTAM may not be cancelled until a response is sent back to VTAM. Always specify the time-out value in the 3600 CPGEN as greater than the total retry time of the NCP.

CHAPTER 4 : VTAM SESSION PARAMETERS

The following table indicates when VTAM 'only' parameters are required.
The examples throughout the guide indicate the use of these parameters.
The MODETAB and USSTAB examples include support for most applications.
The should be modified to support only the applications required by the
user.

	VTAM II	ACF/VTAM	START STOP	3272 LOCAL	BSC 3270	OTHER BSC	SDLC
LOGTAB	YES	ONLY IF NETSOL	YES	NETSOL YES	VTAM II YES; ACF/VTAM NO IF PU = YES	YES	NO
USSTAB	YES	YES	NO	NO (Note 1)	ACF/VTAM IF PU = YES	NO	YES
MODETAB	SNA ONLY	YES	NO	ACF/VTAM YES	ACF/VTAM YES	NO	YES
DLOGMOD	NO	ACF/VTAM ONLY	NO	ACF/VTAM YES	ACF/VTAM YES	NO	YES
SSCPFM	YES	YES	NO	NO	YES	NO	YES
BNNSUP	YES	YES	NO	NO	NO	NO	3271 ONLY

VTAM SESSION CONTROL PARAMETERS

	SNA	IBM DEFAULT	USER SUPP	COMMENTS
LOGTAB	NO	NO	YES	REQUIRED FOR NON-SDLC LOGON VIA NETSOL.
USSTAB	YES	YES (LOGON APPLID)	YES	USSTAB OR FOR BOTH DOS/VS AND OS/VS LOGON (USSTAB PREFERRED).
MODETAB	YES	YES (3767)	YES ONE MODETAB PREFER.	REQUIRED IF APPLICATION DOES NOT SUPPLY BIND PARAMETERS. THE DEFAULTS ARE NOT USABLE.
DLOGMOD	YES	NO	YES	POINTS TO ENTRY IN INDICATED OR IBM SUPPLIED MODETAB.
SSCPFM	YES	YES	YES	VTAM SUPPLIED LEADING GRAPHICS: 1) FORMATTED, DEFAULT 3600, 3650, 3790; 2) UNFORMATED USSSCx 3274, 3276,3770; 3) 3271 BSC. USS 3270
BNNSUP	YES	YES	NO	REQUIRED FOR IBM 3271 Model 11/12

Note 1 - Yes for ACF/VTAM Version 2.

<u>VTAM SESSION CONTROL PARAMETERS(CONT.)</u>

4.1 : INTERPRET TABLE EXAMPLE

SAMPLE LOGON INTERPRET TABLE

The following interpret table can be used with all levels of VTAM. It
is only used by NETSOL and need not be coded if NETSOL is not used.
NETSOL is normally required for devices supported by applications using
the 'BASIC' mode interface. An interpret table is not required for
remote 3271 BSC controllers when interfacing to ACF/VTAM.

```
*********************************************************************
*      SOURCE FOR LOGON INTERPRET TABLE                             *
*********************************************************************
LOGTAB    INTAB
          LOGCHAR APPLID=(APPLICID,VAPPL),SEQNCE='VAPPL'
          LOGCHAR APPLID=(APPLICID,VAPPL),SEQNCE='vappl'
          LOGCHAR APPLID=(APPLICID,CICS),SEQNCE='CICS'
          LOGCHAR APPLID=(APPLICID,CICS),SEQNCE='cics'
          LOGCHAR APPLID=(APPLICID,VTAMWHO),SEQNCE='WHO'
          LOGCHAR APPLID=(APPLICID,VTAMWHO),SEQNCE='who'
          LOGCHAR APPLID=(APPLICID,NOSP1),SEQNCE='NOSP' ACF/VTAM ONLY
          LOGCHAR APPLID=(APPLICID,NOSP1),SEQNCE='nosp' ACF/VTAM ONLY
          LOGCHAR APPLID=(APPLICID,TSO),SEQNCE='LOGON'  3277/MVS ONLY
          LOGCHAR APPLID=(APPLICID,TSO),SEQNCE='logon'  3277/MVS ONLY
          LOGCHAR APPLID=(APPLICID,ISTOLTEP),SEQNCE='TEST'
          LOGCHAR APPLID=(APPLICID,ISTOLTEP),SEQNCE='test'
          LOGCHAR APPLID=(APPLICID,IMS),SEQNCE='IMS'     OS/VS ONLY
          LOGCHAR APPLID=(APPLICID,IMS),SEQNCE='ims'     OS/VS ONLY
          LOGCHAR APPLID=(APPLICID,INQUIRY),SEQNCE='INQUIRY'
          LOGCHAR APPLID=(APPLICID,INQ),SEQNCE='INQ'
          ENDINTAB
          END
```

NOTES- The interpret table is required in order to allow non-SDLC and
local 3270(NON-SNA) terminals to 'logon' to application programs via the
Network Solicitor. The appropriate System Programmers Guide for VTAM or
ACF/VTAM describes the generation and purpose of the interpret table.

VTAM SESSION PARAMETERS

4.2 : MODETAB EXAMPLES

SAMPLE MODETAB FOR IBM 3767

```
ALL3767 MODETAB
        MODEENT LOGMODE=INTERACT,FMPROF=X'03',TSPROF=X'03',          X
            PRIPROT=X'B1',SECPROT=X'A0',COMPROT=X'3040'
        MODEENT LOGMODE=IMSEXCP,FMPROF=X'03',TSPROF=X'03',           X
            PRIPROT=X'B1',SECPROT=X'90',COMPROT=X'3040'
        MODEENT LOGMODE=DEFFLIP,FMPROF=X'03',TSPROF=X'03',           X
            PRIPROT=X'F9',SECPROT=X'E8',COMPROT=X'3081'
        MODEENT LOGMODE=EXECFLIP,FMPROF=X'03',TSPROF=X'03',          X
            PRIPROT=X'F9',SECPROT=X'D8',COMPROT=X'3081'
        MODEENT LOGMODE=EXECCONT,FMPROF=X'03',TSPROF=X'03',          X
            PRIPROT=X'F9',SECPROT=X'D9',COMPROT=X'3041'
        MODEENT LOGMODE=BOB,FMPROF=X'03',TSPROF=X'03',               X
            PRIPROT=X'F9',SECPROT=X'D8',COMPROT=X'3080'
        MODEEND
        END
```

NOTES- Description and specification for MODETAB generation is found in
the appropriate System Programmers Guide for VTAM and ACF/VTAM. The
component description manual for the 3767 should also be referenced.

SAMPLE MODETAB FOR 3270 (3271 AND 3272 CONTROL UNITS).

```
*****************************************************************
* MODE TABLE FOR 3277 LOCAL (3272 Control Unit)
* MODE TABLE FOR 3277 REMOTE (3271 Control Unit Model 11/12)
* MODE TABLE FOR 3277 REMOTE (3271 Control Unit Model 1/2)
*****************************************************************
NOSPTAB  MODETAB
         MODEENT LOGMODE=DSILGMOD,                               X
                 FMPROF=X'02',TSPROF=X'02',PRIPROT=X'71',        X
                 SECPROT=X'40',COMPROT=X'2000',RUSIZES=X'0000',  X
                 PSERVIC=X'000000000000000000000200'
         MODEENT LOGMODE=S3270,                                  X
                 FMPROF=X'02',TSPROF=X'02',PRIPROT=X'71',        X
                 SECPROT=X'40',COMPROT=X'2000',RUSIZES=X'0000',  X
                 PSERVIC=X'000000000000000000000200'
         MODEEND
         END
```

NOTES- This MODETAB is required if sessions are to be initiated by the application or the terminal contains a LOGAPPL parameter. This MODETAB is also required for ACF/VTAM. The DSILGMOD entry is required for ACF/NOSP.

SAMPLE MODETAB FOR 3770 SDLC

```
MODE3770 MODETAB
BAT13770 MODEENT LOGMODE=BAT13770,FMPROF=X'03',TSPROF=X'03',PRIPROT=X'B*
            1',SECPROT=X'B0',COMPROT=X'7080',RUSIZES=X'8585',         *
            PSERVIC=X'013100000000080000000000'
         MODEENT LOGMODE=BATCH,FMPROF=X'03',TSPROF=X'03',              X
            PRIPROT=X'A3',SECPROT=X'A1',COMPROT=X'7080',               X
            RUSIZES=X'8585'
         MODEENT LOGMODE=INTERACT,FMPROF=X'03',TSPROF=X'03',           X
            PRIPROT=X'B1',SECPROT=X'A0',COMPROT=X'3040'
         MODEENT LOGMODE=NOCOMP,FMPROF=X'03',TSPROF=X'03·,             X
            PRIPROT=X'A1',SECPROT=X'A1',COMPROT=X'7080'
         MODEENT LOGMODE=COMP,FMPROF=X'03',TSPROF=X'03',               X
            PRIPROT=X'A3',SECPROT=X'A3',COMPROT=X'7080'
         MODEENT LOGMODE=ASCII,FMPROF=X'03',TSPROF=X'03',              X
            PRIPROT=X'A1',SECPROT=X'A1',COMPROT=X'7880'
         MODEENT LOGMODE=BUF512,FMPROF=X'03',TSPROF=X'03',             X
            PRIPROT=X'A3',SECPROT=X'A3',COMPROT=X'7080',               X
            RUSIZES=X'8686'
         MODEENT LOGMODE=BUF256,FMPROF=X'03',TSPROF=X'03',             X
            PRIPROT=X'A3',SECPROT=X'A3',COMPROT=X'7080',               X
            RUSIZES=X'8585'
         MODEENT LOGMODE=CMPACT,FMPROF=3,TSPROF=3,PRIPROT=X'A3',       X
            SECPROT=X'A1',COMPROT=X'7080',RUSIZES=X'8585',             X
            PSERVIC=X'01106000F100808000010040'
         MODEEND
         END
```

NOTES- Description and specification for MODETAB generation is found in the appropriate System Programmers Guide for VTAM and ACF/VTAM. The component description manual for the 3770 should also be referenced.

SAMPLE MODETAB FOR IBM 3790

```
******************************************************************
* MODETAB FOR 3790
******************************************************************
MODE3790 MODETAB
BAT13790 MODEENT LOGMODE=BAT13790,FMPROF=X'03',TSPROF=X'03',              X
              PRIPROT=X'00',SECPROT=X'00',COMPROT=X'0000'
INQ3790  MODEENT LOGMODE=INQUIRY,FMPROF=X'03',TSPROF=X'03',              X
              PRIPROT=X'B1',SECPROT=X'A0',COMPROT=X'3040'
* The following MODEENT is required for TSO via ACF/VTAM.
EMU3790  MODEENT LOGMODE=EMU3790,FMPROF=X'03',TSPROF=X'03',PRIPROT=X'B1*
              ',SECPROT=X'B0',COMPROT=X'3080',RUSIZES=X'85C7',          *
              PSERVIC=X'02000000000000000000200'
RJE3790A MODEENT LOGMODE=RJE3790A,FMPROF=X'03',TSPROF=X'03',PRIPROT=X'A*
              3',SECPROT=X'A1',COMPROT=X'7080',RUSIZES=X'8585',         *
              PSERVIC=X'01106000F100800000010040'
RJE3790B MODEENT LOGMODE=RJE3790B,FMPROF=X'03',TSPROF=X'03',PRIPROT=X'A*
              3',SECPROT=X'A1',COMPROT=X'7080',RUSIZES=X'8585',         *
              PSERVIC=X'01102000F100800000010040'
BAT23790 MODEENT LOGMODE=BAT23790,FMPROF=X'03',TSPROF=X'04',PRIPROT=X'B*
              1',SECPROT=X'B0',COMPROT=X'7080',RUSIZES=λ'8585',         *
              PSERVIC=X'01310000000000000000000'
BLK3790  MODEENT LOGMODE=BLK3790,FMPROF=X'03',TSPROF=X'03',PRIPROT=X'B1*
              ',SECPROT=X'B0',COMPROT=X'3080',RUSIZES=X'8585',          *
              PSERVIC=X'01000000000000000000000'
SCS3790  MODEENT LOGMODE=SCS3790,FMPROF=X'03',TSPROF=X'03',PRIPROT=X'B1*
              ',SECPROT=X'B0',COMPROT=X'3080',RUSIZES=X'8585',          *
              PSERVIC=X'01000000000000000000000'
DSILGMOD MODEENT LOGMODE=DSILGMOD,FMPROF=X'03',TSPROF=X'03',PRIPROT=X'B*
              1',SECPROT=X'90',COMPROT=X'3080',RUSIZES=X'85C7',         *
              PSERVIC=X'02000000000000000000200'
         MODEEND
         END
```

NOTES- Description and specification for MODETAB generation is found in
the appropriate System Programmers Guide for VTAM and ACF/VTAM. The
component description manual for the 3790 should also be referenced.
The MODEENT 'EMU3790' is required to support the Data Stream
Compatibility interface with TSO.

MODETAB INFORMATION FOR 3276 AND 3274

The mode tables for the 3274-1A, 3274-1C and 3276 are identical except
for RU sizes and 3277 support.   The RU sizes supported by the
controllers are shown below:

controller	MAX RU size inbound to host	MAX RU size outbound from host
3276	2048	unlimited
3274-1C	1024	unlimited
3274-1A	1024	1536

One mode table for the displays attached to each controller type is
included.   This allows independent RU size selection based on the
controllers capabilities.   One mode table would suffice if inbound RU
was limited to 1024 and outbound RU size was limited to 1536. Mode
table entry names are the same in each table to allow the use of one USS
table for all these terminals.

One mode table is included for all printers regardless of controller
attachment. This was done for two reasons:

1. NOSP requires all mode table entry names to be DSILGMOD. This
   precludes having both the NOSP display and NOSP printer entries
   in the same table.
2. Since it was decided to use the same printer RU sizes with all
   controllers, the printer entries in each table would have been
   identical if they were included in each controller table.

For this installation it was decided to set pacing and vpacing values in
the terminal definitions (NCP and VBUILD) to zero and override those
values when desired by utilizing the mode table parameters PSNDPAC and
SRCVPAC. Displays and DSC printers normally run with pacing set to
zero. SCS printers, however, require a non-zero pacing count. Since a
3287 or 3289 printer can operate in either DSC or SCS mode it is not
possible to have different pacing counts for the same printer if the
pacing is determined by the terminal definition. In this installation,
for example, a 3289 printer could be used with IMS/VS by specifying the
mode table entry SCS4K. It could also be used in DSC mode by another
application by specifying the mode table entry DSC4K.

There are some special considerations for printers operating in SCS
mode. For 3287 printers the pacing count, RUSIZE and PSERVIC values
depend on the buffer size in the printer. The 3287 printer has a 2K
buffer as a standard feature and a 4K buffer as an optional feature.
The mode table entry names in these examples indicate their respective
printer buffer sizes.   The 3289 printer has a 4K buffer as a standard

feature. In all cases a determination must be made regarding the pacing count and RU size to be used. Many factors may enter into the decision, but the most important performance objective is to achieve overlap of printing with data transmission. In these examples, the rationale used for the trade-off between pacing count and RU size was to set the pacing count to one and set the RU size to the highest value (up to 1024) that would still allow printing and transmission to overlap. The 1024 byte RU size specified for printers with a 4K buffer is not the absolute maximum. The actual maximum RU size depends on the controller type and model and can be determined by using the formulae described in the 3270 Component Description manual (GA27-2749) in the section "RU Lengths". It was considered more practical to use a common RUSIZE than to set individual maximum sizes. 1536 is actually the maximum common RU size that could have been used, but it appears that there is little, if any, performance advantage in using an RUSIZE greater than 1024. If an application program limits RU lengths to something less than 1024, it may be advantagous to use a pacing count greater than one. For an RU size of 256 a pacing count of 3 could be beneficial. Pacing counts greater than 3 would not generally be recommended unless the RU size is much smaller.

SAMPLE MODETAB FOR IBM 3274-1A (LOCAL ATTACHED)

```
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
X MODE TABLE FOR 3274-1A DISPLAYS
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
MT3274A   MODETAB
          MODEENT LOGMODE=T3278M2,                                X
                  FMPROF=X'03',TSPROF=X'03',PRIPROT=X'B1',        X
                  SECPROT=X'90',COMPROT=X'3080',RUSIZES=X'87C7',  X
                  PSERVIC=X'02000000000185018507F00'
          MODEENT LOGMODE=T3278M3,                                X
                  FMPROF=X'03',TSPROF=X'03',PRIPROT=X'B1',        X
                  SECPROT=X'90',COMPROT=X'3080',RUSIZES=X'87C7',  X
                  PSERVIC=X'02000000000185020507F00'
          MODEENT LOGMODE=T3278M4,                                X
                  FMPROF=X'03',TSPROF=X'03',PRIPROT=X'B1',        X
                  SECPROT=X'90',COMPROT=X'3080',RUSIZES=X'87C7',  X
                  PSERVIC=X'02000000000018502B507F00'
          MODEENT LOGMODE=T3278M1,                                X
                  FMPROF=X'03',TSPROF=X'03',PRIPROT=X'B1',        X
                  SECPROT=X'90',COMPROT=X'3080',RUSIZES=X'87C7',  X
                  PSERVIC=X'0200000000000C280C507F00'
          MODEENT LOGMODE=DSILGMOD,     MODEL 4                   X
                  FMPROF=X'03',TSPROF=X'03',PRIPROT=X'B1',        X
                  SECPROT=X'90',COMPROT=X'3080',RUSIZES=X'87C7',  X
                  PSERVIC=X'02000000000018502B507F00'
          MODEENT LOGMODE=T3277M2,                                X
                  FMPROF=X'03',TSPROF=X'03',PRIPROT=X'B1',        X
                  SECPROT=X'90',COMPROT=X'3080',RUSIZES=X'87C7',  X
                  PSERVIC=X'020000000000000000000200'
          MODEENT LOGMODE=T3277M1,                                X
                  FMPROF=X'03',TSPROF=X'03',PRIPROT=X'B1',        X
                  SECPROT=X'90',COMPROT=X'3080',RUSIZES=X'87C7',  X
                  PSERVIC=X'02000000000000000000000100'
          MODEEND
          END
```

NOTES- Description and specification for MODETAB generation is found in the appropriate System Programmers Guide for VTAM and ACF/VTAM. The component description manual for the 3270 should also be referenced.

SAMPLE MODETAB FOR IBM 3274-1C (REMOTE)

```
*****************************************************************
* MODE TABLE FOR 3274-1C DISPLAYS
*****************************************************************
MT3274C  MODETAB
         MODEENT LOGMODE=T3278M2,                                X
                 FMPROF=X'03',TSPROF=X'03',PRIPROT=X'B1',        X
                 SECPROT=X'90',COMPROT=X'3080',RUSIZES=X'87F8',  X
                 PSERVIC=X'02000000000185018507F00'
         MODEENT LOGMODE=T3278M3,                                X
                 FMPROF=X'03',TSPROF=X'03',PRIPROT=X'B1',        X
                 SECPROT=X'90',COMPROT=X'3080',RUSIZES=X'87F8',  X
                 PSERVIC=X'02000000000185020507F00' .
         MODEENT LOGMODE=T3278M4,                                X
                 FMPROF=X'03',TSPROF=X'03',PRIPROT=X'B1',        X
                 SECPROT=X'90',COMPROT=X'3080',RUSIZES=X'87F8',  X
                 PSERVIC=X'02000000000018502B507F00'
         MODEENT LOGMODE=T3278M1,                                X
                 FMPROF=X'03',TSPROF=X'03',PRIPROT=X'B1',        X
                 SECPROT=X'90',COMPROT=X'3080',RUSIZES=X'87F8',  X
                 PSERVIC=X'0200000000000C280C507F00'
         MODEENT LOGMODE=DSILGMOD,    MODEL 4                     X
                 FMPROF=X'03',TSPROF=X'03',PRIPROT=X'B1',        X
                 SECPROT=X'A0',COMPROT=X'3080',RUSIZES=X'87F8',  X
                 PSERVIC=X'02000000000018502B507F00'
         MODEENT LOGMODE=T3277M2,                                X
                 FMPROF=X'03',TSPROF=X'03',PRIPROT=X'B1',        X
                 SECPROT=X'90',COMPROT=X'3080',RUSIZES=X'87F8',  X
                 PSERVIC=X'02000000000000000000200'
         MODEENT LOGMODE=T3277M1,                                X
                 FMPROF=X'03',TSPROF=X'03',PRIPROT=X'B1',        X
                 SECPROT=X'90',COMPROT=X'3080',RUSIZES=X'87F8',  X
                 PSERVIC=X'02000000000000000000100'
         MODEEND
         END
```

NOTES- Description and specification for MODETAB generation is found in the appropriate System Programmers Guide for VTAM and ACF/VTAM. The component description manual for the 3270 should also be referenced.

SAMPLE MODETAB FOR IBM 3276 (REMOTE)

```
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
* MODE TABLE FOR 3276 DISPLAYS
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
MT3276    MODETAB
          MODEENT LOGMODE=T3278M2,                                  X
                FMPROF=X'03',TSPROF=X'03',PRIPROT=X'B1',            X
                SECPROT=X'90',COMPROT=X'3080',RUSIZES=X'88F8',      X
                PSERVIC=X'020000000000185018507F00'
          MODEENT LOGMODE=T3278M3,                                  X
                FMPROF=X'03',TSPROF=X'03',PRIPROT=X'B1',            X
                SECPROT=X'90',COMPROT=X'3080',RUSIZES=X'88F8',      X
                PSERVIC=X'020000000000185020507F00'
          MODEENT LOGMODE=T3278M4,                                  X
                FMPROF=X'03',TSPROF=X'03',PRIPROT=X'B1',            X
                SECPROT=X'90',COMPROT=X'3080',RUSIZES=X'88F8',      X
                PSERVIC=X'02000000000018502B507F00'
          MODEENT LOGMODE=T3278M1,                                  X
                FMPROF=X'03',TSPROF=X'03',PRIPROT=X'B1',            X
                SECPROT=X'90',COMPROT=X'3080',RUSIZES=X'88F8',      X
                PSERVIC=X'0200000000000C280C507F00'
          MODEENT LOGMODE=DSILGMOD,    MODEL 4                       X
                FMPROF=X'03',TSPROF=X'03',PRIPROT=X'B1',            X
                SECPROT=X'A0',COMPROT=X'3080',RUSIZES=X'87F8',      X
                PSERVIC=X'02000000000018502B507F00'
          MODEEND
          END
```

NOTES- This MODETAB provides session parameters for the IBM 3276 for various types of sessions. Description and specification for MODETAB generation is found in the appropriate System Programmers Guide for VTAM and ACF/VTAM. The component description manual for the 3270 should also be referenced.

SAMPLE MODETAB FOR IBM 3287 AND 3289 PRINTERS

```
*******************************************************************
* MODE TABLE FOR 3287 & 3289 PRINTERS
*******************************************************************
MTNDSPTR MODETAB
         MODEENT LOGMODE=SCS,                                        X
                 FMPROF=X'03',TSPROF=X'03',PRIPROT=X'B1',            X
                 SECPROT=X'90',COMPROT=X'3080',RUSIZES=X'87C6',      X
                 PSERVIC=X'01000000E1000000000000000',               X
                 PSNDPAC=X'01',SRCVPAC=X'01'
         MODEENT LOGMODE=DSC4K,                                      X
                 FMPROF=X'03',TSPROF=X'03',PRIPROT=X'B1',            X
                 SECPROT=X'90',COMPROT=X'3080',RUSIZES=X'8787',      X
                 PSERVIC=X'03000000000018502B507F00'
         MODEENT LOGMODE=DSC2K,                                      X
                 FMPROF=X'03',TSPROF=X'03',PRIPROT=X'B1',            X
                 SECPROT=X'90',COMPROT=X'3080',RUSIZES=X'8787',      X
                 PSERVIC=X'0300000000000185018507F00'
         MODEENT LOGMODE=DSILGMOD,                                   X
                 FMPROF=X'03',TSPROF=X'03',PRIPROT=X'B1',            X
                 SECPROT=X'90',COMPROT=X'3080',RUSIZES=X'8787',      X
                 PSERVIC=X'01000000E1000000000000000',               X
                 PSNDPAC=X'01',SRCVPAC=X'01'
         MODEEND
         END
```

NOTES- This MODETAB provides session parameters for the IBM 3287 and
3289 printers for various types of sessions. Description and
specification for MODETAB generation is found in the appropriate System
Programmers Guide for VTAM and ACF/VTAM. The component description
manual for the 3270 should also be referenced.

4.3 : USSTAB EXAMPLES

USSTAB FOR 3271 SDLC OR BSC(ACF/VTAM ONLY).

```
*******************************************************************
* USSTAB FOR 3271 MOD. 11/12 (VTAM AND ACF/VTAM)                  *
* USSTAB FOR 3271 MOD. 1/2   (ACF/VTAM)                           *
*******************************************************************
VUSS3270 USSTAB
LOG       USSCMD CMD=LOG,REP=LOGON,FORMAT=BAL
          USSPARM PARM=P1,REP=APPLID
          USSPARM PARM=P2,REP=LOGMODE
TSO       USSCMD CMD=TSO,REP=LOGON,FORMAT=BAL
          USSPARM PARM=APPLID,REP=APPLID,DEFAULT=TSO
          USSPARM PARM=LOGMODE,REP=LOGMODE,DEFAULT=S3270
          USSPARM PARM=P1,REP=DATA
NOSP      USSCMD CMD=NOSP,REP=LOGON,FORMAT=BAL
          USSPARM PARM=APPLID,REP=APPLID,DEFAULT=NOSP1
          USSPARM PARM=LOGMODE,REP=LOGMODE,DEFAULT=DSILGMOD
          USSPARM PARM=P1,REP=DATA
CICS14    USSCMD CMD=CICS14,REP=LOGON,FORMAT=BAL
          USSPARM PARM=APPLID,REP=APPLID,DEFAULT=CICS14
          USSPARM PARM=LOGMODE,REP=LOGMODE,DEFAULT=S3270
CICS      USSCMD CMD=CICS,REP=LOGON,FORMAT=BAL
          USSPARM PARM=APPLID,REP=APPLID,DEFAULT=CICS
          USSPARM PARM=LOGMODE,REP=LOGMODE,DEFAULT=S3270
TEST      USSCMD CMD=TEST,REP=LOGON,FORMAT=BAL
          USSPARM PARM=APPLID,REP=APPLID,DEFAULT=ISTOLTEP
          USSPARM PARM=LOGMODE,REP=LOGMODE,DEFAULT=S3270
CICS13    USSCMD CMD=CICS13,REP=LOGON,FORMAT=BAL
          USSPARM PARM=APPLID,REP=APPLID,DEFAULT=CICS13
          USSPARM PARM=LOGMODE,REP=LOGMODE,DEFAULT=S3270
IMS       USSCMD CMD=IMS,REP=LOGON,FORMAT=BAL
          USSPARM PARM=APPLID,REP=APPLID,DEFAULT=IMS
          USSPARM PARM=LOGMODE,REP=LOGMODE,DEFAULT=S3270
VSPC      USSCMD CMD=VSPC,REP=LOGON,FORMAT=BAL
          USSPARM PARM=APPLID,REP=APPLID,DEFAULT=VSPC
          USSPARM PARM=LOGMODE,REP=LOGMODE,DEFAULT=S3270
TCAM      USSCMD CMD=TCAM,REP=LOGON,FORMAT=BAL
          USSPARM PARM=APPLID,REP=APPLID,DEFAULT=TCAMTCAM
          USSPARM PARM=LOGMODE,REP=LOGMODE,DEFAULT=S3270
VTAMWHO   USSCMD CMD=WHO,REP=LOGON,FORMAT=BAL
          USSPARM PARM=APPLID,REP=APPLID,DEFAULT=VTAMWHO
          USSPARM PARM=LOGMODE,REP=LOGMODE,DEFAULT=S3270
LOGOFF    USSCMD CMD=LOGOFF,REP=LOGOFF,FORMAT=BAL
```

```
              USSPARM PARM=APPLID,REP=APPLID
              USSPARM PARM=TYPE,DEFAULT=COND
              USSPARM PARM=HOLD,DEFAULT=YES
*      THE FOLLOWING CODE IS POSITIONALLY DEPENDENT.....DO NOT CHANGE
*IF DOS/VS, A CHARACTER IS REQUIRED IN COLUMN 16 OF THE TEXT ON
* ALL THE STATEMENTS CONTAINING 71 BLANKS.
MESSAGES USSMSG MSG=1,TEXT='MAXIMUM MESSAGE                                 X
                                                                           X
                                                                           X
                                                                           X
                                                                  '

         USSMSG MSG=2,TEXT='MAXIMUM MESSAGE                                 X
                                                                           X
                                                                           X
                                                                           X
                                                                  '

         USSMSG MSG=3,TEXT='MAXIMUM MESSAGE                                 X
                                                                           X
                                                                           X
                                                                           X
                                                                  '

         USSMSG MSG=4,TEXT='MAXIMUM MESSAGE                                 X
                                                                           X
                                                                           X
                                                                           X
                                                                  '

         USSMSG MSG=5,TEXT='MAXIMUM MESSAGE                                 X
                                                                           X
                                                                           X
                                                                           X
                                                                  '

         USSMSG MSG=6,TEXT='MAXIMUM MESSAGE                                 X
                                                                           X
                                                                           X
                                                                           X
                                                                  '

         USSMSG MSG=7,TEXT='MAXIMUM MESSAGE                                 X
                                                                           X
                                                                           X
                                                                           X
                                                                  '

         USSMSG MSG=0,TEXT='MAXIMUM MESSAGE                                 X
                                                                           X
                                                                           X
                                                                           X
                                                                  '

         USSMSG MSG=10,TEXT='MAXIMUM MESSAGE                                X
                                                                           X
```

```
                                                                    X
                                                                    X

        PATCHBK   EQU   *
                  ORG   ISTT0001+1     ORG BACK TO OVERLAY MESSAGE
        MSG1S     EQU   *
                  DC    X'11C260',X'1DE8'
                  DC    C'INVALID COMMAND SYNTAX, ENTER:',X'11C3F0'
                  DC    C'LOG applid logmode data  Or:'
                  DC    X'11C6D21D60'
                  DC    C'CICS14',X'11C7E3'
                  DC    C'CICS13',X'11C8F3'
                  DC    C'TSO tsoid/password',X'114AC3'
                  DC    C'NOSP',X'114BD3'
                  DC    C'TEST',X'114CE3'
                  DC    C'WHO',X'114DF3'
                  DC    C'VSPC ID=nnnnnn',X'114FC3'
                  DC    C'IMS'
        MSG1E     EQU   *
                  ORG   ISTT0002+1     ORG BACK TO OVERLAY MESSAGE
        MSG2S     EQU   *
                  DC    X'11C260',X'1DE8'
                  DC    C'% COMMAND NOT RECOGNIZED, ENTER:',X'11C3F0'
                  DC    C'LOG applid logmode data  Or:'
                  DC    X'11C6D21D60'
                  DC    C'CICS14',X'11C7E3'
                  DC    C'CICS13',X'11C8F3'
                  DC    C'TSO tsoid/password',X'114AC3'
                  DC    C'NOSP',X'114BD3'
                  DC    C'TEST',X'114CE3'
                  DC    C'WHO',X'114DF3'
                  DC    C'VSPC ID=nnnnnn',X'114FC3'
                  DC    C'IMS'
        MSG2E     EQU   *
                  ORG   ISTT0003+1     ORG BACK TO OVERLAY MESSAGE
        MSG3S     EQU   *
                  DC    X'11C260'            SKIP TO LINE 2
                  DC    C'% PARAMETER NOT RECOGNIZED, ENTER:',X'11C3F0'
                  DC    C'LOG applid logmode data  Or:'
                  DC    X'11C6D21D60'
                  DC    C'CICS14',X'11C7E3'
                  DC    C'CICS13',X'11C8F3'
                  DC    C'TSO tsoid/password',X'114AC3'
                  DC    C'NOSP',X'114BD3'
                  DC    C'TEST',X'114CE3'
                  DC    C'WHO',X'114DF3'
                  DC    C'VSPC ID=nnnnnn',X'114FC3'
                  DC    C'IMS'
```

```
MSG3E    EQU    *
         ORG    ISTT0004+1      ORG BACK TO OVERLAY MESSAGE
MSG4S    EQU    *
         DC     X'11C260'
         DC     C'% PARAMETER INVALID, ENTER:',X'11C3F0'
         DC     C'LOG applid logmode data  Or:'
         DC     X'11C6D21D60'
         DC     C'CICS14',X'11C7E3'
         DC     C'CICS13',X'11C8F3'
         DC     C'TSO tsoid/password',X'114AC3'
         DC     C'NOSP',X'114BD3'
         DC     C'TEST',X'114CE3'
         DC     C'WHO',X'114DF3'
         DC     C'VSPC ID=nnnnnn'
         DC     X'114FC3'
         DC     C'IMS'
         DC     X'1150D2'
         DC     C'NOTE: The application may not be active'
MSG4E    EQU    *
         ORG    ISTT0005+1      ORG BACK TO OVERLAY MESSAGE
MSG5S    EQU    *
         DC     X'11C260'
         DC     C'UNSUPPORTED FUNCTION, ENTER:',X'11C3F0'
         DC     C'LOG applid logmode data  Or:'
         DC     X'11C6D21D60'
         DC     C'CICS14',X'11C7E3'
         DC     C'CICS13',X'11C8F3'
         DC     C'TSO tsoid/password',X'114AC3'
         DC     C'NOSP',X'114BD3'
         DC     C'TEST',X'114CE3'
         DC     C'WHO',X'114DF3'
         DC     C'VSPC ID=nnnnnn'
         DC     X'114FC3'
         DC     C'IMS'
MSG5E    EQU    *
         ORG    ISTT0006+1      ORG BACK TO OVERLAY MESSAGE
MSG6S    EQU    *
         DC     X'11C260'
         DC     C'SEQUENCE ERROR:'
         DC     X'11C6D21D60'
         DC     C'1. You are attempting to logoff from a terminal '
         DC     C'that is not in session'
         DC     X'114CE3'
         DC     C'2. You are attempting to logon from a terminal that '
         DC     C'is already in session'
         DC     X'114FC3'
MSG6E    EQU    *
         ORG    ISTT0007+1      ORG BACK TO OVERLAY MESSAGE
```

```
MSG7S   EQU    *
        DC     X'11C260'
        DC     C'SESSION NOT BOUND BECAUSE:'
        DC     X'11C6D21D60'
        DC     C'1. This terminal is already in session'
        DC     X'114CE3'
        DC     C'2. The host application rejected the logon request'
        DC     X'114FC2'
        DC     C'3. The terminal rejected the bind'
        DC     X'114FC3'
MSG7E   EQU    *
        ORG    ISTT0008+1    ORG BACK TO OVERLAY MESSAGE
MSG0S   EQU    *
        DC     X'11C260'
        DC     C'COMMAND COMPLETED OK'
MSG0E   EQU    *
        ORG    ISTT0009+1    ORG BACK TO OVERLAY MESSAGE
MSG10S  EQU    *
        DC     X'11C150'
        DC     C'             PALO ALTO SYSTEMS CENTER, ACF/VTAM SYSTEM'
        DC     X'11C3F2'
        DC     C'For logon command syntax, press enter'
MSG10E  EQU    *
        ORG    PATCHBK
* MAKE SURE EACH MESSAGE DOES NOT EXCEED 249 BYTES
MSG1L   EQU    (MSG1E-MSG1S)
MSG2L   EQU    (MSG2E-MSG2S)
MSG3L   EQU    (MSG3E-MSG3S)
MSG4L   EQU    (MSG4E-MSG4S)
MSG5L   EQU    (MSG5E-MSG5S)
MSG6L   EQU    (MSG6E-MSG6S)
MSG7L   EQU    (MSG7E-MSG7S)
MSG0L   EQU    (MSG0E-MSG0S)
MSG10L  EQU    (MSG10E-MSG10S)
END     USSEND
        END
```

NOTES- This USSTAB simplifies operator logon from the 3271 Model 11/12 under VTAM 2 and for 3271's with PU=YES under ACF/VTAM. Description and specification for USSTAB generation is found in the appropriate System Programmers Guide for VTAM and ACF/VTAM.

USSTAB FOR 3767 SDLC

```
*****************************************************************
* USSTAB   FOR 3767                                             *
*****************************************************************
ASUSSTAB  USSTAB
LOG       USSCMD CMD=LOG,REP=LOGON,FORMAT=BAL
          USSPARM PARM=P1,REP=APPLID
          USSPARM PARM=P2,REP=LOGMODE,
          USSPARM PARM=P3,REP=DATA
IMS       USSCMD CMD=IMS,REP=LOGON,FORMAT=BAL
          USSPARM PARM=APPLID,DEFAULT=IMS
          USSPARM PARM=LOGMODE,DEFAULT=INTERACT
          USSPARM PARM=ID,REP=DATA
CICS      USSCMD CMD=CICS,REP=LOGON,FORMAT=BAL
          USSPARM PARM=APPLID,DEFAULT=DBDCCICS
          USSPARM PARM=LOGMODE,DEFAULT=INTERACT
          USSPARM PARM=DATA
TSO       USSCMD CMD=TSO,REP=LOGON,FORMAT=BAL
          USSPARM PARM=APPLID,DEFAULT=TSO
          USSPARM PARM=LOGMODE,DEFAULT=INTERACT
          USSPARM PARM=DATA
VAPPL     USSCMD CMD=VAPPL,REP=LOGON,FORMAT=BAL
          USSPARM PARM=APPLID,DEFAULT=VAPPL
          USSPARM PARM=LOGMODE,DEFAULT=INTERACT
          USSPARM PARM=DATA
TEST      USSCMD CMD=TEST,REP=LOGON,FORMAT=BAL
          USSPARM PARM=APPLID,DEFAULT=ISTOLTEP
          USSPARM PARM=LOGMODE,DEFAULT=INTERACT
          USSPARM PARM=DATA
LOGOFF    USSCMD CMD=LOGOFF,FORMAT=BAL
          USSPARM PARM=APPLID
          USSPARM PARM=TYPE,DEFAULT=COND
          USSPARM PARM=HOLD,DEFAULT=YES
EOD       USSCMD CMD=EOD,REP=LOGOFF,FORMAT=BAL
          USSPARM PARM=APPLID
          USSPARM PARM=TYPE,DEFAULT=UNCOND
          USSPARM PARM=HOLD,DEFAULT=NO
          USSEND
          END
```

NOTES- This USSTAB simplifies operator logon from the 3767 SDLC unit. Description and specification for USSTAB generation is found in the appropriate System Programmers Guide for VTAM and ACF/VTAM.

VTAM SESSION PARAMETERS

USSTAB FOR 3770 SDLC


```
ASUSST70 USSTAB
LOG       USSCMD CMD=LOG,REP=LOGON,FORMAT=BAL
          USSPARM PARM=P1,REP=APPLID
          USSPARM PARM=P2,REP=LOGMODE
          USSPARM PARM=P3,REP=DATA
SIGNON    USSCMD CMD=SIGNON,REP=LOGON,FORMAT=BAL
          USSPARM PARM=APPLID,DEFAULT=JES2
          USSPARM PARM=LOGMODE,DEFAULT=BUF256
          USSPARM PARM=USER,REP=DATA
IMS       USSCMD CMD=IMS,REP=LOGON,FORMAT=BAL
          USSPARM PARM=APPLID,DEFAULT=IMS
          USSPARM PARM=LOGMODE,DEFAULT=BATCH
TEST      USSCMD CMD=TEST,REP=LOGON,FORMAT=BAL
          USSPARM PARM=APPLID,DEFAULT=ISTOLTEP
          USSPARM PARM=LOGMODE,DEFAULT=INTERACT
RMT1      USSCMD CMD=RMT1,REP=LOGON,FORMAT=BAL
          USSPARM PARM=APPLID,DEFAULT=JES2
          USSPARM PARM=LOGMODE,DEFAULT=BUF512
          USSPARM PARM=DATA,DEFAULT=RMT1
POWER     USSCMD CMD=POWER,REP=LOGON,FORMAT=BAL
          USSPARM PARM=APPLID,DEFAULT=POWER
          USSPARM PARM=LOGMODE,DEFAULT=BATCH
          USSPARM PARM=DATA,DEFAULT=006
LOGOFF    USSCMD CMD=LOGOFF,FORMAT=BAL
          USSPARM PARM=APPLID
          USSPARM PARM=TYPE,DEFAULT=COND
          USSPARM PARM=HOLD,DEFAULT=YES
EOD       USSCMD CMD=EOD,REP=LOGOFF,FORMAT=BAL
          USSPARM PARM=APPLID
          USSPARM PARM=TYPE,DEFAULT=UNCOND
          USSPARM PARM=HOLD,DEFAULT=NO
SIGNOFF   USSCMD CMD=SIGNOFF,FORMAT=BAL
          USSPARM PARM=APPLID
          USSPARM PARM=TYPE,DEFAULT=COND
          USSPARM PARM=HOLD,DEFAULT=YES
          USSEND
          END
```


NOTES- This USSTAB simplifies operator logon from the 3770 SDLC unit.
Description and specification for USSTAB generation is found in the
appropriate System Programmers Guide for VTAM and ACF/VTAM.

USSTAB FOR 3274/3276 SDLC

```
*********************************************************************
*      SOURCE FOR USSTAB FOR SNA 3274/3276
*********************************************************************
USST3270  USSTAB
LOG        USSCMD CMD=LOG,REP=LOGON,FORMAT=BAL
           USSPARM PARM=P1,REP=APPLID
           USSPARM PARM=P2,REP=LOGMODE,
           USSPARM PARM=P3,REP=DATA
IMS        USSCMD CMD=IMS,REP=LOGON,FORMAT=BAL
           USSPARM PARM=APPLID,DEFAULT=IMS
           USSPARM PARM=P1,REP=LOGMODE
IMS115     USSCMD CMD=IMS115,REP=LOGON,FORMAT=BAL
           USSPARM PARM=APPLID,DEFAULT=IMS115
           USSPARM PARM=P1,REP=LOGMODE
CICS14     USSCMD CMD=CICS14,REP=LOGON,FORMAT=BAL
           USSPARM PARM=APPLID,DEFAULT=CICS14
           USSPARM PARM=P1,REP=LOGMODE
CICS13     USSCMD CMD=CICS13,REP=LOGON,FORMAT=BAL
           USSPARM PARM=APPLID,DEFAULT=CICS13
           USSPARM PARM=P1,REP=LOGMODE
NOSP       USSCMD CMD=NOSP,REP=LOGON,FORMAT=BAL
           USSPARM PARM=APPLID,DEFAULT=NOSP1
           USSPARM PARM=LOGMODE,DEFAULT=DSILGMOD
TSO        USSCMD CMD=TSO,REP=LOGON,FORMAT=BAL
           USSPARM PARM=APPLID,DEFAULT=TSO
           USSPARM PARM=LOGMODE
           USSPARM PARM=P1,REP=DATA
LOGOFF     USSCMD CMD=LOGOFF,FORMAT=BAL
           USSPARM PARM=APPLID
           USSPARM PARM=TYPE,DEFAULT=UNCOND
           USSPARM PARM=HOLD,DEFAULT=YES
EOD        USSCMD CMD=EOD,REP=LOGOFF,FORMAT=BAL
           USSPARM PARM=APPLID
           USSPARM PARM=TYPE,DEFAULT=UNCOND
           USSPARM PARM=HOLD,DEFAULT=NO
VSPC       USSCMD CMD=VSPC,REP=LOGON,FORMAT=BAL
           USSPARM PARM=APPLID,DEFAULT=VSPC
           USSPARM PARM=LOGMODE
           USSPARM PARM=P1,REP=DATA
*      THE FOLLOWING CODE IS POSITIONALLY DEPENDENT.....DO NOT CHANGE
*
*IF DOS/VS, A CHARACTER IS REQUIRED IN COLUMN 16 OF THE TEXT ON
* ALL THE STATEMENTS CONTAINING 71 BLANKS.
MESSAGES USSMSG MSG=1,TEXT='MAXIMUM MESSAGE                          X
                                                                    X
```

```
                                                                    X
                                                                    X
                                                         ,
         USSMSG MSG=2,TEXT='MAXIMUM MESSAGE                          X
                                                                    X
                                                                    X
                                                                    X
                                                         ,
         USSMSG MSG=3,TEXT='MAXIMUM MESSAGE                          X
                                                                    X
                                                                    X
                                                                    X
                                                         ,
         USSMSG MSG=4,TEXT='MAXIMUM MESSAGE                          X
                                                                    X
                                                                    X
                                                                    X
                                                         ,
         USSMSG MSG=5,TEXT='MAXIMUM MESSAGE                          X
                                                                    X
                                                                    X
                                                                    X
                                                         ,
         USSMSG MSG=6,TEXT='MAXIMUM MESSAGE                          X
                                                                    X
                                                                    X
                                                                    X
                                                         ,
         USSMSG MSG=7,TEXT='MAXIMUM MESSAGE                          X
                                                                    X
                                                                    X
                                                                    X
                                                         ,
         USSMSG MSG=0,TEXT='MAXIMUM MESSAGE                          X
                                                                    X
                                                                    X
                                                                    X
                                                         ,
         USSMSG MSG=10,TEXT='MAXIMUM MESSAGE                         X
                                                                    X
                                                                    X
                                                                    X
                                                         ,
PATCHBK  EQU    *
         ORG    ISTT0001+1    ORG BACK TO OVERLAY MESSAGE
MSG1S    EQU    *
         DC     X'4015'            SKIP TO LINE 2
         DC     C'INVALID COMMAND SYNTAX, ENTER:',X'15'
```

```
         DC    X'4015'
         DC    C'LOG applid logmode data',X'15'
         DC    C'IMS',X'15'
         DC    C'CICS14',X'15'
         DC    C'CICS13',X'15'
         DC    C'TSO tsoid/password',X'15'
         DC    C'NOSP',X'15'
         DC    C'VSPC ID=nnnnnn'
MSG1E    EQU   *
         ORG   ISTT0002+1    ORG BACK TO OVERLAY MESSAGE
MSG2S    EQU   *
         DC    X'4015'            SKIP TO LINE 2
         DC    C'% COMMAND NOT RECOGNIZED, ENTER:',X'15'
         DC    X'4015'
         DC    C'LOG applid logmode data',X'15'
         DC    C'IMS',X'15'
         DC    C'CICS14',X'15'
         DC    C'CICS13',X'15'
         DC    C'TSO tsoid/password',X'15'
         DC    C'NOSP',X'15'
         DC    C'VSPC ID=nnnnnn'
MSG2E    EQU   *
         ORG   ISTT0003+1    ORG BACK TO OVERLAY MESSAGE
MSG3S    EQU   *
         DC    X'4015'            SKIP TO LINE 2
         DC    C'% PARAMETER NOT RECOGNIZED, ENTER:',X'15'
         DC    X'4015'
         DC    C'LOG applid logmode data',X'15'
         DC    C'IMS',X'15'
         DC    C'CICS14',X'15'
         DC    C'CICS13',X'15'
         DC    C'TSO tsoid/password',X'15'
         DC    C'NOSP',X'15'
         DC    C'VSPC ID=nnnnnn'
MSG3E    EQU   *
         ORG   ISTT0004+1    ORG BACK TO OVERLAY MESSAGE
MSG4S    EQU   *
         DC    X'4015'            SKIP TO LINE 2
         DC    C'% PARAMETER INVALID, ENTER:',X'15'
         DC    X'4015'
         DC    C'LOG applid logmode data',X'15'
         DC    C'IMS',X'15'
         DC    C'CICS14',X'15'
         DC    C'CICS13',X'15'
         DC    C'TSO tsoid/password',X'15'
         DC    C'NOSP',X'15'
         DC    C'VSPC ID=nnnnnn',X'15'
         DC    X'4015'
```

```
                 DC      C'NOTE: The application may not be active'
       MSG4E     EQU     *
                 ORG     ISTT0005+1      ORG BACK TO OVERLAY MESSAGE
       MSG5S     EQU     *
                 DC      X'4015'                 SKIP TO LINE 2
                 DC      C'UNSUPPORTED FUNCTION, ENTER:',X'15'
                 DC      X'4015'
                 DC      C'LOG applid logmode data',X'15'
                 DC      C'IMS',X'15'
                 DC      C'CICS14',X'15'
                 DC      C'CICS13',X'15'
                 DC      C'TSO tsoid/password',X'15'
                 DC      C'NOSP',X'15'
                 DC      C'VSPC ID=nnnnnn'
       MSG5E     EQU     *
                 ORG     ISTT0006+1      ORG BACK TO OVERLAY MESSAGE
       MSG6S     EQU     *
                 DC      X'4015'                 SKIP TO LINE 2
                 DC      C'SEQUENCE ERROR:',X'15'
                 DC      X'40154015'
                 DC      C'1. You are attempting to logoff from a terminal '
                 DC      C'that is not in session'
                 DC      X'4015'
                 DC      C'2. You are attempting to logon from a terminal that '
                 DC      C'is already in session'
       MSG6E     EQU     *
                 ORG     ISTT0007+1      ORG BACK TO OVERLAY MESSAGE
       MSG7S     EQU     *
                 DC      X'40154015'             SKIP TO LINE 3
                 DC      C'SESSION NOT BOUND BECAUSE:',X'15'
                 DC      X'40154015'
                 DC      C'1. This terminal is already in session',X'15'
                 DC      X'4015'
                 DC      C'2. The host application rejected the logon request'
                 DC      X'154015'
                 DC      C'3. The terminal rejected the bind',X'15'
       MSG7E     EQU     *
                 ORG     ISTT0008+1      ORG BACK TO OVERLAY MESSAGE
       MSG0S     EQU     *
                 DC      X'40154015'             SKIP TO LINE 3
                 DC      C'COMMAND COMPLETED OK:'
                 DC      X'4015401540154015'
                 DC      C'If LOGON, press ALT/SYS REQ (TEST REQ/CLEAR for 3277)'
                 DC      X'401540154015'
                 DC      C'If LOGOFF, enter next command or press enter for '
                 DC      C'logon command syntax'
       MSG0E     EQU     *
                 ORG     ISTT0009+1      ORG BACK TO OVERLAY MESSAGE
```

```
MSG10S   EQU     *
         DC      X'40154015'            SKIP TO LINE 3
         DC      C'            PALO ALTO SYSTEMS CENTER, ACF/VTAM SYSTEM'
         DC      X'4015401540154015'
         DC      C'For logon command syntax, press enter'
MSG10E   EQU     *
         ORG     PATCHBK
* MAKE SURE EACH MESSAGE DOES NOT EXCEED 249 BYTES
MSG1L    EQU     (MSG1E-MSG1S)
MSG2L    EQU     (MSG2E-MSG2S)
MSG3L    EQU     (MSG3E-MSG3S)
MSG4L    EQU     (MSG4E-MSG4S)
MSG5L    EQU     (MSG5E-MSG5S)
MSG6L    EQU     (MSG6E-MSG6S)
MSG7L    EQU     (MSG7E-MSG7S)
MSG0L    EQU     (MSG0E-MSG0S)
MSG10L   EQU     (MSG10E-MSG10S)
END      USSEND
         END
```

NOTES- This USSTAB simplifies operator logon from the 3274/3276 SDLC unit. Description and specification for USSTAB generation is found in the appropriate System Programmers Guide for VTAM and ACF/VTAM.

VTAM SESSION PARAMETERS

REFERENCES

DOS/VS VTAM System Programmers Guide   GC27-6957

ACF/VTAM System Programmers Guide (DOS)   SC38-0268

OS/VS1 VTAM System Programmer's Guide   GC27-6996

OS/VS2 SVS VTAM System Programmer's Guide   GC27-0049

OS/VS2 VTAM System Programming Library:VTAM   GC28-0688

ACF/VTAM System Programmers Guide   SC38-0258

CHAPTER 5 : SAMPLE SYSTEM DEPENDENT JCL

5.1 : DOS/VS SAMPLES

The examples included in this section should assist in the installation
of a DOS/VS system with local 3270's and a local attached 3705.

REFERENCES

DOS/VS VTAM System Programmers Guide	GC27-6957
DOS/VS System Management Guide	GC33-5371
DOS/VS System Control Statements	GC33-5376
DOS/VS System Generation	GC33-5377
DOS/VS System Utilities	GC33-5381
DOS/VS VTAM Reference Summary	GX27-0033
ACF/VTAM System Programmers Guide (DOS)	SC38-0268
ACF/VTAM Installation Guide (DOS)	SC38-0270
ACF/VTAM Reference Summary (DOS)	SX27-3022

DOS/VS SYSTEM DEFINITION(PARTIAL)

```
// JOB SUPVR (XXXXXXXXXXXXXX) ASSMB AND CATAL SIPOSUPV MOD2 10/2/78
// EXEC PROC=$$RESET
// OPTION ERRS,LIST,XREF,NODECK,NOEDECK,CATAL
// OPTION NOXREF
// EXEC ASSEMBLY,SIZE=40K
         PRINT   NOGEN
         SUPVR                                                      X
                 ID=V,                  $$A$SUPV                     X
                 AP=YES,                                            X
                 ERRLOG=RDE,                                        X
                 NPARTS=6,                                          X
                 POWER=YES,             'P O W E R / V S'           X
                 PAGEIN=24,                                         X
                 PHO=YES,               REQUIRED FOR POWER/VS       X
                 TP=(BTAM,VTAM),                                    X
                 VM=YES             VM LINKAGE ENHANCEMENTS
$CONFG   EQU     *
         CONFG                                                      X
                 FP=YES,                                            X
                 MODEL=158
$STDJC   EQU     *
         STDJC                                                      X
                 ACANCEL=NO,                                        X
                 DECK=NO,                                           X
                 DUMP=NO,                                           X
                 LINES=60,                                          X
                 SPARM=YES,                                         X
                 XREF=NO
$FOPT    EQU     *
         FOPT                                                       X
                 AB=YES,                REQUIRED FOR VTAM           X
                 ASYNOC=YES,                                        X
                 DASDFP=(1,4),          (TO ALLOW SYSRES ON CHANNELS 1-4)  X
                 DOC=NO,                                            X
                 ECPREAL=YES,           REQUIRED FOR POWER/VS       X
                 ERRQ=10,                                           X
                 EVA=(10,10),                                       X
                 FASTTR=YES,            FAST CCW TRANSLATE (R32 FEATURE)  X
                 GETVIS=YES,            REQUIRED FOR VTAM           X
                 IDRA=YES,                                          X
                 IT=YES,                REQUIRED FOR VTAM           X
                 JA=(12,12,12,12,12),                               X
                 JALIOCS=(64,64),                                   X
                 OC=YES,                REQUIRED FOR VTAM           X
                 OLTEP=YES,                                         X
```

```
                    PC=YES,                 REQUIRED FOR VTAM              X
                    PCIL=YES,                                             X
                    PD=YES,                                               X
                    PFIX=YES,               REQUIRED FOR POWER/VS AND VTAM X
                    PRTY=(BG,F5,F4,F3,F2,F1),   F1-VTAM F2-POWER          X

      **** VTAM must have the highest priority

                    PSLD=12,                                              X
                    RELLDR=YES,             REQUIRED FOR POWER/VS AND VTAM X
                    RPS=YES,                                              X
                    SLD=15,                                               X
                    SYSFIL=YES,             REQUIRED FOR VTAM             X
                    TOD=YES,                REQUIRED FOR VTAM             X
                    TRKHLD=12,                                            X
                    USERID=SIPOSUP1MOD2VMLE,                              X
                    VSAM=YES,               REQUIRED BY SSS               X
                    WAITM=YES,                                            X
                    XECB=YES,               INTER-PARTITION COMMUNICATION (R32) X
                    ZONE=(WEST,7,00)
$PIOCS     EQU      *
           PIOCS                                                          X
                    BLKMPX=YES,                                           X
                    BMPX=YES,                                             X
                    DISK=(3330,3340,3350),                                X
                    TAPE=9
$VSTAB     EQU      *
           VSTAB                                                          X
                    RSIZE=512K,                                           X
                    VSIZE=7680K,      8 MEG VIRTUAL MACHINE                X
                    BUFSIZE=150,                                          X
                    SVA=(570K,40K)
$ALLOC     EQU      *
           ALLOC                                                          X
                    F1=2048K,             VTAM RUNNING AT THE HIGHEST PRTY X
*** Usually 800K to 900k for average VTAM system ***
*** Usually 1500 to 2000k for large systems and if RESTART option.
                    F2=512K,              POWER/VS SNA/RJE                X
                    F3=2048K,             CICS/VS + DL/1 + VSAM OR VTAM   X
                    F4=1024K,             CICS/VS BUT NOT EVERYTHING      X
                    F5=450K               PRODUCTION
*                   BG=1024K     BG = VSIZE - (SVA + F1 + F2 + F3 + F4 + F5
$ALLOCR    EQU      *
           ALLOCR                                                         X
                    BGR=80K,                                              X
                    F4R=40K,                                              X
                    F5R=80K,                                              X
                    F3R=80K,                                              X
```

```
                    F2R=56K,               POWER RSIZE                    X
                    F1R=40K
*** Usually 36K to 40K for average VTAM system ****
*                   (BGR + F1R + F2R + F3R + F4R + F5R + 20K + SUPERVISOR)
*                   MUST BE NO GREATER THAN 'RSIZE'.
$IOTAB     EQU    *
           IOTAB                                                          X
                    BGPGR=40,                                             X
                    CHANQ=64,                                             X
                    D3330=16,                                             X
                    D3340=32,                                             X
                    D3350=8,                                              X
                    D3420=8,                                              X
                    F1PGR=24,                                             X
                    F2PGR=40,                                             X
                    F3PGR=39,                                             X
                    F4PGR=39,                                             X
                    F5PGR=10,                                             X
                    IODEV=110,                                            X
                    JIB=200,                                              X
                    NRES=64                REQUIRED FOR VSAM II
$DVCGEN    EQU    *           'REAL' DEVICES
           DVCGEN CHUN=X'00C',DVCTYP=2540R    READER FOR DMS
           DVCGEN CHUN=X'01C',DVCTYP=2501     DUMMY READER FOR 'SPM II'
           DVCGEN CHUN=X'00D',DVCTYP=2540P    PUNCH FOR DMS
           DVCGEN CHUN=X'04D',DVCTYP=3525P
           DVCGEN CHUN=X'00E',DVCTYP=1403U
           DVCGEN CHUN=X'00B',DVCTYP=1403U
           DVCGEN CHUN=X'009',DVCTYP=1050A
           DVCGEN CHUN=X'030',DVCTYP=2703     2703/OR 370X IN EMULATION
           DVCGEN CHUN=X'031',DVCTYP=2703     2703/OR 370X IN EMULATION
           DVCGEN CHUN=X'060',DVCTYP=3791L    LOCAL 3274
           DVCGEN CHUN=X'070',DVCTYP=3705,MODE=X'01' 370X NATIVE MODE
           DVCGEN CHUN=X'080',DVCTYP=3705,MODE=X'02' 370X NATIVE MODE
           DVCGEN CHUN=X'040',DVCTYP=3277     LOCAL 3270 FOR MONITOR, CICS
           DVCGEN CHUN=X'041',DVCTYP=3277     LOCAL 3270 FOR APPLIC.
           DVCGEN CHUN=X'042',DVCTYP=3277,MODE=X'01' LOC. 3286 PRT
           DVCGEN CHUN=X'043',DVCTYP=3277     FOR CONSOLE SUPPORT
*
*
*     MULTIPLE PRINTERS FOR POWER/VS CONTROL
           DVCGEN CHUN=X'01E',DVCTYP=1403U
           DVCGEN CHUN=X'02E',DVCTYP=1403U
           DVCGEN CHUN=X'08E',DVCTYP=1403U
*
*
           DVCGEN CHUN=X'140',DVCTYP=3350
           DVCGEN CHUN=X'141',DVCTYP=3350
```

```
*
*
*
          DVCGEN CHUN=X'160',DVCTYP=3340
          DVCGEN CHUN=X'161',DVCTYP=3340
          DVCGEN CHUN=X'162',DVCTYP=3340
*
          DVCGEN CHUN=X'280',DVCTYP=3420T9
          DVCGEN CHUN=X'281',DVCTYP=3420T9
*
          DVCGEN CHUN=X'350',DVCTYP=3330
          DVCGEN CHUN=X'351',DVCTYP=3330
          DVCGEN CHUN=X'352',DVCTYP=3330
*
          DVCGEN CHUN=X'370',DVCTYP=3330B
          DVCGEN CHUN=X'371',DVCTYP=3330B
          DVCGEN CHUN=X'372',DVCTYP=3330B
*
$ASSGN    EQU    *
*   SYS
          ASSGN SYSLOG,X'009'
          ASSGN SYSREC,X'160'
          ASSGN SYSCAT,X'160'          VSAM MASTER CATALOG
          ASSGN SYSCAT,X'160',F4       VSAM MASTER CATALOG THESE   ASSGNS
          ASSGN SYSCAT,X'160',F5       VSAM MASTER CATALOG  SHOULD NOT BE
          ASSGN SYSCAT,X'160',F3       VSAM MASTER CATALOG   NEEDED, BUT
          ASSGN SYSCAT,X'160',F2       VSAM MASTER CATALOG   WERE FOUND TO
          ASSGN SYSCAT,X'160',F1       VSAM MASTER CATALOG   BE NECESSARY.
*   BG
          ASSGN SYSRDR,X'00C' BG
          ASSGN SYSIPT,X'00C' BG
          ASSGN SYSPCH,X'00D' BG
          ASSGN SYSLST,X'00E' BG
*
          ASSGN SYSLNK,X'161' BG
          ASSGN SYS001,X'161' BG
          ASSGN SYS002,X'161' BG
          ASSGN SYS003,X'161' BG
          ASSGN SYS004,X'161' BG
*   F5
          ASSGN SYSRDR,X'05C',F5
          ASSGN SYSIPT,X'05C',F5
          ASSGN SYSPCH,X'05D',F5
          ASSGN SYSLST,X'05E',F5
*   F4
          ASSGN SYSRDR,X'00C',F4
          ASSGN SYSIPT,X'00C',F4
          ASSGN SYSPCH,X'00D',F4
```

```
              ASSGN SYSLST,X'00E',F4
              ASSGN SYSLNK,X'161',F4
              ASSGN SYS001,X'161',F4
              ASSGN SYS002,X'161',F4
              ASSGN SYS003,X'161',F4
              ASSGN SYS004,X'161',F4
*     F3
              ASSGN SYSRDR,X'00C',F3
              ASSGN SYSIPT,X'00C',F3
              ASSGN SYSPCH,X'00D',F3
              ASSGN SYSLST,X'00E',F3
*     F2   POWER/VS PARTITION
              ASSGN SYSLST,X'00E',F2
              ASSGN SYS000,X'161',F2
              ASSGN SYS001,X'161',F2
              ASSGN SYS002,X'161',F2
*     F1   VTAM PARTITION
              ASSGN SYSLST,X'01E',F1
*
*
$SEND     EQU   *
          SEND
          ENTRY NUCEND           IDENTIFY ACTUAL END OF SUPERVISOR.
          SUPPARMS             LIST PARAMETERS, AHEAD OF PRINT GEN
          END
/*
// EXEC LNKEDT
/&
```

NOTE- Information for preparing the DOS/VS system is found in Chapter 2
of the DOS/VS VTAM System Programmer's Guide (GC27-6957), and the DOS/VS
System Generation Guide (GC33-5377). If installing ACF/VTAM, the
ACF/VTAM System Programmer's Guide (SC38-0268) and ACF/VTAM Installation
Guide (SC38-0270) are required.

DOS/VS POWER DEFINITION


```
// JOB POWERASM
// EXEC PROC=$$RESET
// OPTION ERRS,LIST,XREF,NODECK,NOEDECK,CATAL
// EXEC ASSEMBLY,SIZE=128K
           TITLE 'POWER SNA - RELEASE 34'
           PRINT GEN
POWSNA     POWER DBLK=1966,                                              X
                 TRACKGP=3,                                              X
                 LTAB=(10,00,05,10,15,20,25,30,35,40,45,50,56),          X
                 PRI=5,                                                  X
                 SUBLIB=P,                                               X
                 ACCOUNT=YES,                                            X
                 STDLINE=(10000,10000),                                  X
                 STDCARD=(500,500),                                      X
                 JLOG=YES,                                               X
                 JSEP=(2,0),                                             X
                 RBS=(0,0),                                              X
                 RDREXIT=YLZ1REX,                                        X
                 PAUSE=NO,                                               X
                 SPOOL=YES,                                              X
                 SNA=(20,,POWER)
           EJECT
           PLINE ADDR=X'030',                                           X
                 SWITCH=YES,                                             X
                 TRNSP=YES
           PLINE ADDR=X'031',                                           X
                 SWITCH=YES,                                             X
                 TRNSP=YES
           EJECT
           PRMT  REMOTE=1,                                               X
                 TYPE=3780,                                              X
                 TRNSP=YES,                                              X
                 TRACE=YES
           PRMT  REMOTE=2,                                               X
                 TYPE=3780,                                              X
                 SCE=YES,                                                X
                 TRACE=YES
           PRMT  REMOTE=3,                                               X
                 TYPE=2770,                                              X
                 TRNSP=NO,                                               X
                 SCE=YES,                                                X
                 BE=YES,                                                 X
                 ABE=YES,                                                X
                 TRACE=YES
           PRMT  REMOTE=4,                                               X
```

```
                TYPE=2770,                                              X
                TRNSP=YES,                                              X
                SCE=NO,                                                 X
                BE=YES,                                                 X
                ABE=YES,                                                X
                TRACE=YES
        EJECT
        PRMT    REMOTE=5,                                               X
                TYPE=LUT1,                                              X
                CONSOLE=NO,                                             X
                SESSLIM=1,                                              X
                LU=(P76ALU1)
        PRMT    REMOTE=6,                                               X
                TYPE=LUT1,                                              X
                CONSOLE=YES,                                            X
                LU=(P76ALU1,P76ALU2,P76ALU3,P76ALU4,P76ALU5,P76ALU6),   X
                SESSLIM=6
        PRMT    REMOTE=7,                                               X
                TYPE=LUT1,                                              X
                CONSOLE=YES,                                            X
                LU=(RJE01,RJE02,RJE03,RJE04,RJE05),                     X
                SESSLIM=5
        END
/*
// EXEC LNKEDT
/*
/&
```

DOS/VS VTAM OR ACF/VTAM NETWORK INSTALL JCL

```
// JOB CATAL VTAM NETWORK DEFINITION
// EXEC MAINT
        CATALS B.node name
        BKEND B.node name

Insert network definition deck here


        BKEND
/*
/&
```

NOTE- Chapter 3 of the DOS/VS VTAM System Programmer's Guide describes
the filing of network definition decks. Sample network definitions for
the NCP are described in Chapter 6. Chapter 7 contains a sample Switches
SNA node definition and Chapter 8 contains sample local device
definitions.

DOS/VS VTAM OR ACF/VTAM START PARAMETER DEFINITION EXAMPLE

```
        CATALS B.ATCSTR00
        BKEND B.ATCSTR00
**************************************************************************
*                                                                        *
*    MINIMUM VTAM SYSTEM --- NO NCP                                       *
*     THIS WILL NOT SUPPORT AN NCP UNLESS VTAM BUFFER VALUES ARE          *
*      ENTERED WHEN PROMPTED BY VTAM AT STARTUP.                          *
**************************************************************************
CONFIG=00,      PREDEFINED LIST OF MAJOR NODES (ATCCON00)               X
MAXSUBA=15,             MAXIMUM NUMBER OF MAJOR NODES                    X
SSCPID=01       REQUIRED FOR VTAM-2 or ACF/VTAM
        BKEND
```

.

DOS/VS VTAM START DEFINITION (TEST - REPLACES INITIAL)

```
        CATALS B.ATCSTR01
        BKEND B.ATCSTR01
***************************************************************
*   NOTE:  THE LFBUF (BSZ) PARAMETER MUST EQUAL THE UNITSZ VALUE   *
*          IN THE NCP HOST MACRO DEFINITION. THE FORMAT OF THE     *
*          BUFFER POOL START PARAMETERS IS EITHER                  *
*          XXBUF=(BNO,BSZ,BTHZ) OR XXBUF=VBSZ AS INDICATED BELOW.  *
***************************************************************
CONFIG=01,          PREDEFINED LIST OF MAJOR NODES (ATCCON01)       X
SSCPID=01,          VTAM IDENTIFIER REQUIRED FOR VTAM-2 (RELEASE 32) X
NETSOL=NO,          NETWORK SOLICITOR NOT TO BE STARTED             X
SUPP=NOSUP,         DO NOT SUPPRESS VTAM MESSAGES                   X
MAXSUBA=31,         MAXIMUM NUMBER OF MAJOR NODES                   X
PROMPT,             ALLOW NETWORK OPERATOR TO ENTER VTAM START DATA X
APBUF=(23,,21),     ACTIVE & INACTIVE BUFFER POOL - PAGEABLE STORAGE X
LFBUF=(39,88,37),   LARGE FIXED STORAGE I/O BUFFER POOL             X
LPBUF=(20,,18),     LARGE PAGEABLE-STORAGE BUFFER POOL              X
NPBUF=(11,,9),      DEVICE CONNECTION BUFFER POOL, PAGEABLE         X
PPBUF=(8,88,6),     PAGEABLE DATA BUFFER POOL                       X
SFBUF=(1,,1),       SMALL FIXED STORAGE BUFFER POOL                 X
SPBUF=(46,,43),     SMALL PAGEABLE-STORAGE BUFFER POOL              X
WPBUF=(8,,6),       DEVICE CONNECTION BUFFER POOL - PAGEABLE        X
UECBUF=(20,,18),    SESSION AND SIMLOGON BFR POOL - PAGEABLE        X
VFBUF=6144,VPBUF=120000
        BKEND
```

NOTE- Defining and filing DOS VTAM start parameters is described in Chapter 4 of the DOS/VS VTAM System Programmer's Guide (GC27-6957).

ATCSTR00 is required by VTAM even if all defaults are taken. The system defaults will not support more than one active application program, including the Network Solicitor, and will not support an active NCP. ATCSTR01 specifies the values necessary to support a small NCP, application definitions, and local definitions. A VTAM virtual partition size should be about 900K and the ALLOCR size should be at least 36K.

DOS/VS ACF/VTAM START PARAMETER DEFINITION (TEST)

```
        CATALS B.ATCSTRAC
        BKEND  B.ATCSTRAC
    ***************************************************************
    *                                                             *
    *   ATCSTR00 IS REQUIRED OR THIS DEFINITION CAN REPLACE IT.   *
    *                                                             *
    *   NOTE:   THE IOBUF (BUFSIZE) PARAMETER MUST EQUAL THE UNITSZ VALUE  *
    *           IN THE NCP HOST MACRO DEFINITION. THE FORMAT OF THE        *
    *           BUFFER POOL START PARAMETERS IS EITHER                     *
    *           XXBUF=(BASENO,BUFSIZE,SLOWPT,XPANNO,XPANPT)                *
    *           OR XXBUF=VBSZ AS INDICATED BELOW.                          *
    *           XPANNO OF 1 WILL CAUSE ACF/VTAM TO ACQUIRE 1 PAGE OF       *
    *           BUFFERS SINCE THEY ARE ALWAYS ACQUIRED IN PAGE             *
    *           INCREMENTS.                                                *
    ***************************************************************
        SSCPID=01,         VTAM IDENTIFIER REQUIRED FOR ACF/VTAM           X
        CONFIG=AC,         PREDEFINED LIST OF MAJOR NODES (ATCCONAC)       X
        HOSTSA=12,         HOST SUBAREA FOR THIS ACF/VTAM                  X
        MAXSUBA=31,        MAXIMUM  NUMBER OF MAJOR NODES                  X
        VTAMEAS=100,                                                       X
        MAXAPPL=50,        MAXIMUM  NUMBER OF APPLICATION STATEMENTS       X
        NETSOL=NO,         NETWORK SOLICITOR NOT TO BE STARTED            X
        PROMPT,            ALLOW VTAM OPERATOR TO ENTER VTAM START DATA    X
        SUPP=NOSUP,        ALL ACF/VTAM MESSAGES TO BE PRINTED             X
        APBUF=(64,,0,1,5),     64- ACTIVE & INACTIVE BUF POOL - PAGEABLE STOR  X
        LFBUF=(46,136,2,1,24), 136- LARGE FIXED STORAGE I/O BUFFER POOL        X
          Note - The difference between SLOWPT and XPANPT must be greater than
                 the largest MAXBFRU defined in any NCP or Local definition.
        LPBUF=(3,,0,2,1),      1131-  LARGE PAGEABLE - STORAGE BUFFER POOL     X
        NPBUF=(14,,0,1,3),     288- DEVICE CONNECTION BUFFER POOL - PAGEABLE   X
        PPBUF=(30,136,0,1,5),  136- PAGEABLE DATA BUFFER POOL                  X
        SFBUF=(34,,0,1,5),     120- SMALL FIXED STORAGE BUFFER POOL            X
        SPBUF=(26,,0,1,3),     156- SMALL PAGEABLE - STOR BUFFER POOL          X
        UECBUF=(40,,4,1,10),   100- SESSION & SIMLOGON BFR POOL - PAGEABLE     X
        WPBUF=(24,,0,1,3),     164- DEVICE CONNECTION BUF POOL - PAGEABLE      X
        VFBUF=8000,VPBUF=180000
        BKEND
```

NOTE- The VTAM virtual partition size should be adjusted to 2048K, and
the ALLOCR value should be 36K. These buffer values will support the
initialization of a large NCP definition, a switched SNA node, local
3270's and NETSOL. The above values should be adjusted after the system
has been checked out.

DOS/VS START DEFINITION WITH AUTO-START OF VTAM TRACES


```
         CATALS B.ATCSTR11
         BKEND B.ATCSTR11
*********************************************************************
*                                                                   *
*    AUTO LOAD OF NCP  WITH VTAM TRACES                             *
*                                                                   *
*********************************************************************
CONFIG=11,      PREDEFINED LIST OF MAJOR NODES (ATCCON11)          X
TRACE,TYPE=BUF,ID=NCPBS,                                           X
TRACE,TYPE=BUF,ID=CL3790,                                          X
TRACE,TYPE=BUF,ID=SD3767,                                          X
TRACE,TYPE=BUF,ID=INBATCH1,                                        X
TRACE,TYPE=BUF,ID=INQDEMO2,                                        X
TRACE,TYPE=BUF,ID=TR3767SD,                                        X
TRACE,TYPE=IO,ID=NCPBS,                                            X
TRACE,TYPE=IO,ID=CL3790,                                           X
TRACE,TYPE=IO,ID=SD3767,                                           X
TRACE,TYPE=IO,ID=INBATCH1,                                         X
TRACE,TYPE=IO,ID=INQDEMO2,                                         X
TRACE,TYPE=IO,ID=TR3767SD
         BKEND
```


NOTE- The above start list assumes the required buffer definitions are
specified in ATCSTR00. If they are not, then all the start parameters in
the normal start list should be included.

DOS/VS VTAM APPLICATION PARAMETER EXAMPLE

```
            CATALS B.APPCON01
            BKEND B.APPCON01
********************************************************************
*                                                                  *
* APPLICATION PROGRAM DEFINITION FOR VTAM                          *
*    WHERE THE OPERANDS AVAILABLE ARE:                             *
*              PRTCT=PASSWORD,     PASSWORD MUST ALSO BE DEFINED IN *
*                                  APPLICATION PROGRAM 'ACB'.       *
*              BUFFACT=N|1,        MAXIMUM NUMBER OF VTAM PPBUF'S. IT*
*                                  MAY NEED TO BE ADJUSTED FOR BATCH*
*                                  INPUT.                           *
*              AUTH=(ACQ|NOACQ,    ALLOWS APPLICATION PROGRAM TO USE*
*                                  THE OPNDST MACRO WITH THE        *
*                                  ACQUIRE OPTION.                  *
*                BLOCK|NOBLOCK,    NOT USED WITH SDLC OR 3270.      *
*                PASS|NOPASS)      ALLOWS USE OF CLSDST MACRO       *
*                                  WITH THE PASS OPTION.            *
*                                                                  *
********************************************************************
SAMP1    APPL    AUTH=(ACQ)
CICS     APPL    AUTH=(ACQ),BUFFACT=4
PROG1    APPL    AUTH=(ACQ)
INQALL   APPL    PRTCT=OKAYOKAY
INQ      APPL    AUTH=(ACQ)
BATCH    APPL    AUTH=(ACQ),BUFFACT=2
INQ3790  APPL    AUTH=(NOACQ)
TEST3    APPL    AUTH=(ACQ)
SYSSSS   APPL    AUTH=(ACQ)
            BKEND
```

NOTE- Chapter 3 of the DOS/VS VTAM System Programmer's Guide (GC27-6957) describes the definition and filing of the application programs.

DOS/VS ACF/VTAM APPLICATION PARAMETER EXAMPLE

```
          CATALS B.APPCONAC
          BKEND B.APPCONAC
APPCONAC VBUILD  TYPE=APPL
*****************************************************************
*                                                               *
* APPLICATION PROGRAM DEFINITION FOR VTAM                       *
*    WHERE THE OPERANDS AVAILABLE ARE:                          *
*              ACBNAME=ACBNAME,     MINOR NODE NAME. DEFAULTS TO NAME *
*                                   ON APPL STATEMENT.          *
*              PRTCT=PASSWORD,      PASSWORD MUST ALSO BE DEFINED IN  *
*                                   APPLICATION PROGRAM 'ACB'.  *
*              BUFFACT=N|1,         MAXIMUM NUMBER OF VTAM PPBUF'S. IT *
*                                   APPLIES TO BASIC MODE ONLY. *
*              VPACING=N,           MAXIMUM NUMBER OF NORMAL-FLOW *
*                                   REQUESTS FROM LU.           *
*              MODETAB=MODETAB NAME, NAME OF MODETAB TO BE USED BY THE *
*                                   APPLICATION.               *
*              DLOGMOD=DEFAULT LOG- NAME OF LOGMODE ENTRY TO BE USED *
*                      MODE ENTRY   IF NONE IS OTHERWISE PROVIDED. *
*              EAS=N|404,           NUMBER OF CONCURRENT SESSIONS THIS *
*                                   APPLICATION PROGRAM WILL HAVE WITH *
*                                   ANY LOGICAL UNITS.          *
*              AUTH=(ACQ|NOACQ,     ALLOWS APPLICATION PROGRAM TO USE *
*                                   THE OPNDST MACRO WITH THE   *
*                                   ACQUIRE OPTION.             *
*               PPO|SPO|NOPO,       DEFAULTS TO NOPO. SEE THE PROGRAM *
*                                   OPERATOR GUIDE FOR ITS USE. *
*               BLOCK|NOBLOCK,      BASIC MODE ONLY.            *
*               VPACE|NVPACE,       DETERMINES IF APPLICATION IS TO BE *
*                                   SUBJECT TO VPACING FOR LU. DEFAULTS*
*                                   TO VPACING.                 *
*               PASS|NOPASS)        ALLOWS USE OF CLSDST MACRO  *
*                                   WITH THE PASS OPTION.       *
*                                                               *
*****************************************************************
SAMP1    APPL    AUTH=(ACQ),DLOGMOD=S3270,EAS=2
CICS     APPL    AUTH=(ACQ),EAS=40
PROG1    APPL    AUTH=(ACQ),EAS=10
INQALL   APPL    PRTCT=OKAYOKAY,EAS=10
INQ      APPL    AUTH=(ACQ),EAS=10
BATCH    APPL    AUTH=(ACQ),EAS=1
INQ3790  APPL    AUTH=(NOACQ),MODETAB=MODE3790,EAS=4
TEST3    APPL    AUTH=(ACQ),EAS=1
SYSSSS   APPL    AUTH=(ACQ),DLOGMOD=BATCH,EAS=1
         BKEND
```

DOS/VS NETWORK CONFIGURATION DEFINITION

```
          CATALS B.ATCCON00
          BKEND B.ATCCON00
******************************************************************
*    CONFIGURATION DEFINITION                                    *
*        NETWORK INCLUDES APPLICATION PROGRAM LIST ONLY          *
******************************************************************
APPCON01
          BKEND
          CATALS B.ATCCONAC
          BKEND B.ATCCONAC
******************************************************************
*    CONFIGURATION DEFINITION                                    *
*        NETWORK INCLUDES APPLICATION PROGRAM LIST, AND          *
*        LOCAL 3270 DEFINITION.                                  *
******************************************************************
APPCONAC,LOCCONAC
          BKEND
          CATALS B.ATCCON03
          BKEND B.ATCCON03
******************************************************************
*    CONFIGURATION DEFINITION                                    *
*        NETWORK INCLUDES APPLICATION PROGRAM LIST, NCPBS AND SWITCH01. *
******************************************************************
APPCON01,NCPBS,SWITCH01
          BKEND
          CATALS B.ATCCON11
          BKEND B.ATCCON11
******************************************************************
*                                                                *
*    CONFIGURATION DEFINITION                                    *
*        NETWORK INCLUDES APPLICATION PROGRAM LIST, LOCAL 3270,  *
*        NCPBS AND SWITCH02. THE BUFFER VALUES ARE PICKED UP FROM *
*        ATCSTR00.                                               *
******************************************************************
APPCON01,NCPBS,LOCCON01,SWITCH02
          BKEND
```

NOTE- ATCCON00 is used when first bringing up VTAM with the initial
start definition.   It maybe used afterwards   by specifing
CONFIG=00,LIST=00 at VTAM startup time.

DOS/VS SAMPLES

DOS/VS USSTAB INSTALLATION JCL


```
// JOB USSTAB
// OPTION CATAL
 PHASE name,*
// EXEC ASSEMBLY,REAL
Source Deck
/*
// EXEC LNKEDT
/*
/&
```


DOS/VS MODETAB INSTALLATION JCL


```
// JOB MODETAB
// OPTION CATAL
 PHASE name,*
// EXEC ASSEMBLY,REAL
Source Deck
/*
// EXEC LNKEDT
/*
/&
```


DOS/VS INTERPRET TABLE INSTALLATION JCL


```
// JOB ASSEMBLE
// OPTION CATAL
 PHASE name,*
// EXEC ASSEMBLY,REAL,SIZE=64K
Source Deck
/*
// EXEC LNKEDT
/&
```

DOS/VS EXAMPLE FOR LINKING 3704/5 LOAD UTILITY CSECTS TO VTAM

```
// JOB PUNCH NCP CSECT MODULES
// ASSGN SYS001,3330,VOL=RGW110,SHR
// DLBL IJSYSPR,'NCP PRL'
// EXEC CORGZ
   MERGE PRV,RES
    COPYR CXWMAXI1,CXWMAXI2,CXWMINI1,CXWMINI2
/*
/&
// JOB LINKEDIT NCP MODULES
// OPTION CATAL
   PHASE CXWMAXI1,*
   INCLUDE CXWMAXI1
   PHASE CXWMAXI2,*
   INCLUDE CXWMAXI2
   PHASE CXWMINI1,*
   INCLUDE CXWMINI1
   PHASE CXWMINI2,*
   INCLUDE CXWMINI2
// EXEC LNKEDT
/*
/&
```

NOTE- This step is required for DOS/VS VTAM. VTAM must have these modules link-edited in order to load the NCP.

DOS/VS EXAMPLE FOR INSTALLING 3704/5 INITIAL TESTS

```
// JOB CREATE 3704/5 INITIAL TEST FILE
// DLBL IJSYSPH,'INITTEST',300
// EXTENT SYSPCH,,,,7220,14
ASSGN SYSPCH,SYSRES
// EXEC CSERV
   PUNCH IFU3705D,IFU3705E
/*
/&
CLOSE SYSPCH,X'00D'
/&
```

NOTE- This step is required for DOS/VS VTAM. VTAM must have these modules in a direct access file.

DOS/VS SAMPLES

DOS/VS VTAM START PROCEDURE


```
// JOB CATALP VTAM START PROCEDURE
// EXEC MAINT
     CATALP $1NET,VM=0.0,EOP=/+
* START VTAM EXECUTION
// ASSGN SYS000,UA
// DLBL TRFILE,'VTRACE',0
// EXTENT SYS001,,,,7600,19
// ASSGN SYS001,SYSRES
// DLBL NCP45F,'NCP FOR SSS'
// EXTENT SYS008
// DLBL NCPSN2,'HAL NCP'
// EXTENT SYS008
// ASSGN SYS008,SYSRES
// DLBL DIAGFLE,'INITTEST'
// EXTENT SYS008,,,,7220,14
// ASSGN SYS008,SYSRES
// DLBL NCPDUMP,,0,DA
// EXTENT SYS007,,,,6880,12
// ASSGN SYS007,SYSRES
// OPTION NODUMP
// PAUSE ENTER  // EXEC ISTINCVT,SIZE=350K
/+  END OF PROCEDURE
/*
/&
```


NOTE- This procedure allows the operator to select either of two NCP
load modules. The use of this procedure allows VTAM to be executed in
'F1' only. It also allows update of the procedure catalog while VTAM is
being executed. The sample does include the file that holds the NCP
initial test, therefore NCP initial test may be specified in the PCCU
macro of the NCP definition.

DOS/VS ACF/VTAM START PROCEDURE (ONE NCP)


```
// JOB CATALP VTAM START PROCEDURE
// EXEC MAINT
    CATALP $1NET,VM=0.0,EOP=/+
* START VTAM EXECUTION
* MUST DEFINE A TRACE FILE
// ASSGN SYS000,UA
// DLBL TRFILE,'VTRACE',0
// EXTENT SYS001,,,,7896,48
// ASSGN SYS001,3340,VOL=DOS111,SHR
// DLBL NCPACFI,'HAL NCP'
// EXTENT SYS008,DOS111,1,0,2880,60
// ASSGN SYS008,3340,VOL=DOS111,SHR
// PAUSE ENTER  // EXEC ISTINCVT,SIZE=500K
/+  END OF PROCEDURE
/*
/&
```


NOTE- This procedure allows the operator to select either of two NCP load modules. The use of this procedure allows VTAM to be executed in 'F2' only. It also allows update of the procedure catalog while VTAM is being executed. The sample does include the file that holds the NCP initial test, therefore NCP initial test may be specified in the PCCU macro of the NCP definition.

DOS/VS NCP STAGE 1 GENERATION JCL


```
//  JOB  NCP STAGE1 GENERATION
// ASSGN SYSSLB,3330,VOL=RGW110,SHR
// DLBL IJSYSSL,'NCP PSL'
// OPTION DECK
// EXEC  IFZASM,SIZE=64K
*******************************************************************
*                                                                 *
*         SOURCE FOR NCP3 DOS                                     *
*                                                                 *
*******************************************************************
/*
/&
```

NOTE- This step will produce the cards necessary for the rest of the NCP
generation. The output of this stage will have to be adjusted to point
to the NCP macro library, if the NCP macros are put in a private
library. The assemblies produced by the stage 1 job stream should be
error free. The link-edit stage will have unresolved EXTRNS, but if all
the assembly steps were correct, these can be ignored.

PLEASE NOTE

The stage 1 output should be closely examined. Default: do not create
MNOTES. All defaults should be checked for correct value.

DOS/VS EXAMPLE OF STAGE 2 NCP GENERATION JCL

```
//  JOB  SATLTCT
//  ASSGN SYSSLB,3330,VOL=RGW110,SHR
//  DLBL IJSYSSL,'NCP PSL'
//  OPTION  DECK,NOXREF
//  EXEC  IFZASM,SIZE=64K
 PUNCH '  CATALR  SATLTCT'
$SATLTCT CSECT
         CXTLTC SWTD=NO,OLTT=1
* PUT STATE ADDRESS TABLES ON 64 BYTE BOUNDARY
PADSAT   EQU   64+64*((*-$SATLTCT-1)/64)-(*-$SATLTCT)
         DS    (PADSAT)X
* STATE ADDRESS TABLES
* BSC EBCDIC
         RNSTAEBC BSCPTPT=0,BSCCNTL=1,MPTRB=0
* DUPLEX LINE CONTROL
         CXBDLST
         SPACE
         END
/*
/&
```

NOTE- This is an example of the job stream needed for the assembly of one of the NCP stages. There are approximatly 15 stages. Each of the stages will produce an object module that should be stored using the next example. The final step is a link-edit that will store the generated NCP load module in the system core-image library.

DOS/VS JCL TO STORE NCP OBJECT MODULES FROM STAGE 2

```
// JOB STORE NCP OBJECT MODULES
// ASSGN SYSRLB,3330,VOL=DOS111,SHR
// DLBL IJSYSRL,'NCP PRL'
// EXEC MAINT
*****************************************************************
*                                                               *
*       INSERT OBJECT FROM NCP ASSEMBLY HERE                    *
*       STEP STORES OBJECT IN FILE FOR LINK-EDIT STAGE          *
*                                                               *
*****************************************************************
/*
/&
```

NOTE- This library is used by the link-edit stage. If a new NCP generation is required, a different library should be specified unless the old NCP is not to be updated.

DOS/VS SAMPLE FOR MOVING NCP LOAD MODULE


```
// JOB PUNCH NCPSSS
// DLBL IJSYSPH,'HAL NCP',300
// EXTENT SYSPCH,DOS111,1,0,2880,60
ASSGN SYSPCH,SYSRES
// EXEC CSERV
 PUNCH NCPSN2
/*
/&
CLOSE SYSPCH,X'00D'
/&
```


NOTE- This step is required for DOS/VS VTAM. VTAM expects to find the NCP load module in a library specified in the VTAM start procedure. If the NCP Generation is done on another DOS system, at least two modules must be punched for the new system,NCPXXX and NCPxxxr where NCPxxx is the NCP name specified in the newname parameter of the NCP build macro. NCPxxxR is the resource resolution table required by the access method (EXTM or VTAM). If block handlers were specified for Start/Stop or BSC devices, NCPxxxB should also be punched.

DOS/VS SAMPLE JCL TO DUMP A 3705 AND PRINT THE DUMP

```
// JOB DUMP DOS NCP
// ASSGN SYS007,X'0BF'
// DLBL NCPDUMP,'NCP3DUMP',,DA
// EXTENT SYS008,,,,6880,12
// ASSGN SYS008,SYSRES
// EXEC IFUREAD
  DUMP FROMADDR=200,FORMAT=Y,BUF=Y
/*
/&
```

NOTE- Options for this procedure are found in Chapter 8 of the NCP Generation Manual, GC30-3008. This example uses the same area defined in the VTAM start procedure.

DOS/VS SAMPLE JCL TO PRINT A 3705 DUMP TAKEN BY VTAM

```
// JOB PRINT DOS NCP
// DLBL  NCPDUMP,,0,DA
// EXTENT SYS007,,,,6880,12
// ASSGN SYS007,SYSRES
// EXEC IFUDUMP
 DUMP FROMADDR=200,FORMAT=Y,BUF=Y
/*
/&
```

NOTE- Options for this procedure are found in Chapter 8 of the NCP Generation manual, GC30-3008. This example operates on the dump area that is defined in the VTAM start procedure.

5.2 : OS/VS1 SAMPLES

REFERENCES

OS/VS1 Planning and Use Guide	GC24-5090
OS/VS1 System Generation Reference	GC26-3791
OS/VS1 Access Methods Services	GC26-3840
OS/VS1 VTAM System Programmer's Guide	GC27-6996
OS/VS1 JCL Reference	GT28-0618
OS/VS VTAM Reference Summary	GX27-0034
ACF/VTAM System Programmers Guide	SC38-0258
ACF/VTAM Installation Guide	SC38-0269
ACF/VTAM Reference Summary	SX27-3021

OS/VS1 SYSTEM GENERATION MACRO INSTRUCTIONS

The actual SYSGEN specifications are not included. VTAM and GTF should be included as part of the sysgen. The samples included are based on the availability of two 3330 drives, an additional scratch drive and a tape drive. The VTAM system specifications are consistant with the NCP samples in Chapter 7 of this manual.

```
********************************************************************
*                                                                  *
* THIS IS A PORTION OF STAGE 1 SYSGEN FOR THE VS/1-R6.0            *
*                                                                  *
********************************************************************
 TITLE 'VS1/REL6.0 - HARDWARE SPECIFICATION - CHANNEL 0'
       CHANNEL ADDRESS=0,TYPE=MULTIPLEXOR
       IODEVICE ADDRESS=00A,UNIT=3505
       IODEVICE ADDRESS=00B,UNIT=3525,FEATURE=TWOLINE
       IODEVICE ADDRESS=00C,UNIT=2540R,MODEL=1
       IODEVICE ADDRESS=00D,UNIT=2540P,MODEL=1
       IODEVICE ADDRESS=00E,UNIT=3211
       IODEVICE ADDRESS=00F,UNIT=1403,MODEL=N1,FEATURE=UNVCHSET
       IODEVICE ADDRESS=(010,2),UNIT=3791L     (3790 LOCAL)
```

```
            IODEVICE ADDRESS=01F,UNIT=3215,MODEL=1
      TITLE 'VS1/REL6.0 - HARDWARE SPECIFICATION - CHANNEL 0 (3270 LOCAL)'
            IODEVICE ADDRESS=(020,3),UNIT=3277,MODEL=2,                         *
                  FEATURE=(EBKY3277,AUDALRM,MAGCDRD,NUMLOCK,SELPEN,DOCHAR)
            IODEVICE ADDRESS=023,UNIT=3286,MODEL=2,FEATURE=DOCHAR
            IODEVICE ADDRESS=(024,2),UNIT=3284,MODEL=2,FEATURE=DOCHAR
            IODEVICE ADDRESS=(026,14),UNIT=3277,MODEL=2,                        *
                  FEATURE=(EBKY3277,AUDALRM,MAGCDRD,NUMLOCK,SELPEN,DOCHAR)
      TITLE 'VS1/REL6.0 - HARDWARE SPECIFICATION - CHANNEL 0 (3705)'
            IODEVICE ADDRESS=05F,UNIT=3705,ADAPTER=CA1
            IODEVICE ADDRESS=0BF,UNIT=3705,ADAPTER=CA2
      TITLE 'VS1/REL6.0 - HARDWARE SPECIFICATION - CHANNEL 1'
            CHANNEL ADDRESS=1,TYPE=SELECTOR
            IODEVICE ADDRESS=(130,4),UNIT=2314,IOREQUE=PRIORITY
            IODEVICE ADDRESS=(160,8),UNIT=3330,IOREQUE=PRIORITY
      TITLE 'VS1/REL6.0 - HARDWARE SPECIFICATION - CHANNEL 2'
            CHANNEL ADDRESS=2,TYPE=BLKMPXR
            IODEVICE ADDRESS=(230,8),UNIT=2314,IOREQUE=PRIORITY
            IODEVICE ADDRESS=(260,8),UNIT=3330,IOREQUE=PRIORITY
      TITLE 'VS1/REL6.0 - HARDWARE SPECIFICATION - CHANNEL 3'
            CHANNEL ADDRESS=3,TYPE=SELECTOR
            IODEVICE ADDRESS=(330,6),UNIT=2314,IOREQUE=PRIORITY
            IODEVICE ADDRESS=(360,8),UNIT=3330,IOREQUE=PRIORITY
            IODEVICE ADDRESS=(380,4),UNIT=3420,MODEL=3,                         *
                  FEATURE=(9-TRACK,DUALDENS)
            IODEVICE ADDRESS=3BF,UNIT=3705,ADAPTER=CA2
      TITLE 'VS1/REL6.0 - CONTROL PROGRAM SPECIFICATIONS'
            CTRLPROG ASCII=INCLUDE,            INCLUDE ASCII SUPPORT        *
                  AUTO=(VMSTART,NOLIST),       AUTO START LIST             *
                  DYNINTR=(10,50,200,10000),   DYNAMIC DISPATCH PARAMETERS *
                  DYNPART=(P3-P5),             PARTITIONS IN DYNAMIC DISPATCH *
                  FETCH=STD,                   NO PCI FETCH (VM SYS)       *
                  MAXIO=80,                    GENERATE 80 12-STARS        *
                  OPTIONS=(BLDL,NODDRSYS,NODEBCHK,RDE,RER,TRSVCTBL),       *
                  OVERLAY=ADVANCED,            FULL-OVERLAY CHECKING       *
                  RESIDNT=(ACSMETH,ERP,RENTCODE,TRSVC),          VTAM REQ*
                  SECURTY=FPROT,               FETCH PROTECT PARTITIONS    *
                  SYSQUE=16,                   16K SQA INITIALLY           *
                  TRACE=20,                    20 ENTRY SYSTEM TRACE TABLE *
                  TZ=(W,5,0),                  5 HOURS WEST OF GMT IS LOCAL *
                  VIRTUAL=4096,                4 MEG VIRTUAL MACHINE       *
```

VTAM REQUIRED

```
                  VSAM=INCLUDE            VIRTUAL SEQ ACCESS METHOD   VTAM REQ
```

VTAM REQUIRED

```
     DATAMGT ACSMETH=(BTAM,ISAM,TCAM,VTAM),  ALL ADDITIONAL  VTAM REQ*
             IND=YES                    INCLUDE INDUSTRY SUB-SYSTEM
        EDITOR  SIZE=(200,40)
      GRAPHICS GSP=EXCLUDE,PORRTNS=EXCLUDE   NO GRAPHICS
         JES  ALCUNIT=73608,     SPOOL ALLOCATION UNIT               *
              BUFSIZE=3952,      JES BUFFER SIZE (3952+144=4096)      *
              JOBLOG=YES,        LOG WTO AND WTORS                    *
              JOBQEXT=25,        JOBQ EXTENTION ENTRIES               *
              JOBQINT=200,       INITIAL RESIDENT ENTRIES             *
              JOBQNXT=10,        NUMBER OF EXTENTIONS                 *
              JOBQVOL=VS1R60,    VOL SER OF SYS1.JOBQUEUE             *
              JOUTLIM=0,         NO MAX TO OUTPUT LINES               *
              NUMBUFS=100,       NUMBER OF I/O BUFFERS IN POOL        *
              RDR=(R=2,Y=5,B=800,A=2,N=84),                          *
              SPOLCAP=80,        80 PERCENT SPOOL GIVES MESSAGE       *
              SPOLVOL=VS1R60,    VOL SER OF SYS1.SYSPOOL              *
              STEPWTP=60,        MAX WTP PER JOB STEP                 *
              SWDSLMT=80,        NUMBER OF RESERVED JOBQ BLOCKS       *
              WTLRCDS=2000,      MAX WTL HELD PER DATA SET            *
              WTR=(W=4,U=0,Z=6,B=2660)
        LOADER  SIZE=256
       MACLIB EXCLUDE=(GPS,OCR),  NOT NEEDED                          *
              INCLUDE=ISSP       INDUSTRY SYSTEM SUPPORT MACROS
         PAGE  DEV=3330,         PAGING DEVICE TYPE (FOR NON-VM USE) *
               SIZE=(CYL,35),    35 CYLINDERS OF AREA                 *
               VOLNO=VS1R60      VOLSER OF PAGING PACK
```

INCLUDE PARTITION FOR GTF

```
     PARTITNS P0(C-*,S-128),     SYSTEM PARTITION-NEED 128K for VSAM *
              P1(C-*,S-64),      SYSTEM PARTITION                     *
              P2(C-F,S-256),     HI-PRIORITY USER PARTITION           *
              P3(C-A,S-320),     NORMAL USER PARTITION                *
              P4(C-B,S-320),     ....                                 *
              P5(C-C,S-320),     ....                                 *
              P6(C-N,S-768),     LARGE USER PARTITION                 *
              P7(C-M,S-320),     LOW-PRIORITY USER PARTITION          *
              P8(C-*,S-0)        LOW-PRIORITY SYSTEM PARTITION
     SCHEDULR ALTCONS=029,       ALTERNATE CONSOLE ADDRESS            *
              BCLMT=100,         100 SLOTS FOR BROADCAST              *
              CONSOLE=01F,       PRIMARY CONSOLE ADDRESS              *
              ESV=SMF,           I/O STATS TO SMF DATA SET            *
              EVA=(15,15),       TEMP READ/WRITE THRESHOLD            *
              HARDCPY=SYSLOG,    HARD COPY TO SYSPOOL DATA SET        *
              IOC=01F,           INTEGRATED OPERATOR CONSOLE          *
              JOBQLMT=400,       400 BLOCKS PER INIT                  *
              JOBQLST=20,        RESIDENT LIST ENTRIES                *
              JOBQTMT=100,       BLOCKS FOR CRITICAL SITUATION        *
```

```
              OPTIONS=(MCS,REMOTE,VM),  FULL USEFUL OPTIONS            *
              REPLY=5,                  NUMBER OF WTOR REPLY BUFFERS    *
              SMF=FULL,                 FULL-BLOWN SMF                  *
              SYSWFMT=20,               QUEUE BLOCKS PER LOGICAL TRACK  *
              SYSWTMT=2200,             CRITICAL RDR, WTR REQUIREMENT   *
              VLMOUNT=AVR,              AUTO VOLUME RECOGNITION         *
              WTLCLSS=L,                SYSOUT=L FOR LOG                *
              WTOBFRS=60                NUMBER OF WTO BUFFERS
       TITLE 'VS1/REL6.0 - SECONDARY CONSOLE SPECIFICATION'
          SECONSLE AREA=(5,6,8),        LOGICAL SCREEN AREAS            *
              CONSOLE=020,              ADDRESS OF THIS CONSOLE         *
              PFK=12,                   USE ALL 12 PF KEYS         ,    *
```

VTAM REQUIRES SYSTEM CONSOLES TO HAVE ROUTCDE=ALL

```
              ROUTCDE=ALL,              ROUTE ALL MESSAGES              *
              VALDCMD=(1,2,3)           ALL COMMANDS ARE VALID     .
       SPACE 2
       SECONSLE AREA=(5,6,8),           LOGICAL SCREEN AREAS            *
              CONSOLE=021,              ADDRESS OF THIS CONSOLE         *
              PFK=12,                   USE ALL 12 PF KEYS              *
              ROUTCDE=ALL,              ROUTE ALL MESSAGES              *
              VALDCMD=(1,2,3)           ALL COMMANDS ARE VALID
       SECONSLE AREA=(5,6,8),           LOGICAL SCREEN AREAS            *
              CONSOLE=022,              ADDRESS OF THIS CONSOLE         *
              PFK=12,                   USE ALL 12 PF KEYS              *
              ROUTCDE=ALL,              ROUTE ALL MESSAGES              *
              VALDCMD=(1,2,3)           ALL COMMANDS ARE VALID
       TITLE 'VS1/REL6.0 - USER SVC SPECIFICATION'
          SVCTABLE SVC-255-D1-S0,       USER SVC - TYPE 1
       TITLE 'VS1/REL6.0 - PRINTER UNIVERSAL CHARACTER SET SPECIFICATION'
          UCS  DEFAULT=(H11,HN),IMAGE=ALL
       TITLE 'VS1/REL6.0 - GENERATE - STAGE 2 SYSGEN INPUT'
          GENERATE GENTYPE=ALL,         FULL SYSGEN                     *
              INDEX=SYS1,               INDEX SYSTEM DATASETS SYS1      *
              RESVOL=(VS1R60,3330)      SYSTEM RESIDENCE VOLUME
          END
```

NOTE- Information for preparing the OS/VS1 system for VTAM is found in
OS/VS1 System Programming Library: VTAM (GC27-6996), and the OS/VS1
Sysgen Reference (GC26-3791)

OS/VS1 SYSTEM PARAMETER DEFINITIONS


```
./   ADD    NAME=IEAAPFPS,LEVEL=00,SOURCE=0,LIST=ALL
 IMS.RESLIB USRLB2,
 IMS.PGMLIB USRLB2,
 SYS1.VTAMLIB IPOR21,
 SYS1.NCPLIB USRLB2,
 SYS1.LINKLIB2 USRLB1,
 SYS2.LINKLIB USRLB1,
 SYS1.OLTLIB USRLB1,
 SYS1.CDSLIB USRLB1,
 LAST.ENTRY DUMMY

./   ADD    NAME=LNKLSTPS,LEVEL=00,SOURCE=0,LIST=ALL
            SYS1.LINKLIB,                          XXXXXXXXX
            SYS1.LINKLIB2,  USER     UTILITIES     XXXXXXXXXXX
  '         IMS.RESLIB,     IMS LIBRARY            XXXXXXXXXXXXXXXXXX
            SYS1.TCAMLIB,   TCAM PROGRAMS          XXXXXXXXXXXXXXX
            NCP6.SSPLIB,    NCP6 UTILITIES         XXXXXXXXXXXXXXX
            SYS2.LINKLIB    USER LINK LIB

./   ADD    NAME=VATLSTPS
 USRLB1,1,0,3330-1  ,N      LIBRARY PACK
 USRLB2,1,0,3330-1  ,N      LIBRARY PACK
 DLIB01,1,2,3330    ,N      VS1 DLIB
 VS1RES,1,2,3330    ,N      SYSRES
 NCPLIB,1,0,3340    ,N      NCP6 LIBRARY
```


NOTE- Information for preparing the OS/VS1 system parameters is found in
OS/VS1 Sysgen Reference (GC26-3791)

OS/VS1 START PARAMETER DEFINITION (VTAM AND ACF/VTAM)


```
./    ADD    NAME=ATCSTR00,LEVEL=00,SOURCE=0,LIST=ALL
*************************************************************************
*                                                                       *
*    MINIMUM STARTUP - SHOULD BE USED FOR OS/VS VTAM AND ACF/VTAM        *
*                                                                       *
*************************************************************************
TRACE,TYPE=SMS,ID=VTAMBUF,                                               X
MAXSUBA=31,                                                              X
SSCPID=01,                                                               X
NETSOL=NO
```


NOTE- The above start-up definition can be used to initialize VTAM. The
default buffer values are unusable and should be changed before
activating any nodes.

OS/VS1 VTAM START PARAMETER DEFINITION (TEST)

```
./ ADD  NAME=ATCSTR01,LIST=ALL,SOURCE=0,LEVEL=00
************************************************************
*                                                          *
*     VTAM START PARAMETERS                                *
*     NOTE:  THE IOBUF (BSZ) PARAMETER MUST EQUAL THE UNITSZ VALUE  *
*            IN THE NCP HOST MACRO DEFINITION. THE FORMAT OF THE    *
*            BUFFER POOL START PARAMETERS IS EITHER        *
*            XXBUF=(BNO,BSZ,BTHZ) AS INDICATED BELOW.      *
*                                                          *
************************************************************
************************************************************
CONFIG=01,              PREDEFINED LIST OF MAJOR NODES (ATCCON01)     X
SSCPID=01,              VTAM IDENTIFICATION                           X
TRACE,TYPE=SMS,ID=VTAMBUF,                                            X
NETSOL=NO,              NETWORK SOLICITOR IS NOT TO BE STARTED        X
MAXSUBA=15,             NUMBER OF MAJOR NODES, VALUE MUST ALSO BE IN NCP X
APBUF=(64,,58),         ACTIVE & INACTIVE BUFFER POOL - PAGEABLE STORAGE X
CRPLBUF=(120,,110),     RPL-COPY POOL IN PAGEABLE STORAGE             X
IOBUF=(71,152,50),      FIXED STORAGE MESSAGE POOL                    X
LFBUF=(33,,33),         LARGE FIXED STORAGE I/O BUFFER POOL           X
LPBUF=(100,,90),        LARGE PAGEABLE-STORAGE BUFFER POOL            X
NPBUF=(100,,90),        DEVICE CONNECTION BUFFER POOL, PAGEABLE       X
PPBUF=(130,152,120),    PAGEABLE DATA BUFFER POOL                     X
SFBUF=(40,,40),         SMALL FIXED STORAGE BUFFER POOL               X
SPBUF=(12,,12),         SMALL PAGEABLE-STORAGE BUFFER POOL            X
UECBUF=(130,,120),      USER-EXIT CONTROL BLOCK (UECB) POOL           X
WPBUF=(130,,120)        DEVICE CONNECTION BUFFER POOL - PAGEABLE
./      ENDUP
/*
```

NOTE- Details for coding and filing start parameters are found in Chapter 7 of the OS/VS1 System Programmer's Guide(GC27-6996).

ATCSTR00 is required by VTAM even if all defaults are taken. The system defaults will not support more than one active application program, including the Network Solicitor, and will not support an active NCP. ATCSTR01 specifies the values necessary to support a small network consisting of an NCP with 6 Ports, 6 Start/Stop terminals, 4 local 3270's, 6 BSC terminals, 7 PU's, and 32 LU's.

OS/VS1 ACF/VTAM START PARAMETER DEFINITION (TEST)

```
./    ADD    NAME=ATCSTRAC,LEVEL=00,SOURCE=0,LIST=ALL
*******************************************************************
*                                                                 *
*    ATCSTR00 IS REQUIRED OR THIS DEFINITION CAN REPLACE IT.      *
*                                                                 *
*    NOTE:  THE IOBUF (BUFSIZE) PARAMETER MUST EQUAL THE UNITSZ VALUE *
*           IN THE NCP HOST MACRO DEFINITION. THE FORMAT OF THE    *
*           BUFFER POOL START PARAMETERS IS EITHER                 *
*           XXBUF=(BASENO,BUFSIZE,SLOWPT,XPANNO,XPANPT)            *
*           OR XXBUF=VBSZ AS INDICATED BELOW.                      *
*           XPANNO OF 1 WILL CAUSE ACF/VTAM TO ACQUIRE 1 PAGE OF   *
*           BUFFERS SINCE THEY ARE ALWAYS ACQUIRED IN PAGE         *
*           INCREMENTS.                                            *
*******************************************************************
TRACE,TYPE=SMS,ID=VTAMBUF,                                        X
TNSTAT,CNSL,TIME=10,                                             X
MAXSUBA=31,                                                      X
NOPROMPT,                                                        X
CONFIG=AC,                                                       X
SSCPID=01,                                                       X
HOSTSA=13,                                                       X
MAXAPPL=40,                                                      X
VTAMEAS=150,                                                     X
NETSOL=NO,                                                       X
SFBUF=(60,,2,,01,3),   *** XPANNO OF 1 WILL CAUSE ACF/VTAM TO ACQUIRE X
LFBUF=(37,,2,,01,3),       1 PAGE OF BUFFERS SINCE THEY ARE ALWAYS    X
LPBUF=(32,,1,,01,2),       ACQUIRED IN PAGE INCREMENTS ***            X
NPBUF=(23,,2,,01,3),                                            X
CRPLBUF=(40,,2,,01,3),                                          X
IOBUF=(60,152,4,,01,26),                                        X
 Note - The difference between SLOWPT and XPANPT must be greater than
         the largest MAXBFRU defined in any NCP or Local definition.
APBUF=(66,,2,,01,3),                                            X
SPBUF=(66,,2,,01,3),                                            X
UECBUF=(39,,2,,01,3),                                           X
WPBUF=(27,,2,,01,3),                                            X
PPBUF=(29,152,2,,01,3)
./      ENDUP
/*
//
```

NOTE- Details for coding and filing start parameters are found in the ACF/VTAM System Programmers Guide: VTAM (SC38-0258).

OS/VS1 VTAM APPLICATION DEFINITION EXAMPLE

```
./        ADD    NAME=APPCON01,LEVEL=00,SOURCE=0,LIST=ALL
./        NUMBER NEW1=10,INCR=10
***************************************************************
*                                                             *
* APPLICATION PROGRAM DEFINITION FOR VTAM                     *
*    WHERE THE OPERANDS AVAILABLE ARE:                        *
*              PRTCT=PASSWORD,      PASSWORD MUST ALSO BE DEFINED IN  *
*                                   APPLICATION PROGRAM 'ACB'.  *
*              BUFFACT=N|1,         APPLIES ONLY TO BASIC NEWE.  *
*              AUTH=(ACQ|NOACQ,     ALLOWS APPLICATION PROGRAM TO USE *
*                                   THE OPNDST MACRO WITH THE  *
*                                   ACQUIRE OPTION.            *
*              BLOCK|NOBLOCK,       NOT USED WITH SDLC OR 3270. *
*              PASS|NOPASS,         ALLOWS USE OF CLSDST MACRO  *
*                                   WITH THE PASS OPTION.      *
*              TCAM)                ALLOWS PATH TO TCAM        *
*                                                             *
***************************************************************
SAMP1     APPL   AUTH=(ACQ)
DBDCCICS  APPL   AUTH=(ACQ,BLOCK)
BATCH     APPL   AUTH=(ACQ)
VSPC      APPL   AUTH=(ACQ,NOBLOCK,NOPASS),PRTCT=ALVERTA
INQ3790   APPL   AUTH=(NOACQ)
INQALL    APPL   PRTCT=OKAYOKAY,AUTH=(ACQ)
HOSTPGM1  APPL   AUTH=(NOACQ)
INQ       APPL   AUTH=(ACQ,BLOCK)
TEST1     APPL   AUTH=(ACQ,PPO)
BASIC2    APPL   AUTH=(ACQ,PASS,SPO,BLOCK)
ISDQTCAM  APPL   AUTH=(ACQ,TCAM,BLOCK),PRTCT=PASSWORD
TCAM      APPL   AUTH=(ACQ,TCAM,BLOCK),PRTCT=PASSITON
RTAM      APPL   AUTH=ACQ,BUFFACT=2
./        ENDUP
/*
```

NOTE- Defining application parameters is described in Chapter 5
(Defining Application Programs) of the OS/VS1 VTAM Systems Programmer's
Guide(GC27-6996).

The following applies to VTAM II, not ACF/VTAM:

When a definition is changed in SYS1.VTAMLST, the member name must be
deleted from the SYS1.VTAMOBJ data set, otherwise VTAM will not use the
new version. This applies to all members of SYS1.VTAMLST except the
start and configuration definitions.

OS/VS1 ACF/VTAM APPLICATION DEFINITION EXAMPLE

```
./        ADD    NAME=APPCONAC
*************************************************************
*                                                           *
* APPLICATION PROGRAM DEFINITION FOR VTAM                   *
*    WHERE THE OPERANDS AVAILABLE ARE:                      *
*              ACBNAME=ACBNAME,      MINOR NODE NAME. DEFAULTS TO NAME  *
*                                    ON APPL STATEMENT.     *
*              PRTCT=PASSWORD,       PASSWORD MUST ALSO BE DEFINED IN   *
*                                    APPLICATION PROGRAM 'ACB'.         *
*              BUFFACT=N|1,          MAXIMUM NUMBER OF VTAM PPBUF'S. IT *
*                                    APPLIES TO BASIC MODE ONLY.        *
*              VPACING=N,            MAXIMUM NUMBER OF NORMAL-FLOW      *
*                                    REQUESTS FROM LU.      *
*              MODETAB=MODETAB NAME, NAME OF MODETAB TO BE USED BY THE  *
*                                    APPLICATION.           *
*              DLOGMOD=DEFAULT LOG-  NAME OF LOGMODE ENTRY TO BE USED   *
*                      MODE ENTRY    IF NONE IS OTHERWISE PROVIDED.     *
*              EAS=N|404,            NUMBER OF CONCURRENT SESSIONS THIS *
*                                    APPLICATION PROGRAM WILL HAVE WITH *
*                                    ANY LOGICAL UNITS.     *
*              AUTH=(ACQ|NOACQ,      ALLOWS APPLICATION PROGRAM TO USE  *
*                                    THE OPNDST MACRO WITH THE          *
*                                    ACQUIRE OPTION.        *
*                PPO|SPO|NOPO,       DEFAULTS TO NOPO. SEE THE PROGRAM  *
*                                    OPERATOR GUIDE FOR ITS USE.        *
*                BLOCK|NOBLOCK,      BASIC MODE ONLY.       *
*                VPACE|NVPACE,       DETERMINES IF APPLICATION IS TO BE *
*                                    SUBJECT TO VPACING FOR LU. DEFAULTS*
*                                    TO VPACING.            *
*                PASS|NOPASS)        ALLOWS USE OF CLSDST MACRO         *
*                                    WITH THE PASS OPTION.  *
*                                                           *
*************************************************************
SAMP1    APPL   AUTH=(ACQ),DLOGMOD=S3270,EAS=2
CICS     APPL   AUTH=(ACQ),EAS=40
PROG1    APPL   AUTH=(ACQ),EAS=10
INQALL   APPL   PRTCT=OKAYOKAY,EAS=10
RTAM     APPL   AUTH=(ACQ),EAS=10
BATCH    APPL   AUTH=(ACQ),EAS=1
INQ3790 APPL    AUTH=(NOACQ),MODETAB=MODE3790,EAS=4
TEST3    APPL   AUTH=(ACQ),EAS=1
SYSSSS   APPL   AUTH=(ACQ),DLOGMOD=BATCH,EAS=1
/*
```

NOTE- Defining and filing application parameters is described in Defining VTAM Application Programs of the ACF/VTAM Systems Programmers Guide: (SC38-0258).

OS/VS1 NCP DEFINITION EXAMPLE

```
./        ADD   NAME=NCPSN2,LEVEL=00,SOURCE=0,LIST=ALL
./        NUMBER NEW1=10,INCR=10
********************************************************************
*                                                                  *
*        SOURCE FOR NCP                                            *

See NCP examples in Chapter 7.

*                                                                  *
********************************************************************
./        ENDUP
/*
```

Notes- Chapter 4 of the OS/VTAM System Programmer's Guide and the NCP/VTAM generation guide are required. The host macro definition must be consistant with the VTAM start parameters.

The source from the NCP generation should be used here after removing the assembler control cards. When testing the NCP the first time, all the PU's should contain the VTAM parameter 'ISTATUS=INACTIVE'. After loading the NCP they should be varied 'active' individually. Later, when the PU and its resources are operational, this member can be updated to change the ISTATUS to 'ACTIVE'.

The following applies to VTAM II, not ACF/VTAM:

When a definition is changed in SYS1.VTAMLST, the member name must be deleted from the SYS1.VTAMOBJ data set, otherwise VTAM will not use the new version. This applies to all members of SYS1.VTAMLST except the start and configuration definitions.

OS/VS1 CONFIGURATION DEFINITION

```
./      ADD    NAME=ATCCON00,LEVEL=00,SOURCE=0,LIST=ALL          .
********************************************************************
*                                                                *
*    START-UP CONFIGURATION, APPLICATION CONFIGURATION ONLY      *
*                                                     .          *
********************************************************************
APPCON01
./      ADD    NAME=ATCCON01,LEVEL=00,SOURCE=0,LIST=ALL
********************************************************************
*                                                                *
*    START-UP CONFIGURATION, LOCAL 3270, AND NCP                 *
*                                                                *
********************************************************************
APPCON01,LOCCON01
./      ENDUP       .
/*
//
```

NOTE- To allow the operator to activate the NCP, ATCCON00 should be
specified. To autoload the NCP, ATCCON01 should be specified.

OS/VS1 USSTAB INSTALLATION JCL

```
//USSTAB JOB 'USSTAB ASSEMBLY',CLASS=C
//STEP1 EXEC ASMFCL
//ASM.SYSPUNCH DD  DUMMY
//ASM.SYSIN DD *
Source Deck
//LKED.SYSLMOD  DD  DSN=SYS1.VTAMLIB(Name),DISP=SHR
/*
```

OS/VS1 MODETAB ASSEMBLY

```
//MODETAB JOB 'MODETAB ASSEMBLY',MSGLEVEL=1,CLASS=C
//STEP1 EXEC ASMFCL
//ASM.SYSPUNCH DD  DUMMY
//ASM.SYSIN DD *
Source Deck
//LKED.SYSLMOD  DD  DSN=SYS1.VTAMLIB(Modetab Name),DISP=SHR
/*
```

OS/VS1 INTERPRET TABLE INSTALLATION JCL

```
//LOGASM JOB 'LOGTAB ASSEMBLY'
//STEP1 EXEC ASMFCL
//ASM.SYSPUNCH DD  DUMMY
//ASM.SYSIN DD *
Source Deck
//LKED.SYSLMOD  DD  DSN=SYS1.VTAMLIB(Name),DISP=SHR
/*
```

NOTE- The interpret table is required in order to allow non-SDLC terminals to 'logon' to application programs via the Network Solicitor. Chapter 9 of the OS/VS1 VTAM System Programmers Guide describes the generation of the interpret table.

OS/VS1 EXAMPLE OF START PROCEDURE (VTAM OR ACF/VTAM)

```
//PROCUP JOB 123,'UPDATE PROCS',REGION=100K
//        EXEC  PGM=IEBUPDTE,PARM=NEW
//SYSPRINT DD SYSOUT=A
//SYSUT2 DD    DSNAME=SYS1.PROCLIB,DISP=SHR
//SYSIN  DD    DATA
./      ADD LIST=ALL,NAME=NET,LEVEL=01,SOURCE=0
./   NUMBER  NEW1=10,INCR=10
//NET    EXEC  PGM=ISTINA01
//VTAMLIB DD   DSN=SYS1.VTAMLIB,DISP=SHR
//VTAMLST DD   DSN=SYS1.VTAMLST,DISP=SHR
//VTAMOBJ DD   DSN=SYS1.VTAMOBJ,DISP=SHR
//INITEST DD   DSN=SYS1.LINKLIB,DISP=SHR
//NCPLOAD  DD  DSN=SYS1.NCPLOAD,DISP=SHR
//NCPDUMP  DD  DSN=NCPDUMP,DISP=MOD
//OLTCDSDD DD  DSN=OLTLIB,DISP=SHR
//SYMSYM  DD   DSN=SYMSYM,DISP=SHR
./      ADD LIST=ALL,NAME=NETSSC,LEVEL=01,SOURCE=0
./   NUMBER  NEW1=10,INCR=10
//NET    EXEC  PGM=ISTINA01
//STEPCAT DD DSN=USRVCAT,DISP=SHR
//VTAMLIB DD   DSN=SYS1.VTAMLIB,DISP=SHR
//VTAMLST DD   DSN=SYS1.VTAMLST,DISP=SHR
//VTAMOBJ DD   DSN=SYS1.VTAMOBJ,DISP=SHR
//INITEST DD   DSN=SYS1.LINKLIB,DISP=SHR
//LRNCKPT DD   DSN=LRNCKPT,DISP=MOD
//NCP001 DD DSN=NCP001,DISP=MOD
//LOC001 DD DSN=LOC001,DISP=MOD
//SWT001 DD DSN=SWT001,DISP=MOD
//NCPLOAD  DD  DSN=SYS1.NCPLOAD,DISP=SHR
//NCPDUMP  DD  DSN=NCPDUMP,DISP=MOD
./   ENDUP
//
```

NOTE- The DD cards for data sets OLTLIB and CDSLIB should be omitted
unless the Customer Engineer has prepared these data sets. The system
can be installed without these data sets but they must be installed if
TOLTEP is to be used.

OS/VS1 RTAM GENERATION SAMPLE

```
        LINE  LINEID=1,LDESCR=(1,1),    BSC,FDX,TRANSPARENCY          X
              AUTOLOG=YES
        LINE  LINEID=2,LDESCR=(1,0),    BSC,FDX,NO TRANSPARENCY       X
              AUTOLOG=YES
        LINE  LINEID=3,LDESCR=(0,1),    BSC,HDX,TRANSPARENCY          X
              AUTOLOG=YES
        LINE  LINEID=4,LDESCR=(0,0),    BSC,HDX,NO TRANSPARENCY       X
              AUTOLOG=YES
*   2770 COMPRESS/NO TRANSPARENCY  512 BYTE BUFFER
        TERMINAL TDESCR=(3,0,3,6),LNUM=1,COMPRES=YES,                 X
              BUFXSIZ=512,TERMID=1
*
*   2770 COMPRESS/NO TRANSPARENCY  256 BYTE BUFFER
        TERMINAL TDESCR=(3,0,3,6),COMPRES=YES,                        X
              TERMID=2
*   3780 COMPRESS/NO TRANSPARENCY
        TERMINAL TDESCR=(3,7,3,1),COMPRES=YES,PCHS=0,TERMID=3
*
*   3780 COMPRESS/NO TRANSPARENCY/3781 CARD PUNCH
        TERMINAL TDESCR=(3,7,3,3),COMPRES=YES,TERMID=4
*
*   3780 NO COMPRESS/TRANSPARENCY/3781 CARD PUNCH
        TERMINAL TDESCR=(3,7,3,7),COMPRES=NO,TERMID=5
*
* 3770 SNA------CONSOLE PRINTER ONLY
        TERMINAL TDESCR=(3,8,5,1),VBUF=3
        TERMINAL TDESCR=(3,8,5,1),VBUF=6
        TERMINAL TDESCR=(3,8,5,1),VPUF=9
        TERMINAL TDESCR=(3,8,5,1),VBUF=20
        TERMINAL TDESCR=(3,8,5,1),VBUF=45
* 3770 SNA------CONSOLE PRINTER + LINE PRINTER
        TERMINAL TDESCR=(3,8,5,3),VBUF=3
        TERMINAL TDESCR=(3,8,5,3),VBUF=6
        TERMINAL TDESCR=(3,8,5,3),VBUF=9
        TERMINAL TDESCR=(3,8,5,3),VBUF=20
        TERMINAL TDESCR=(3,8,5,3),VBUF=45
* 3790 SNA --CONSOLE, RDR, 2 PTRS, 1 WTR (DISK)
        TERMINAL TDESCR=(3,8,5,2),RDRS=1,PTRS=3,PCHS=0,               X
              PLGN=0,COMPRES=YES,BUFXSIZ=256,CNMSGNO=5,VBUF=9,        X
              NODE=(RJE1F,RJE2F,RJE3F,RJE4F),SESSLIM=4,CPACTBL=NO
        RTAM  INTPR=YES,TPBFSIZ=512,MXINTBR=1024,PORTS=3,             X
              SNACOMP=YES,                                            X
              TPBUF=19,TPREAD=6,TPPRINT=8,TPPUNCH=4,                  X
              WAITIME=1,MSGFCTR=10,CPACT=YES
              END
```

OS/VS1 JCL FOR GTF PROCEDURE AND PARAMETERS FOR VTAM TRACE TO TAPE

```
//ADDGTF   JOB MSGLEVEL=1,REGION=100K,CLASS=A
//       · EXEC  PGM=IEBUPDTE,PARM=NEW
//SYSPRINT DD  SYSOUT=A
//SYSUT2 DD    DSNAME=SYS1.PROCLIB,DISP=SHR
//SYSIN  DD    DATA
./ ADD  NAME=GTFTAPE,LIST=ALL
./ NUMBER NEW1=10,INCR=10
//GTFTAPE PROC   A=GTF2
//IEFPROC EXEC PGM=HHLGTF,
//            PARM='MODE=EXT,DEBUG=NO,TIME=YES'
//IEFRDER DD   UNIT=2400-3,VOL=SER=GTFXXX,LABEL=(,NL),
//         DCB=(BLKSIZE=3500,RECFM=U),DISP=SHR
//SYSPRINT DD  SYSOUT=A,SPACE=(TRK,(1,1))
//SYSLIB DD    DSN=SYS1.PARMLIB(&A),DISP=SHR
./ ENDUP
/*
//PARMDEF   JOB MSGLEVEL=1,REGION=100K
//         EXEC  PGM=IEBUPDTE,PARM=NEW
//SYSPRINT DD  SYSOUT=A
//SYSUT2 DD    DSNAME=SYS1.PARMLIB,DISP=SHR
//SYSIN  DD    DATA
./ ADD NAME=GTF2,LIST=ALL
TRACE=RNIO,USR
./ ENDUP
/*
```

NOTE- Information on this service aid may be found in the OS/VS1
Services Aid SRL GC28-0665.

OS/VS1 JCL FOR PRINTING VTAM TRACE RECORDS

```
//ADDPRT    JOB MSGLEVEL=1,REGION=100K,CLASS=A
//         EXEC  PGM=IEBUPDTE,PARM=NEW
//SYSPRINT DD   SYSOUT=A
//SYSUT2 DD     DSNAME=SYS1.PROCLIB,DISP=SHR
//SYSIN   DD    DATA
./ ADD    NAME=GTFTPRT,LIST=ALL
./ NUMBER NEW1=10,INCR=10
//VPRDMP   PROC  A=GTFP2,ASREGN=128K
//*  USE TO DUMP VTAM TRACE FILES
//DMP   EXEC PGM=HMDPRDMP,REGION=&ASREGN
//PRINTER DD SYSOUT=A
//TAPE DD DSN=SYS1.TRACE,UNIT=2400-3,LABEL=(,NL),DISP=SHR,
//            VOL=SER=GTFXXX
//SYSUT1 DD DSN=&&WORK,SPACE=(CYL,(3,1)),UNIT=SYSDA
//SYSPRINT DD  SYSOUT=A,SPACE=(TRK,(1,1))
//SYSIN   DD    DSN=SYS1.PARMLIB(&A),DISP=SHR
./ ENDUP
/*
//PARMUP    JOB MSGLEVEL=1,REGION=100K
//         EXEC  PGM=IEBUPDTE,PARM=NEW
//SYSPRINT DD   SYSOUT=A
//SYSUT2 DD     DSNAME=SYS1.PARMLIB,DISP=SHR
//SYSIN   DD    DATA
./ ADD NAME=GTFP2,LIST=ALL
 EDIT DDNAME=TAPE,RNIO,USR=CL01,USR=CL02,USR=TPIO,USR=LINE
 END
./ ENDUP
/*
```

NOTE- Information on this service aid may be found in the OS/VS1 Services Aid SRL GC28-0665.

5.3 : **OS/SVS** (**OS/VS2** **R1.7**) **SAMPLES**.

REFERENCES

OS/VS2 Sysgen Reference	GC26-3792
OS/VS2 SVS VTAM System Programmer's Guide	GC27-0049
OS/VS2 SVS VTAM Component Release Guide	GC27-0053
OS/VS2 JCL Reference	GT28-0618
OS/VS2 System Programming Library: Service Aids	GT28-0663
OS/VS VTAM Reference Summary	GX27-0034
ACF/VTAM System Programmers Guide	SC38-0258
ACF/VTAM Installation Guide	SC38-0269
ACF/VTAM Reference Summary	SX27-3021

OS/SVS SAMPLES

OS/SVS SYSTEM GENERATION MACRO INSTRUCTIONS

The actual SYSGEN specifications are not included. The VTAM system
definitions for OS/VS2 R1.7 are almost the same as OS/VS1 R6.

XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX

<u>IODEVICE</u> <u>MACRO</u> <u>INSTRUCTIONS</u> <u>REQUIRED</u> <u>FOR</u> <u>VTAM</u> <u>IF</u> <u>USED</u>.

```
     IODEVICE ADDRESS=(010,2),UNIT=3791L      (3790 LOCAL)

     IODEVICE ADDRESS=(020,3),UNIT=3277,MODEL=2,                        X
             FEATURE=(EBKY3277,AUDALRM,MAGCDRD,NUMLOCK,SELPEN,DOCHAR)
     IODEVICE ADDRESS=023,UNIT=3286,MODEL=2,FEATURE=DOCHAR
     IODEVICE ADDRESS=(024,2),UNIT=3284,MODEL=2,FEATURE=DOCHAR

     IODEVICE ADDRESS=05F,UNIT=3705,ADAPTER=CA1
     IODEVICE ADDRESS=0BF,UNIT=3705,ADAPTER=CA2
```


<u>DATAMGT</u> <u>MACRO</u> <u>INSTRUCTION</u> <u>ADDITION</u>.

```
     DATAMGT ACSMETH=(VTAM,TCAM),     REQUIRED FOR VTAM AND/OR TCAM   X
             IND=YES                 INCLUDE INDUSTRY SUB-SYSTEM
```


<u>DATASET</u> <u>MACRO</u> <u>SPECIFIFICATION</u> <u>CHANGES</u>

```
     DATASET VTAMLIB,VOL=(SSVS70,3330),SPACE=(CYL,(5,1,5)
     DATASET INDMAC,VOL=(SSVS70,3330)
```


NOTE- Information for preparing the OS/SVS system for VTAM is found in
OS/VS2 SVS VTAM System Programmer's Guide (GC27-0049), and the OS/VS2
SVS VTAM Component Release Guide (GC27-0053).

ACF/VTAM PARAMETER DEFINITIONS

For ACF/VTAM definitions, please refer to the ACF/VTAM definitions in
the OS/VS1 section.

OS/SVS START PARAMETER DEFINITION EXAMPLE


```
./    ADD    NAME=ATCSTR00,LEVEL=00,SOURCE=0,LIST=ALL
*******************************************************************
*                                                                 *
*    MINIMUM VTAM SYSTEM --- NO NCP                               *
*                                                                 *
*******************************************************************
CONFIG=00,      PREDEFINED LIST OF MAJOR NODES (ATCCON00)         X
SSCPID=01       VTAM IDENTIFICATION
./ ADD   NAME=ATCSTR01,LIST=ALL,SOURCE=0,LEVEL=00
*******************************************************************
*                                                                 *
*    VTAM START PARAMETERS                                        *
*    NOTE:  THE IOBUF (BSZ) PARAMETER MUST EQUAL THE UNITSZ VALUE *
*           IN THE NCP HOST MACRO DEFINITION. THE FORMAT OF THE   *
*           BUFFER POOL START PARAMETERS IS EITHER                *
*           XXBUF=(BNO,BSZ,BTHZ) OR XXBUF=VBSZ AS INDICATED BELOW.*
*                                                                 *
*******************************************************************
CONFIG=01,          PREDEFINED LIST OF MAJOR NODES (ATCCON01)       X
NETSOL=NO,          NETWORK SOLICITOR IS NOT TO BE STARTED          X
MAXSUBA=15,         NUMBER OF MAJOR NODES, VALUE MUST ALSO BE IN NCP X
IOBUF=(71,152,50),  FIXED STORAGE MESSAGE POOL                      X
PPBUF=(76,152,72),  PAGEABLE DATA BUFFER POOL                       X
TRACE,TYPE=SMS,ID=VTAMBUF
./       ENDUP
/*
```

NOTE- Details for coding and filing start parameters are found in
Chapter 5 of the OS/VS2 SVS VTAM System Programmer's Guide (GC27-0049).

ATCSTR00 is required by VTAM even if all defaults are taken. The system
defaults for IOBUF AND PPBUF should not be used. ATCSTR01 will support a
small NCP and can be used for initial system checkout.

OS/SVS VTAM APPLICATION DEFINITION EXAMPLE

```
./        ADD    NAME=APPCON01,LEVEL=00,SOURCE=0,LIST=ALL
./        NUMBER NEW1=10,INCR=10
*************************************************************
*                                                           *
* APPLICATION PROGRAM DEFINITION FOR VTAM                   *
*     WHERE THE OPERANDS AVAILABLE ARE:                     *
*              PRTCT=PASSWORD,       PASSWORD MUST ALSO BE DEFINED IN  *
*                                    APPLICATION PROGRAM 'ACB'.        *
*              BUFFACT=N|1,          MAXIMUN PPBUF QUEUE FOR APPLICATION*
*              AUTH=(ACQ|NOACQ,      ALLOWS APPLICATION PROGRAM TO USE *
*                                    THE OPNDST MACRO WITH THE         *
*                                    ACQUIRE OPTION.                   *
*              BLOCK|NOBLOCK,        NOT USED WITH SDLC OR 3270.       *
*              PASS|NOPASS)          ALLOWS USE OF CLSDST MACRO        *
*                                    WITH THE PASS OPTION.             *
*                                                           *
*************************************************************
SAMP1    APPL   AUTH=(ACQ)
DBDCCICS APPL   AUTH=(ACQ)
BATCH    APPL   AUTH=(ACQ)
INQ3790  APPL   AUTH=(NOACQ)
INQALL   APPL   PRTCT=OKAYOKAY,AUTH=(ACQ)
EMESG    APPL   PRTCT=VTAMMESG,AUTH=(ACQ,BLOCK)
INQ      APPL   AUTH=(ACQ,BLOCK)
TEST1    APPL   AUTH=(ACQ,PPO)
BASIC2   APPL   AUTH=(ACQ,PASS,SPO,BLOCK)
SYSSSS   APPL   AUTH=(ACQ)
./       ENDUP
/*
```

NOTE- Defining and filing application parameters is described in Chapter
3 of the OS/VS2 SVS VTAM Systems Programmer's Guide.

OS/SVS NCP DEFINITION EXAMPLE

```
./        ADD   NAME=NCPSN2,LEVEL=00,SOURCE=0,LIST=ALL
./        NUMBER NEW1=10,INCR=10
*****************************************************************
*                                                               *
*         SCURCE FOR NCP                                        *

See NCP examples in Chapter 7.

*                                                               *
*****************************************************************
./        ENDUP
/*
```

NOTE- Chapter 2 of the SVS VTAM System Programmer's Guide and the NCP/VTAM generation guide are required. The host macro definition must be consistant with the VTAM start parameters.

The source from the NCP generation should be used here after removing the assembler control cards. When testing the NCP the first time, all the PU's should contain the VTAM parameter 'ISTATUS=INACTIVE'. After loading the NCP they should be varied 'active' individually. After a PU and its resources are operational, this member can be updated to change the ISTATUS to 'ACTIVE'.

The following applies to VTAM II, not ACF/VTAM:

When a definition is changed in SYS1.VTAMLST, the member name must be deleted from the SYS1.VTAMOBJ data set, otherwise VTAM will not use the new version. This applies to all members of the SYS1.VTAMLST except the start definition.

OS/SVS CONFIGURATION DEFINITION

```
./       ADD   NAME=ATCCON00,LEVEL=00,SOURCE=0,LIST=ALL
*********************************************************************
*                                                                 *
*   START-UP CONFIGURATION, APPLICATION CONFIGURATION ONLY        *
*                                                                 *
*********************************************************************
APPCON01
./       ADD   NAME=ATCCON01,LEVEL=00,SOURCE=0,LIST=ALL
*********************************************************************
*                                                                 *
*   START-UP CONFIGURATION, LOCAL 3270, AND NCP                   *
*                                                                 *
*********************************************************************
APPCON01,LOCCON01,NCPSN2
./       ENDUP
/*
//
```

NOTE- To allow the operator to activate the NCP, ATCCON00 should be specified. To autoload the NCP, ATCCON01 should be specified.

OS/SVS SAMPLE INSTALLATION JCL FOR USSTAB


```
//USSTAB JOB 'USSTAB ASSEMBLY',CLASS=C
//STEP1 EXEC ASMFCL
//ASM.SYSPUNCH DD  DUMMY
//ASM.SYSIN DD *
```

Add source here:
```
//LKED.SYSLMOD  DD  DSN=SYS1.VTAMLIB(usstab),DISP=SHR
/*
```


NOTE- The System Programmers Guide for the applicable level of VTAM or
ACF/VTAM should be referenced.

OS/SVS SAMPLE JCL FOR INTERPRET TABLE INSTALLATION


```
//LOGASM JOB '              ',MSGLEVEL=1,REGION=200K
//STEP1 EXEC ASMFCL
//ASM.SYSPUNCH DD  DUMMY
//ASM.SYSIN DD *
```

Add source here:

```
//LKED.SYSLMOD  DD  DSN=SYS1.VTAMLIB(table),DISP=SHR
/*
```


NOTE- The interpret table is required in order to allow non-SDLC
terminals to 'logon' to application programs via the Network Solicitor.
Chapter 9 of the OS/SVS VTAM System Programmers Guide describes the
generation of the interpret table.

OS/SVS EXAMPLE OF START PROCEDURE

```
./       ADD LIST=ALL,NAME=NET,LEVEL=01,SOURCE=0
./    NUMBER  NEW1=10,INCR=10
//* ADD REGION SIZE IF TO BE RUN IN A REGION
//NET     EXEC  PGM=ISTINS01
//VTAMLIB  DD    DSN=SYS1.VTAMLIB,DISP=SHR
//VTAMLST  DD    DSN=SYS1.VTAMLST,DISP=SHR
//VTAMOBJ  DD    DSN=SYS1.VTAMOBJ,DISP=SHR
//INITEST  DD    DSN=SYS1.LINKLIB,DISP=SHR
//NCPLOAD  DD    DSN=SYS1.NCPLOAD,DISP=SHR
//NCPDUMP  DD    DSN=NCPDUMP,DISP=MOD
//OLTCDSDD DD    DSN=OLTLIB,DISP=SHR
//SYMSYM   DD    DSN=SYMSYM,DISP=SHR
./       ADD LIST=ALL,NAME=NETSSC,LEVEL=01,SOURCE=0
./    NUMBER  NEW1=10,INCR=10
//NET     EXEC  PGM=ISTINS01
//STEPCAT  DD    DSN=USRVCAT,DISP=SHR
//VTAMLIB  DD    DSN=SYS1.VTAMLIB,DISP=SHR
//VTAMLST  DD    DSN=SYS1.VTAMLST,DISP=SHR
//VTAMOBJ  DD    DSN=SYS1.VTAMOBJ,DISP=SHR
//INITEST  DD    DSN=SYS1.LINKLIB,DISP=SHR
//LRNCKPT  DD    DSN=LRNCKPT,DISP=MOD
//NCP001   DD    DSN=NCP001,DISP=MOD
//LOC001   DD    DSN=LOC001,DISP=MOD
//SWT001   DD    DSN=SWT001,DISP=MOD
//NCPLOAD  DD    DSN=SYS1.NCPLOAD,DISP=SHR
//NCPDUMP  DD    DSN=NCPDUMP,DISP=MOD
./    ENDUP
//
```

NOTE- The DD cards for data sets OLTLIB and CDSLIB should be omitted
unless the Customer Engineer has prepared these data sets. The system
can be installed without these data sets but they must be installed
before TOLTEP can be used.

OS/SVS JCL FOR GTF PROCEDURE AND PARAMETERS FOR VTAM TRACE TO TAPE

```
./ ADD  NAME=GTFTAPE,LIST=ALL
./ NUMBER NEW1=10,INCR=10
//GTFTAPE PROC    A=GTF2
//IEFPROC EXEC PGM=AHLGTF,REGION=64K,
//              PARM='MODE=EXT,DEBUG=NO,TIME=YES'
//IEFRDER DD    UNIT=2400-3,VOL=SER=GTFXXX,LABEL=(,NL),
//         DCB=(BLKSIZE=3500,RECFM=U),DISP=SHR
//SYSPRINT DD  SYSOUT=A,SPACE=(TRK,(1,1))
//SYSLIB DD    DSN=SYS1.PARMLIB(&A),DISP=SHR
./ ENDUP
/*
//PARMDEF   JOB MSGLEVEL=1,REGION=100K
//        EXEC  PGM=IEBUPDTE,PARM=NEW
//SYSPRINT DD  SYSOUT=A
//SYSUT2 DD    DSNAME=SYS1.PARMLIB,DISP=SHR
//SYSIN  DD    DATA
./ ADD NAME=GTF2,LIST=ALL
TRACE=RNIO,USR
./ ENDUP
/*
```

NOTE- Information on this service aid may be found in the OS/VS Services
Aid SRL GC28-0633.

OS/SVS SAMPLES

OS/SVS JCL FOR PRINTING VTAM TRACE RECORDS


```
./ ADD    NAME=GTFTPRT,LIST=ALL
./ NUMBER NEW1=10,INCR=10
//VPRDMP   PROC  A=GTFP2,ASREGN=128K
//*  USE TO DUMP VTAM TRACE FILES
//DMP   EXEC PGM=AMDPRDMP,REGION=&ASREGN
//PRINTER DD SYSOUT=A
//TAPE DD DSN=SYS1.TRACE,UNIT=2400-3,LABEL=(,NL),DISP=SHR,
//          VOL=SER=GTFXXX
//SYSUT1 DD DSN=&&WORK,SPACE=(CYL,(3,1)),UNIT=SYSDA
//SYSPRINT DD  SYSOUT=A,SPACE=(TRK,(1,1))
//SYSIN  DD    DSN=SYS1.PARMLIB(&A),DISP=SHR
./ ENDUP
/*
//PARMUP   JOB MSGLEVEL=1,REGION=100K
//         EXEC  PGM=IEBUPDTE,PARM=NEW
//SYSPRINT DD   SYSOUT=A
//SYSUT2 DD     DSNAME=SYS1.PARMLIB,DISP=SHR
//SYSIN  DD     DATA
./ ADD NAME=GTFP2,LIST=ALL
  EDIT DDNAME=TAPE,RNIO,USR=CL01,USR=CL02,USR=TPIO,USR=LINE
  END
./ ENDUP
/*
```


NOTE- Information on this service aid may be found in the OS/VS Services
Aid SRL GC28-0633.

5.4 : OS/MVS SAMPLES.

REFERENCES

OS/VS2 Sysgen Reference	GC26-3792
OS/VS2 MVS Utilities	GC26-3902
OS/VS2 System Programming Library: Service Aids	GC28-0674
OS/VS2 System Programming Library: Initialization and Tuning Guide	GC28-0681
OS/VS2 VTAM System Programming Library:VTAM	GC28-0688
OS/VS2 JCL	GC28-0692
Operator's Library: OS/VS2 Reference(JES2)	GC38-0210
OS/VS VTAM Reference Summary	GX27-0034
ACF/VTAM System Programmers Guide	SC38-0258
ACF/VTAM Installation Guide	SC38-0269

OS/MVS SYSTEM GENERATION MACRO INSTRUCTIONS

The actual SYSGEN specifications are not included. VTAM must be included as part of the sysgen.

```
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
X THIS IS A PORTION OF THE STAGE 1 SYSGEN LISTING FOR THE VS/2-R3.7   X
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
X          MULTIPLEXER CHANNEL IO DEVICES (PARTIAL)                  X
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
          IODEVICE UNIT=3215,               3158 KB CONSOLE   X
             ADDRESS=009
I3705     IODEVICE UNIT=3705,                                 X
             ADAPTER=CA1,                                     X
             ADDRESS=019
          IODEVICE UNIT=3215,                                 X
             ADDRESS=01F
```

```
*    CHANNEL 1 IO DEVICES                                          *
*****************************************************************
PRT3800   IODEVICE UNIT=3800,ADDRESS=(110),FEATURE=CGS2   158,168(610)
          IODEVICE UNIT=2305,                                      X
               MODEL=2,                                            X
               ADDRESS=1D0
*    CHANNEL 2 IO DEVICES                                          *
*****************************************************************
DSK220    IODEVICE UNIT=3330,MODEL=11,ADDRESS=(220,4),OPTCHAN=9,   *
               FEATURE=ALTCTRL
*    CHANNEL 3 IO DEVICES                                          *
*****************************************************************
DSK348    IODEVICE  UNIT=3330,MODEL=1,                             X
               OPTCHAN=8,FEATURE=ALTCTRL,                          X
               ADDRESS=(348,8)
*    CHANNEL 4 IO DEVICES                                          *
*****************************************************************
I37052    IODEVICE UNIT=3705,ADAPTER=CA1,  3705-I, CA4,            X
               ADDRESS=418
E37052    IODEVICE UNIT=3705,ADAPTER=CA1,  3705-E, CA4,            X
               ADDRESS=41A                         FUTURE
C37052    IODEVICE UNIT=3705,ADAPTER=CA2,  3705-C, CA2,            X
               ADDRESS=41C                         FUTURE
J3705     IODEVICE UNIT=3705,ADAPTER=CA1,  3705-J, CA4,            X
               ADDRESS=498
          IODEVICE UNIT=3277,MODEL=2,                              X
               ADDRESS=(4A0,32),                                   X
               FEATURE=(DOCHAR,                                    X
               SELPEN,EBKY3277,KB78KEY,NUMLOCK,AUDALRM)
          IODEVICE UNIT=3277,MODEL=2,                              X
               ADDRESS=(4C0,32),                                   X
               FEATURE=(DOCHAR,                                    X
               SELPEN,EBKY3277,KB78KEY,NUMLOCK,AUDALRM)
          IODEVICE UNIT=3791L,ADDRESS=4E0                 3274
*    CHANNEL 5 IO DEVICES                                          *
*****************************************************************
DSK530    IODEVICE  UNIT=2314,                                     X
               ADDRESS=(530,8)
T5808     IODEVICE UNIT=3420,MODEL=8,ADDRESS=(580,6),              *
               FEATURE=(OPT1600,SHARABLE),OFFLINE=YES
********   SYSTEM CONSOLES
*****************************************************************
CONM      CONSOLE MCONS=01F,ALTCONS=01A,      MASTER CONSOLE UNDER VM X
               ROUTCDE=ALL,       NO DEFAULT                      X
               OLDWTOR=1,         OLDWTOR=ALL                     X
               IOC=YES            DEFAULT=NO
CON1      CONSOLE SECONS=01A,ALTCONS=009,       3158 CONSOLE       X
               AREA=10,                                           X
```

```
                 PFK=12              NO DEFAULT
CON4      CONSOLE SECONS=4A0,VALDCMD=(1,2,3),  158 SEC CONS 3270      X
                 ROUTCDE=ALL,                                        X
                 AREA=10,ALTCONS=4A1,PFK=12
****** 'MVS/REL3 - CONTROL PROGRAM SPECIFICATION'
CTRL      CTRLPROG  OPTIONS=(DEVSTAT,RDE,RER,BLDL,CRH),SQA=9,REAL=256,  H
                 TZ=(W,8),ASCII=INCLUDE,STORAGE=16777216,            X
                 CSA=3000,VRREGN=512,PAGNUM=(9,9),                   X
                 ACRCODE=YES,APFLIB=(SYS1.VTAMLIB,MVSRES,SYS1.VTAMOBJ,  +
                 MVSRES)
SCHEDULR SCHEDULR  BCLMT=100,PRISUB=JES2,                            X
                 SUBSYS=(JES3,ECSS,ECST,JESO,JESP,JESQ,JESR,JES,JEST,  X
                 JES4,JES5,JES6,JES7,JES8,JES9),                     +
                 HARDCPY=(SYSLOG,ALL,CMDS),                          X
                 DEVPREF=(3330-1,3330,2305-2,2305-1,3350,3340,2314,2400)
*    JES3 GENNED IN FOR SECONDARY SUBSYSTEM SUPPORT
          JES      CNS=((009,3215)),LOCLJES=NO
CHKPT     CKPTREST ELIGBLE=(20,100,101,102,103,110,120,140,160,4092)
          EJECT
DATAMAN   DATAMGT  ACSMETH=(BTAM,TCAM,ISAM,GAM,VTAM),                X
                 GRAPHCS=(PORRTNS,GSP),                              X
                 TABLE=ALL,UCSDFLT=ALL,IND=YES
TSO       TSO      LOGTIME=20000
EDIT      EDIT     DSTYPE=SYSTEST,BLOCK=800,FORMAT=FIXED,FIXED=(80-80),X
                 CONVERT=CAPSONLY
***** DATASET SPECIFICATIONS                        **************
SPACE     DATASET  BRODCAST,SPACE=(CYL,(1))
          DATASET  CMDLIB,SPACE=(CYL,(3,1,112))
          DATASET  TELCMLIB,SPACE=(CYL,(2,1,84))
          DATASET  VTAMLIB,SPACE=(CYL,(2,1,56))
          AFFINITY AFF-AFFPGM00-0,AFF-AFFPGM01-0,AFF-AFFPGM02-0,     X
                 AFF-AFFPGM03-0,                                     X
                 AFF-AFFPGM04-0,                                     X
                 AFF-AFFPGM05-0,                                     X
                 AFF-AFFPGM06-1,                                     X
                 AFF-AFFPGM07-1,                                     X
                 AFF-AFFPGM08-1,                                     X
                 AFF-AFFPGM09-1,                                     X
                 AFF-AFFPGM10-1
```

NOTE- Information for preparing the OS/MVS system for VTAM is found in OS/MVS System Programming Library: VTAM (GC28-0688), and the OS/MVS System Generation Reference (GC26-3792)

OS/MVS SYSTEM PARAMETER DEFINITIONS

```
./    ADD    NAME=IEASYS00,LEVEL=00,SOURCE=0,LIST=ALL
APF=PS,                     AUTHORIZATION LIST
APG=07,                     AUTOMATIC PRIORITY GROUP IS 7        DEFAULT
BLDLF=00,                   FIX IEABLD00 TABLE
CMD=00,                     SET TOD PROMPT,SDUMP,TRACE ON        DEFAULT
CSA=3644,                   CONSIDER SETTING TO LIMIT USER REG TO 8 MEG
DUMP=DASD,                  PLACE SVC DUMPS ON DASD DEVICES     DEFAULT
FIX=00,                     FIX MODULES SPECIFIED IN BASE AND TSO LIST
HARDCPY=(SYSLOG,            HARDCOPY LOG IS SYSTEM LOG(SYSLOG)
        ALL,               RECORD ALL WTO/WTOR WITH ROUTE CODES
        CMDS),             RECORD ALL COMMANDS AND RESPONSES
IPS=00,                     SELECT IEAIPS00 INSTALL PERF SPECS FOR SRM
LNK=PS,                     SPECIFY LNKLST00 AS LINK LIST
LOGCLS=A,                   WILL NOT BE PRINTED BY DEFAULT
LOGLMT=999999,              MUST BE 6 DIGITS, MAX WTL MESSAGES QUEUED
MAXUSER=36,                 (SYS TASKS + INITS + TSOUSERS) < 36
PAGNUM=(3,2),               ALLOW ADDITION OF 3 PAGE D/S & 2 SWAP D/S
OPI=YES,                    ALLOW OPERATOR OVERRIDE TO IEASYS00
OPT=00,                     SPECIFY IEAOPT00 (SRM TUNING PARMETERS)
PAGE=(PAGE.IPOJ2101,        PLPA PAGE DATA SET
      PAGE.IPOJ2102,        COMMON PAGE DATA SET
      PAGE.IPOJ2103,L),     USER(LOCAL) PAGE DATA SET
REAL=128,                   ALLOWS 2 64K JOBS OR 1 128K JOB TO RUN V=R
RSU=0,                      NO RECONFIG STORAGE UNITS            DEFAULT
SMF=00,                     SELECT SMFPRM00, SMF PARMETERS       DEFAULT
SQA=5,                      SIZE=(3+3)*64K=384K VIRTUAL STORAGE
VAL=PS,                     SELECT VATLST00                      DEFAULT
VRREGN=128,                 DEFAULT REAL-STORAGE REGION SIZE    DEFAULT
WTOBFRS=250,CVIO,                 SET NUMBER OF WTO BUFFERS
WTORPLY=10                  SET NUMBER OF WTOR BUFFERS
/* THIS COMPLETES THE SYSP LIST
/*
/* NOTE 1: NOTE THAT SCAN OF THE SYSP PARAMETERS ENDS
/*         AT FIRST PARAMETER WITHOUT A COMMA.
/*         WHEN MODIFYING ANY PARAMETER EXCEPT THE LAST SPECIFIED,
/*         INCLUDE THE COMMA.
/*
/* NOTE 2: PAGE PARAMETER SPECIFIED AT IPL TIME MERGES WITH IEASYSXX
/*         SEE INIT AND TUNING GUIDE GC28-0755-0 -
/*              IEASYS00 SOURCE OF PAGE PARAMETER
/*
/* NOTE 3: THE FOLLOWING PARAMETERS HAVE BEEN OMITTED BY CHOICE
CLPA                        RE-CREATION OF PLPA IS OPERATOR CHOICE
CVIO                        DO NOT DELETE VIO D/S - CLPA IMPLIES CVIO
DUPLEX=                     NO DUPLEX D/S - OPTIONAL WITH SU 7
```

```
MLPA=                              NO MLPA PARAMETERS
NUCMAP
PURGE                              DO NOT DEMOUNT MSS VOLUMES
SWAP=                              NO SWAP DATASET SPECIFIED
SYSP=00                            SPECIFIED BY OPERATOR AT IPL FOR THIS SYSP
                                   NOT A VALID PARMETER FOR IEASYSXX
/*                                 THIS IS THE END OF IEASYS00


./    ADD    NAME=IEAFIX00,LEVEL=00,SOURCE=0,LIST=ALL
SYS1.LPALIB    IEAVAR00,       /* 6816 RCT INIT/TERM     */
               IEWFBOSV,       /* 6384 PROGRAM FETCH     */
               IEWMSEPT,       /*   FETCH ALIAS SEE ABOVE */
               IGC0001F,       /* 5072 PURGE(SVC16)      */
               IGC0001G,       /*  368 RESTORE(SVC17     */
               IGC0003C,       /* 2656 IO HALT           */
               IGC0004F,       /* 3000 TTIMER            */
               IGC0004G,       /* 3000 STIMER            */
               ISTAPC61,       /* ACF/VTAM               */
               ISTAPC62,       /* ACF/VTAM               */
               ISTAPC63,       /* ACF/VTAM               */
               ISTAPC64,       /* ACF/VTAM               */
               ISTAPC66,       /* ACF/VTAM               */
               ISTAPC67,       /* ACF/VTAM               */
               ISTAPC83,       /* ACF/VTAM               */
               ISTAPC64,       /* ACF/VTAM               */
               ISTRACCA,       /* ACF/VTAM               */
               ISTRACIO,       /* ACF/VTAM               */
               ISTRACTB,       /* ACF/VTAM               */
               ISTRAMTR,       /* ACF/VTAM               */
               ICHRRCDE,       /* RACF REL. 3            */
               ICHRFC00,       /* RACF REL. 3            */
               ICHRGL00,       /* RACF REL. 3            */
               ICHRGL01,       /* RACF REL. 3            */
               ICHRGL03        /* RACF REL. 3            */


./    ADD    NAME=IEAAPFPS,LEVEL=00,SOURCE=0,LIST=ALL
 IMS.RESLIB USRLB2,
 IMS.PGMLIB USRLB2,
 SYS1.VTAMLIB IPOR21,
 SYS1.NCPLIB USRLB2,
 SYS1.LINKLIB2 USRLB1,
 SYS2.LINKLIB USRLB1,
 SYS1.OLTLIB USRLB1,
 SYS1.CDSLIB USRLB1,
 LAST.ENTRY DUMMY
```

```
./    ADD    NAME=LNKLSTPS,LEVEL=00,SOURCE=0,LIST=ALL
     SYS1.LINKLIB,SYS1.TSOLIB,    TSO PROGRAM PRODUCTS           XXXXXXXXX
                 SYS1.CMDLIB,     TSO COMMAND LIB            XXXXXXXXXXXXXX
                 SYS1.LINKLIB2,   USER    UTILITIES            XXXXXXXXXXX
                 IMS.RESLIB,      IMS LIBRARY           XXXXXXXXXXXXXXXXXX
                 SYS1.TCAMLIB,    TCAM PROGRAMS          XXXXXXXXXXXXXXXX
                 NCP6.SSPLIB,     NCP6 UTILITIES         XXXXXXXXXXXXXXXX
                 SYS2.LINKLIB,    USER LINK LIB          XXXXXXXXXXXXXXXX
                 SYS1.PPLINK,     P. P. LOAD LIB          XXXXXXXXXXXXXXX
                 SYS1.COBLIB,     COBOL LIBRARY          XXXXXXXXXXXXXXXX
                 SSS4.LINKLIB,    PVS AND SSS PROGRAMS          XXXXXXXXX
                 IP021.LINKLIB    IPO PROGRAMS           XXXXXXXXXXXXXXXX


./    ADD    NAME=VATLSTPS
     USRLB1,1,0,3330-1   ,N       LIBRARY PACK
     USRLB2,1,0,3330-1   ,N       LIBRARY PACK
     DLIB21,1,2,3330     ,N       MVS DLIB FOR IP021
     IPOR21,1,2,3330     ,N       IPO REL. 2.1 SYSRES
     IPOJ21,1,2,3330     ,N       IPO REL. 2.1 CATALOG SPOOL PAGING
     NCPLIB,1,0,3340     ,N       NCP6 LIBRARY


./    ADD    NAME=TSOKEYPS
     USERMAX=30,                                                         X
     RECONLIM=10,                                                        X
     BUFRSIZE=512,                                                       X
     SCRSIZE=1920    USED FOR 3277'S ONLY
```

NOTE- Information for preparing the OS/MVS system parameters is found in
OS/MVS Sysgen Reference (GC26-3792)

OS/MVS JES2   PARAMETER DEFINITIONS(VTAM OR ACF/VTAM)


```
./   ADD    NAME=SNAPARM
*------------------------------------------------------------------*
*                             JES2PARM                             *
*------------------------------------------------------------------*
*  SU 25 JES 4.1                                                   *
********************************************************************
********************************************************************
*                                                                  *
*  RJE RELATED PARAMETERS                                          *
*                                                                  *
LOGON1 APPLID=JES2       APPL ID TO VTAM                           *
&NUMLNES=9               MAX NUMBER OF RJE LINES INCLUDING SNA LINES *
&NUMRJE=110              MAX NUMBER OF RJE DEFINITIONS ALLOWED      *
&NUMTPBF=20              NUMBER OF TP BUFFERS GENERATED FOR RJES    *
&TPBFSIZ=800             TP BUFFER SIZE                             *
&MAXSESS=25              MAX NUMBER OF VTAM SESSIONS=LINES AT 5 LU EAC*
&WAITIME=15              15 SECONDS FOR RMT CMD(FROM 1 DEFAULT)     *
COMPACT=40,15,A,C,D,E,H,I,L,N,O,R,S,T,U,40,0,            HRS15*   C
        B,F,G,J,K,M,P,Q,V,W,X,Y,Z,1,2,3                  HRS16*
COMPACT=41,16,0,1,2,3,4,5,6,7,8,9,A,B,C,D,E,F            HRS16*
&NUMTPBF=8               NUMBER OF BUFFERS GENERATED FOR RJE        *
&TPIDCT=66               NUMBER OF LINES ON HEADER PAGE REMOTE PRINTR*
LINE1  UNIT=SNA                                                    *
LINE2  UNIT=SNA                                                    *
LINE3  UNIT=SNA                                                    *
LINE4  UNIT=SNA                                                    *
LINE5  UNIT=SNA                                                    *
LINE6  UNIT=SNA                                                    *
********* RMT1 IS A 3777
RMT1  LUTYPE1,BUFSIZE=512,COMP,CMPCT,NUMPR=1,                      *
      NUMRD=1,SETUPMSG                                             *
R1.PR1 PRWIDTH=132,FCBLOAD                                         *
R1.RD1 PUDEST=1,PULCL                                              *
********* RMT2 IS A 3777
RMT2  LUTYPE1,BUFSIZE=512,COMP,CMPCT,NUMPR=1,LUNAME=LU3777R,       *
      NUMRD=1,SETUPMSG                                             *
R2.PR1 PRWIDTH=132,FCBLOAD                                         *
R2.RD1 PUDEST=1,PULCL                                              *
********* RMT90 is a 3790
RMT90 LUTYPE1,BUFSIZE=256,COMP,CMPCT,CONSOLE,NUMPR=3,                C
      SETUPHDR
R90.PR1 DRAIN,PRWIDTH=120
R90.PR2 DRAIN,CLASS=X
R90.PR3 PRWIDTH=132
*++++++ RMT95 = ID ASSIGNED TO 3776
```

```
RMT95 LUTYPE1,BUFSIZE=256,COMP,NUMPR=1,                                    C
       SETUPMSG
R95.PR1 PRWIDTH=132,FCBLOAD
*
*
*  - RMT LINE DEFAULTS - CODEA,LOWSPEED,IFACEA,ADISCON,EBCDIC,HDUPLEX
*
*  - RMT NUM DEFAULTS - BLOCKED,NOMRF,NOTRANSP,HARDWARE,NOTABS,NUMPR=1,
*                       NUMRD=1,NUMPU=0,VARIABLE,NOBUFEX,NOABUFEX,
*                       NOCOMP,NOCON,DISCINTV=0,PASSWORD=,LINE=
*
*  - RMT PRT DEFAULTS - OPERATOR,CLASS=AJ,START,NOFCBLOD,SEP,SUSPEND,
*                       PRWIDTH=120,FORMS=STD.,UCS=,FCB=
*
*  - RMT PUN DEFAULTS - OPERATOR,CLASS=BK,START,SEP,SUSPEND,FORMS=STD.
*
*  - RMT RDR DEFAULTS - CLASS=A,MSGCLASS=A,START,NOHOLD,PRDEST=,
*                       PRIOLIM=15,PRIOINC=,PUDEST=
*
```

OS/VS START PARAMETER DEFINITION (VTAM AND ACF/VTAM)

```
./   ADD   NAME=ATCSTR00,LEVEL=00,SOURCE=0,LIST=ALL
************************************************************************
*                                                                     *
*    MINIMUM STARTUP - SHOULD BE USED FOR OS/VS VTAM AND ACF/VTAM      *
*                                                                     *
************************************************************************
TRACE,TYPE=SMS,ID=VTAMBUF,                                              X
MAXSUBA=31,                                                            X
SSCPID=01,                                                            X
NETSOL=NO
```

OS/MVS VTAM START PARAMETER DEFINITION (TEST)

```
./    ADD    NAME=ATCSTRPS,LEVEL=00,SOURCE=0,LIST=ALL
*****************************************************************
*                                                               *
*    ATCSTR00 IS REQUIRED                                        *
*                                                               *
*    VTAM START PARAMETERS --- DEFAULT VALUES                    *
*    NOTE:  THE IOBUF (BSZ) PARAMETER MUST EQUAL THE UNITSZ VALUE *
*           IN THE NCP HOST MACRO DEFINITION. THE FORMAT OF THE   *
*           BUFFER POOL START PARAMETERS IS EITHER                *
*           XXBUF=(BNO,BSZ,BTHZ) AS INDICATED BELOW.              *
*                                                               *
*****************************************************************
MAXSUBA=31,                                                      X
NOPROMPT,                                                        X
CONFIG=PS,                                                       X
SSCPID=01,                                                       X
NETSOL=NO,                                                       X
SFBUF=(271,,271),                                                X
LFBUF=(40,,32),                                                  X
LPBUF=(52,,32),                                                  X
NPBUF=(153,,145),                                                X
CRPLBUF=(171,,162),                                              X
IOBUF=(102,156,80),                                              X
APBUF=(154,,146),                                                X
SPBUF=(15,,15),                                                  X
UECBUF=(269,,256),                                               X
WPBUF=(132,,132),                                                X
PPBUF=(135,156,128)
./        ENDUP
/*
//
```

NOTE- Details for coding and filing start parameters are found in the
OS/MVS System Programming Library: VTAM (GC28-0688).

OS/MVS ACF/VTAM START PARAMETER DEFINITION (TEST)

```
./   ADD   NAME=ATCSTRAC,LEVEL=00,SOURCE=0,LIST=ALL
*************************************************************
*   ATCSTR00 IS REQUIRED OR THIS DEFINITION CAN REPLACE IT.   *
*   NOTE:  THE IOBUF (BUFSIZE) PARAMETER MUST EQUAL THE UNITSZ VALUE *
*          IN THE NCP HOST MACRO DEFINITION. THE FORMAT OF THE   *
*          BUFFER POOL START PARAMETERS IS EITHER             *
*          XXBUF=(BASENO,BUFSIZE,SLOWPT,XPANNO,XPANPT)        *
*          OR XXBUF=VBSZ AS INDICATED BELOW.                  *
*          XPANNO OF 1 WILL CAUSE ACF/VTAM TO ACQUIRE 1 PAGE OF *
*          BUFFERS SINCE THEY ARE ALWAYS ACQUIRED IN PAGE     *
*          INCREMENTS.                                        *
*************************************************************
TRACE,TYPE=SMS,ID=VTAMBUF,                                     X
TNSTAT,CNSL,TIME=10,                                           X
MAXSUBA=31,NOPROMPT,CONFIG=AC,SSCPID=01,                       X
HOSTSA=13,                                                     X
MAXAPPL=50,                                                    X
VTAMEAS=150,                                                   X
NETSOL=NO,                                                     X
SFBUF=(60,,2,,01,3),    *** XPANNO OF 1 WILL CAUSE ACF/VTAM TO ACQUIRE X
LFBUF=(37,,2,,01,3),        1 PAGE OF BUFFERS SINCE THEY ARE ALWAYS   X
LPBUF=(32,,1,,01,2),        ACQUIRED IN PAGE INCREMENTS ***           X
NFBUF=(23,,2,,01,3),                                          X
CRPLBUF=(40,,2,,01,3),                                        X
IOBUF=(60,152,4,,01,26),
 NOTE - The difference between SLOWPT and XPANPT must be greater than
        the largest MAXBFRU defined in any NCP or Local definition.
APBUF=(66,,2,,01,3),                                          X
SPBUF=(66,,2,,01,3,                                           X

NOTE: For Networks with greater than 100 BSC 3277's,
      expansion of SPBUF is not recommended. BASENO must be larger
      that the number of BASIC sessions if no expansion.
or SPBUF=(100,,10),                                           X
UECBUF=(39,,2,,01,3),                                         X
WPBUF=(27,,2,,01,3),                                          X
PPBUF=(29,152,2,,01,3)
./        ENDUP
```

NOTE- Details for coding and filing start parameters are found in the
ACF/VTAM System Programmers Guide: VTAM (SC38-0258).

OS/MVS VTAM APPLICATION DEFINITION EXAMPLE

```
./        ADD    NAME=APPCON01,LEVEL=00,SOURCE=0,LIST=ALL
./        NUMBER NEW1=10,INCR=10
*******************************************************************
*                                                                 *
* APPLICATION PROGRAM DEFINITION FOR VTAM                         *
*    WHERE THE OPERANDS AVAILABLE ARE:                            *
*              PRTCT=PASSWORD,        PASSWORD MUST ALSO BE DEFINED IN  *
*                                     APPLICATION PROGRAM 'ACB'.  *
*              BUFFACT=N|1,           APPLIES ONLY TO BASIC NEWE. *
*              AUTH=(ACQ|NOACQ,       ALLOWS APPLICATION PROGRAM TO USE *
*                                     THE OPNDST MACRO WITH THE   *
*                                     ACQUIRE OPTION.             *
*              BLOCK|NOBLOCK,         NOT USED WITH SDLC OR 3270. *
*              PASS|NOPASS,           ALLOWS USE OF CLSDST MACRO  *
*                                     WITH THE PASS OPTION.       *
*              TCAM)                  ALLOWS PATH TO TCAM         *
*                                                                 *
*******************************************************************
SAMP1    APPL   AUTH=(ACQ)
DBDCCICS APPL   AUTH=(ACQ)
BATCH    APPL   AUTH=(ACQ)
INQ3790  APPL   AUTH=(NOACQ)
INQALL   APPL   PRTCT=OKAYOKAY,AUTH=(ACQ)
HOSTPGM1 APPL   AUTH=(NOACQ)
INQ      APPL   AUTH=(ACQ,BLOCK)
TEST1    APPL   AUTH=(ACQ,PPO)
BASIC2   APPL   AUTH=(ACQ,PASS,SPO,BLOCK)
IEDQTCAM APPL   AUTH=(ACQ,TCAM,BLOCK),PRTCT=PASSWORD
TCAM     APPL   AUTH=(ACQ,TCAM,BLOCK),PRTCT=PASSITON
SYSSSS   APPL   AUTH=(ACQ)
./        ENDUP
/*
```

NOTE- Defining and filing application parameters is described in Defining VTAM Application Programs of the OS/MVS Systems Programming Library: VTAM(GC28-0688).

OS/MVS ACF/VTAM APPLICATION DEFINITION EXAMPLE


```
./        ADD   NAME=APPCONAC
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
X                                                                X
X APPLICATION PROGRAM DEFINITION FOR VTAM                        X
X    WHERE THE OPERANDS AVAILABLE ARE:                           X
X              PRTCT=PASSWORD,     PASSWORD MUST ALSO BE DEFINED IN X
X                                  APPLICATION PROGRAM 'ACB'.     X
X              BUFFACT=N|1,        APPLIES ONLY TO BASIC SESSIONS. X
X              AUTH=(ACQ|NOACQ,    ALLOWS APPLICATION PROGRAM TO USE X
X                                  THE OPNDST MACRO WITH THE      X
X                                  ACQUIRE OPTION.                X
X              BLOCK|NOBLOCK,      NOT USED WITH SDLC OR 3270.    X
X              PASS|NOPASS,        ALLOWS USE OF CLSDST MACRO     X
X                                  WITH THE PASS OPTION.          X
X              TCAM)               ALLOWS PATH TO TCAM            X
X                                                                X
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
IMS       APPL AUTH=ACQ
VAPPL     APPL AUTH=(ACQ,PPO)
SYSSSS    APPL AUTH=ACQ
BTS3770   APPL AUTH=ACQ
DSPRINT   APPL AUTH=ACQ
IKJACCNT  APPL AUTH=ACQ
JES2      APPL AUTH=ACQ
VTAMWHO   APPL
./        ADD   NAME=TSOAPAC,LEVEL=00,SOURCE=0,LIST=ALL
./        NUMBER NEW1=10,INCR=10
TSO       APPL  AUTH=(NOBLOCK,PASS,NOPO,TSO,NVPACE),EAS=10
TSO0001   APPL  AUTH=(NOBLOCK,PASS,NOPO,TSO,NVPACE),EAS=1
TSO0002   APPL  AUTH=(NOBLOCK,PASS,NOPO,TSO,NVPACE),EAS=1
TSO0003   APPL  AUTH=(NOBLOCK,PASS,NOPO,TSO,NVPACE),EAS=1
TSO0004   APPL  AUTH=(NOBLOCK,PASS,NOPO,TSO,NVPACE),EAS=1
TSO0005   APPL  AUTH=(NOBLOCK,PASS,NOPO,TSO,NVPACE),EAS=1
TSO0006   APPL  AUTH=(NOBLOCK,PASS,NOPO,TSO,NVPACE),EAS=1
TSO0007   APPL  AUTH=(NOBLOCK,PASS,NOPO,TSO,NVPACE),EAS=1
TSO0008   APPL  AUTH=(NOBLOCK,PASS,NOPO,TSO,NVPACE),EAS=1
TSO0009   APPL  AUTH=(NOBLOCK,PASS,NOPO,TSO,NVPACE),EAS=1
TSO0010   APPL  AUTH=(NOBLOCK,PASS,NOPO,TSO,NVPACE),EAS=1
./        ENDUP
/X
```


NOTE- Defining and filing application parameters is described in
Defining VTAM Application Programs of the ACF/VTAM Systems Programmers
Guide: (SC38-0258).

OS/MVS NCP DEFINITION EXAMPLE


```
./      ADD    NAME=NCPRAL,LEVEL=00,SOURCE=0,LIST=ALL
./      NUMBER NEW1=10,INCR=10
*****************************************************************
*                                                               *
*      SOURCE FOR NCP4.1 OS/MVS VTAM                            *
*                                                               *
*****************************************************************
./      ENDUP
/*
```


NOTE- The OS/MVS System Programming Library: VTAM and the NCP/VTAM generation guide are required. The HOST macro definition must be consistent with the VTAM start parameters.

The source from the NCP generation should be used here after removing the assembler control cards. When testing the NCP the first time, all the PU's should contain the VTAM parameter 'ISTATUS=INACTIVE'. After loading the NCP they should be varied 'active' individually. After a PU and it's resources are operational, the member can be updated to change the ISTATUS to 'ACTIVE'.

OS/MVS VTAM CONFIGURATION DEFINITION

```
./       ADD   NAME=ATCCON00,LEVEL=00,SOURCE=0,LIST=ALL
************************************************************
*                                                         *
*   START-UP CONFIGURATION, NO NCP                        *
*                                                         *
************************************************************
APPCON01,LOCCON01
./       ADD   LIST=ALL,SSI=20001103,NAME=ATCCONPS
APPCON01,LOCCON01,NCPRAL
./       ENDUP
/*
//
```

NOTE- If 00 is activated, it will be necessary to vary the NCP 'active'
via the operator. To autoload the NCP, LIST=RA should be specified at
VTAM start time.

OS/MVS ACF/VTAM CONFIGURATION DEFINITION

```
./       ADD   NAME=ATCCON00,LEVEL=00,SOURCE=0,LIST=ALL
************************************************************
*                                                         *
*   START-UP CONFIGURATION, NO NCP                        *
*                                                         *
************************************************************
LOC3272,TSOAPAC
./       ADD   NAME=ATCCONAC
LOC3272,SWITCHAC,NCPACF,APPCONAC,TSOAPAC
./       ENDUP
/*
//
```

OS/MVS EXAMPLE OF LOGON TABLE GENERATION

```
//LOGASM JOB 'LOGTAB ASSEMBLY',MSGLEVEL=1,REGION=200K
//STEP1 EXEC ASMFCL
//ASM.SYSPUNCH DD  DUMMY
//ASM.SYSIN DD *
 Source deck
//LKED.SYSLMOD  DD  DSN=SYS1.LPALIB(Table Name),DISP=SHR
```

NOTE- The interpret table is required in order to allow non-SDLC terminals to 'logon' to application programs via the Network Solicitor. Terminal-Initiated Logons in OS/MVS System Programmers Library: VTAM describes the generation of the interpret table.

OS/MVS MODETAB ASSEMBLY

```
//MODETAB JOB 'MODETAB ASSEMBLY',MSGLEVEL=1,CLASS=C
//STEP1 EXEC ASMFCL
//ASM.SYSPUNCH DD  DUMMY
//ASM.SYSIN DD *
Source Deck
//LKED.SYSLMOD  DD  DSN=SYS1.LPALIB(Modetab Name),DISP=SHR
/*
/*
```

NOTE- This modetab is a subset of the IBM supplied Logon Mode Table. Adding it this way simplifies operator logon from the 3270 SDLC unit. Terminal-Initiated Logons in OS/MVS System Programmers Library: VTAM Chapter 4 describes Logon Mode Tables. If the terminal is to be acquired by an application, this modetab is required.

OS/MVS EXAMPLE OF START PROCEDURE

START PROCEDURE FOR VTAM2

```
./       ADD LIST=ALL,NAME=NET,LEVEL=01,SOURCE=0
./    NUMBER  NEW1=10,INCR=10
//NET     EXEC  PGM=ISTINM01,REGION=500K
//VTAMLIB  DD    DSN=SYS1.VTAMLIB,DISP=SHR
//VTAMLST  DD    DSN=SYS1.VTAMLST,DISP=NEW
//VTAMOBJ  DD    DSN=SYS1.VTAMOBJ,DISP=SHR
//INITEST  DD    DSN=SYS1.LINKLIB,DISP=SHR
//OLTCDSDD DD    DSN=OLTLIB,DISP=SHR
//SYSMSYM  DD    DSN=CDSLIB,DISP=SHR
//NCPLOAD  DD    DSN=SYS1.NCPLOAD,DISP=SHR
//NCPDUMP  DD    DSN=NCPDUMP,DISP=NEW
//SYSABEND DD    SYSOUT=A
./ ENDUP
.sp 2
.uc Start Procedure for ACF/VTAM
.sp 2
./       ADD LIST=ALL,NAME=NET,LEVEL=01,SOURCE=0
./    NUMBER  NEW1=10,INCR=10
//NET      EXEC  PGM=ISTINM01,REGION=1536K,DPRTY=(15,15),PERFORM=8
//VTAMLIB  DD    DSN=SYS1.VTAMLIB,DISP=SHR
//VTAMLST  DD    DSN=VTAM.LIST.SOURCE,DISP=SHR
//NCPLIB   DD    DSN=SYS2.NCPLIB,DISP=SHR
//VTAMOBJ  DD    DSN=SYS1.VTAMOBJ,DISP=SHR
//NCPDUMP  DD    DSN=SYS1.NCPDUMP,DISP=SHR
//OLTCDSDD DD    DSN=SYS1.OLTLIB,DISP=SHR
//SYMSYM   DD    DSN=SYS1.CDSLIB,DISP=SHR
//SYSUDUMP DD    SYSOUT=A                 Used when Z NET,CANCEL executed.
//INITEST  DD    DSN=NCP6.SSPLIB,DISP=SHR
./ ENDUP
//
```

NOTE- The DD cards for data sets OLTLIB and CDSLIB should be omitted
unless the Customer Engineer has prepared these data sets. The system
can be installed without these data sets but they must be installed
before TOLTEP can be used.

5.5 : OS/VS SAMPLES (COMMON CODE)

The samples contained here are for either a VS1 or VS2 System.

REFERENCES

IBM 3704 And 3705 Communications Controllers Network Control Program/VS Generation And Utilities Guide And Reference Manual (for OS/VS And DOS/VS VTAM Users)	GC30-3008
IBM 3705 Advanced Communications Function for Network Control Program/VS Generation And Utilities Guide And Reference Manual	SC30-3116
OS/VS1 Service Aids	GC28-0665
OS/VS1 Access Methods Services	GC26-3840
OS/VS1 VTAM System Programmer's Guide	GC27-6996
OS/VS1 JCL Reference	GT28-0618
OS/VS VTAM Reference Summary	GX27-0034
ACF/VTAM System Programmers Guide	SC38-0258
ACF/VTAM Installation Guide	SC38-0269
ACF/VTAM Reference Summary	SX27-3021
OS/VS2 SVS VTAM System Programmer's Guide	GC27-0049
OS/VS2 MVS Utilities	GC26-3902
OS/VS2 System Programming Library: Service Aids	GC28-0674
OS/VS2 JCL	GC28-0692
OS/VS TCAM System Programmer's Guide	GC30-2051
OS/VS TCAM Installation and Migration Guide	GC30-3039
OS/VS TCAM Program Reference Summary	GY30-1024
ACF/TCAM System Programmer's Guide	SC30-3117
ACF/TCAM Installation and Migration Guide	SC30-3121
ACF/TCAM Program Reference Summary	LY30-3037

OS/VS SAMPLES (COMMON CODE)

VTAM FILE ALLOCATION SAMPLE FOR OS/VS1


```
//ALLOC JOB   MSGLEVEL=(1,1)
//ALLOC  EXEC  PGM=IEFBR14
//*    THIS STEP WILL ALLOCATE THE NECESSARY VTAM DATA SETS.
//DD1 DD UNIT=SYSDA,VOL=SER=SNA001,DISP=(,CATLG),SPACE=(CYL,(5,1,10)),
//   DCB=(LRECL=80,RECFM=FB,BLKSIZE=800),DSN=SYS1.VTAMLST
//DD2 DD UNIT=SYSDA,VOL=SER=SNA001,DISP=(,CATLG),SPACE=(CYL,(2,1,10)),
//   DCB=(LRECL=3152,RECFM=F,BLKSIZE=3152),DSN=SYS1.VTAMOBJ
//DD3 DD UNIT=SYSDA,VOL=SER=SNA001,DISP=(,CATLG),SPACE=(CYL,(1)),
//   DSN=NCPDUMP
```


VSAM DATA SET ALLOCATION FOR VTAM


```
//VSAMCAT JOB CLASS=A
// EXEC PGM=IDCAMS
//TARGTVOL DD DISP=OLD,VOL=SER=SNA001,UNIT=3330,DISP=OLD
//SYSPRINT DD SYSOUT=A
//SYSIN DD *
 DEFINE UCAT(NAME(USRVCAT) FILE(TARGTVOL) VOL(SNA001) CYL(2,1) -
       TO(99999))
/*
//VSAMALC JOB CLASS=a
//JOBCAT DD DISP=OLD,DSN=USRVCAT
//   EXEC PGM=IDCAmS
//FSPACE1 DD DISP=OLD,UNIT=3330,VOL=SER=SNA001
//SYSPRINT DD SYSOUT=A
//SYSIN DD *
 DEFINE SPACE(FILE(FSPACE1) VOL(SNA001) CYL (50,5))
 DEFINE CLUSTER  (NAME(LRNCKPT) -
              VOL(SNA001) -
              KEYS(2,0) -
                TRACKS(2) -
              RECSZ(10,10) -
              SHR(4,4) -
              FREESPACE(1))
 DEFINE CLUSTER  (NAME(NCP001) -
              KEYS(4,0) -
              VOL(SNA001) -
              TRACKS(2) -
              FSPC(1) -
              SHR(4,4) -
```

```
                      RECSZ(24,24))
      DEFINE CLUSTER  (NAME(LOC001) -
                      KEYS(4,0) -
                      VOL(SNA001) -
                      TRACKS(2) -
                      FSPC(1) -
                      SHR(4,4) -
                      RECSZ(24,24))
      DEFINE CLUSTER  (NAME(SWT001) -
                      KEYS(4,0) -
                      VOL(SNA001) -
                      TRACKS(2) -
                      FSPC(1) -
                      SHR(4,4) -
                      RECSZ(24,24))
/*
```

NOTES- Apendix G of the OS/VS1 VTAM System Programmer's Guide should be referenced. (VTAM Level 2 only).

NCP FILE ALLOCATION AND INSTALLATION SAMPLE FOR OS/VS (2314)

The following sample is for NCP/VS Release 5.0.


```
//ALLOC  JOB    MSGLEVEL=(1,1)
//ALLOC  EXEC  PGM=IEFBR14
//*     THIS STEP WILL ALLOCATE THE NECESSARY NCP DATA SETS.
//DD1 DD UNIT=2314,VOL=SER=NCPR50,DISP=(,CATLG),SPACE=(CYL,(37,4,11)),
//     DSN=SYS1.GEN3705,DCB=(LRECL=80,RECFM=FB,BLKSIZE=3520)
//DD2 DD UNIT=2314,VOL=SER=NCPR50,DISP=(,CATLG),SPACE=(CYL,(64,5,36)),
//     DSN=SYS1.MAC3705,DCB=(LRECL=80,RECFM=FB,BLKSIZE=3520)
//DD3 DD UNIT=2314,VOL=SER=NCPR50,DISP=(,CATLG),SPACE=(CYL,(8,2,30)),
//     DCB=(LRECL=80,RECFM=FB,BLKSIZE=400),DSN=SYS1.OBJ3705
//DD4 DD UNIT=2314,VOL=SER=NCPR50,DISP=(,CATLG),SPACE=(CYL,(2,1,10)),
//     DCB=(LRECL=80,RECFM=FB,BLKSIZE=400),DSN=SYS1.NCPOBJ
//DD5 DD UNIT=2314,VOL=SER=NCPR50,DISP=(,CATLG),SPACE=(CYL,(5,2,10)),
//     DSN=SYS1.NCPLOAD1
//STA      EXEC  PGM=IEHMOVE
//*     THIS STEP WILL COPY THE DATA FROM THE TAPE TO THE DISK
//SYSPRINT DD   SYSOUT=A
//SYSUT1   DD   UNIT=2314,SPACE=(CYL,(5,5))
//TAPEIN DD     UNIT=2400,VOL=SER=DISTTP,LABEL=(,NL),
//              DCB=(RECFM=FB,LRECL=80,BLKSIZE=800),DISP=(OLD,PASS)
//DISKOUT DD    UNIT=2314,VOL=SER=NCPR50,DISP=OLD
//SYSIN  DD     *
SSP      COPY  PDS=SYS1.SSPLIB,FROM=2400=(DISTTP,1),              X
               TO=2314=NCPR50,FROMDD=TAPEIN
NCPMAC1  COPY  PDS=SYS1.GEN3705,FROM=2400=(DISTTP,2),             X
               FROMDD=TAPEIN,TO=2314=NCPR50
NCPMAC2  COPY  PDS=SYS1.MAC3705,FROM=2400=(DISTTP,3),             X
               FROMDD=TAPEIN,TO=2314=NCPR50
NCPOBJ   COPY  PDS=SYS1.OBJ3705,FROM=2400=(DISTTP,4),             X
               FROMDD=TAPEIN,TO=2314=NCPR50
/*
```

NOTES- This job stream allocates space for the data sets required for an
NCP installation and generation. The PDS SYS1.SSPLIB must be copied to
the SYS1.LINKLIB as noted in the next sample. The storage requirements
may vary between release levels of NCP/VS.   The Program Directories
shipped with the NCP tape should always be consulted.

NCP INSTALLATION CONTINUED, UPDATE LINKLIST


```
./   ADD   NAME=LNKLSTxx
              SYS1.LINKLIB,    SYSTEM LINKLIB              XXXXXXXXX
              SYS1.LINKLIB2,   USER     UTILITIES          XXXXXXXXXXX
              IMS.RESLIB,      IMS LIBRARY           XXXXXXXXXXXXXXXXXX
              SYS1.SSPLIB      NCP UTILITIES
```


NOTES- This stage is necessary. VTAM expects to find the 370x loader in
the SYS1.LINKLIB and VTAM will be unable to load the 3705 if it can not
find the loader. NCP utilities may be placed in SYS1.LINKLIB.

NCP JOB CONTROL FOR STAGE 1 - OS/VS

```
//SCRNCP4 JOB MSGLEVEL=(1,1)
//        EXEC  PGM=IEHPROGM
//SYSPRINT DD   SYSOUT=A
//DD3      DD    UNIT=2314,VOL=SER=NCPR50,DISP=OLD
//SYSIN DD *
    SCRATCH DSNAME=NCPSTG1,VOL=2314=NCPR50,PURGE
/*
//STAGE1 EXEC PGM=CWAX00,REGION=320K
//SYSLIB DD DSN=SYS1.GEN3705,DISP=SHR
//OBJ1 DD UNIT=2314,VOL=SER=NCPR50,DISP=(,CATLG),SPACE=(CYL,(2,1,10)),
//       DCB=(LRECL=80,RECFM=FB,BLKSIZE=400),DSN=SYS1.NCPOBJ1
//SYSUT1 DD    UNIT=SYSDA,SPACE=(1700,(800,800)),DCB=(OPTCD=C)
//SYSUT2 DD    UNIT=SYSDA,SPACE=(1700,(800,800)),DCB=(OPTCD=C)
//SYSUT3 DD    UNIT=SYSDA,SPACE=(1700,(800,800)),DCB=(OPTCD=C)
//SYSPRINT DD  SYSOUT=A
//SYSPUNCH DD  DSN=NCPSTG1,VOL=SER=NCPR50,DISP=(,KEEP),
//       UNIT=2314,SPACE=(CYL,(2,1)),DCB=(LRECL=80,RECFM=FB,BLKSIZE=800)
//SYSIN DD *
//SYSIN DD *
**************************************************************
*                                                            *
*        SOURCE FOR NCP3 OS VTAM                              *
*                                                            *
**************************************************************
/*
//
```

NOTES- The JCL sample punches the Stage 1 ouput to a sequential data
set. This sample allows Stage 2 to be started by reading from the file.
The listing from Stage 1 must be examined for defaults and MNOTES. The
punched output from this stage should allow an error free NCP
generation. There may be unresolved EXTRNs in the link edit stage. The
letter to users, that comes with the NCP installation materials, lists
these unresolved EXTRNs. Normally these unresolved items can be ignored.
Unlike DOS/VS, there are no additional steps after the link edit stage.
The NCP load is ready to be used as soon as the last step is completed.

OS/VS NCP LOAD SAMPLE

```
//LOAD    JOB    MSGLEVEL=(1,1)
//*   THIS ROUTINE LOADS THE LOCAL 3705
//        EXEC  PGM=IFLOADRN
//SYSPRINT DD   SYSOUT=A
//SYSUT1   DD DSN=NCP.NCPSN2,DISP=SHR
//* NEXT STATEMENT SPECIFIES INITIAL TEST LIBRARY
//SYSUT3 DD     DSN=SYS1.LINKLIB,DISP=SHR
//CUNAME DD     UNIT=0BF
//SYSIN  DD     *
        LOAD LOADMOD=NCPSN2,3705=CUNAME,DIAG=Y8
/*
//
```

NOTES- Options for this routine are covered in Chapter 7 of the NCP Generation manual, GC30-3008. This routine maybe used to check the NCP with initial test, prior to loading the 370x using VTAM. If the NCP is defined with 'Automatic Network Shutdown', the NCP will go back to the load state after the 'TIMEOUT' value specified in the NCP 'HOST' parameter has expired.

SAMPLE JCL TO DUMP AND PRINT NCP ON OS/VS

```
//DUMP    JOB    MSGLEVEL=(1,1)
//*   THIS ROUTINE DUMPS AND PRINTS THE LOCAL 3705 STORAGE CONTENTS
//        EXEC  PGM=IFLREAD
//SYSPRINT DD   SYSOUT=A
//* SYSUT1 SPECIFIES THE 3705 ADDRESS
//SYSUT1   DD   UNIT=0BF
//* SYSUT2 SPECIFIES THE TEMORARY DASD WORK DATA SET
//SYSUT2 DD     UNIT=SYSDA,DISP=NEW,                                    X
//             SPACE=(512,(513),,CONTIG),DCB=(DSORG=DA)
//SYSIN  DD     *
        DUMP FROMADDR=200,BUF=Y,FORMAT=Y
/*
//
```

NOTES- Options for this procedure are covered in Chapter 8 of the NCP Generation Manual, GC30-3008.

SAMPLE JCL FOR STARTING AND STOPPING VTAM TRACE


```
//PROCUP JOB 'UPDATE PROCLIB',MSGLEVEL=1,REGION=100K
//       EXEC  PGM=IEBUPDTE,PARM=MOD
//SYSPRINT DD SYSOUT=A
//SYSUT1 DD    DSNAME=SYS1.PROCLIB,DISP=SHR
//SYSUT2 DD    DSNAME=SYS1.PROCLIB,DISP=SHR
//SYSIN  DD    DATA
./  ADD  NAME=GOTRACE,LIST=ALL
//TRACE PROC
// MODIFY NET,TRACE,TYPE=IO,ID=NCPSN2
// MODIFY NET,TRACE,TYPE=BUF,ID=NCPSN2
// MODIFY NET,TRACE,TYPE=IO,ID=CL3790
// MODIFY NET,TRACE,TYPE=BUF,ID=CL3790
// MODIFY NET,TRACE,TYPE=IO,ID=INBATCH1
// MODIFY NET,TRACE,TYPE=BUF,ID=INBATCH1
// MODIFY NET,TRACE,TYPE=IO,ID=INQDEMO2
// MODIFY NET,TRACE,TYPE=BUF,ID=INQDEMO2
// VARY NET,ACT,ID=CL3790
//STEP1 EXEC PGM=IEFBR14
//* OPERATOR COMMANDS TO SET UP FOR TRACE
./ ADD NAME=NOTRACE,LIST=ALL
//NOTRACE PROC
// MODIFY NET,NOTRACE,TYPE=IO,ID=NCPSN2
// MODIFY NET,NOTRACE,TYPE=BUF,ID=NCPSN2
// MODIFY NET,NOTRACE,TYPE=IO,ID=CL3790
// MODIFY NET,NOTRACE,TYPE=BUF,ID=CL3790
// MODIFY NET,NOTRACE,TYPE=IO,ID=INBATCH1
// MODIFY NET,NOTRACE,TYPE=BUF,ID=INBATCH1
// MODIFY NET,NOTRACE,TYPE=IO,ID=INQDEMO2
// MODIFY NET,NOTRACE,TYPE=BUF,ID=INQDEMO2
//* OPERATOR COMMANDS TO STOP VTAM TRACE
//STEP1 EXEC PGM=IEFBR14
./ ENDUP
/*
```


NOTES- This procedure allows an operator to execute a list of operator
commands. It reduces operator error and insures that trace is started or
stopped on specified nodes. The same operation can be accomplished by
entering the commands through the card reader.

SAMPLE JCL FOR PRINTING TCAM TRACE RECORDS

```
//PROCUP JOB 'UPDATE PROCLIB',MSGLEVEL=1,REGION=100K
//        EXEC  PGM=IEBUPDTE,PARM=MOD
//SYSPRINT DD SYSOUT=A
//SYSUT1 DD    DSNAME=SYS1.PROCLIB,DISP=SHR
//SYSUT2 DD    DSNAME=SYS1.PROCLIB,DISP=SHR
//SYSIN  DD    DATA
./ ADD  NAME=TRACES,LIST=ALL
//PIU     EXEC PGM=IEDQXB,PARM='PIUT'
//SYSUT1   DD  DSN=TCAM.COMWRITE,DISP=OLD
//SYSPRINT DD  SYSOUT=R,SPACE=(CYL,(5,1))
//BUFF    EXEC PGM=IEDQXB,PARM='BUFF'
//SYSUT1   DD  DSN=TCAM.COMWRITE,DISP=OLD
//SYSPRINT DD  SYSOUT=R,SPACE=(CYL,(5,1))
//LINE    EXEC PGM=IEDQXB,PARM='LINT,LIN3'
//SYSUT1   DD  DSN=TCAM.COMWRITE,DISP=OLD
//SYSPRINT DD  SYSOUT=R,SPACE=(CYL,(5,1))
//IOTR    EXEC PGM=IEDQXB,PARM='IOTR'
//SYSUT1   DD  DSN=TCAM.COMWRITE,DISP=OLD
//SYSPRINT DD  SYSOUT=R,SPACE=(CYL,(5,1))
//STCB    EXEC PGM=IEDQXB,PARM='STCB'
//SYSUT1   DD  DSN=TCAM.COMWRITE,DISP=OLD
//SYSPRINT DD  SYSOUT=R,SPACE=(CYL,(5,1))
./ ENDUP
/*
```

SAMPLE JCL FOR RUNNING TCAM

```
//PROCUP JOB 'UPDATE PROCLIB',MSGLEVEL=1,REGION=100K
//         EXEC  PGM=IEBUPDTE,PARM=MOD
//SYSPRINT DD SYSOUT=A
//SYSUT1 DD      DSNAME=SYS1.PROCLIB,DISP=SHR
//SYSUT2 DD      DSNAME=SYS1.PROCLIB,DISP=SHR
//SYSIN  DD      DATA
./ ADD NAME=TCAM,LIST=ALL
//SCRQ      EXEC PGM=IEFBR14
//REQUEUE  DD  DSN=TCAM.REQUEUE,DISP=(OLD,DELETE)
//FORMATQ EXEC PGM=IEDQXA
//IEDQDATA DD  DSN=TCAM.REQUEUE,DISP=(,CATLG),DCB=KEYLEN=156,
//           VOL=SER=SCLIB1,UNIT=3330-1,SPACE=(CYL,(5,5),,CONTIG)
//ACFTCAM EXEC PGM=IEDQTCAM,TIME=1440,DPRTY=(11,10),REGION=600K
//STEPLIB  DD  DSN=SYS2.NCPLIB,DISP=SHR
//REQUEUE   DD  DSN=TCAM.REQUEUE,DISP=SHR
//COMWRITE DD  DSN=TCAM.COMWRITE,DISP=SHR
//NCPDUMP  DD  DSN=TCAM.NCPDUMP,DISP=SHR
//DDIPL    DD  DSN=SYS2.NCPLIB,DISP=SHR
//NCP      DD  UNIT=019,DCB=IPLTXID=NCPACFI
//DD3270L  DD  UNIT=4C8
//         DD  UNIT=4C9
//QOPCTLI  DD  QNAME=AOPCTLI
//QOPCTLO  DD  QNAME=AOPCTLO
//QOPCTLP  DD  QNAME=AOPCTLP
//QSOFO    DD  QNAME=ASOFO
//Q3270I   DD  QNAME=A3270I
//Q3270O   DD  QNAME=A3270O
//QDLQI    DD  QNAME=DLQ
//QDLQO    DD  SYSOUT=R                              \
//SYSUDUMP DD  SYSOUT=A,SPACE=(CYL,(5,1))
./ ENDUP
/*
```

CHAPTER 6 : ACF/TCAM SAMPLE

This section contains a sample MCP for ACF/TCAM and the USS table defintions for the devices supported in the MCP.

REFERENCES

TCAM Migration To NCP and SNA Featuring IBM 3790	GG22-9100
ACF/TCAM General Information	GC30-2050
ACF/TCAM Concepts and Planning	GC30-3049
ACF/TCAM System Programmer's Guide	SC30-3117
ACF/TCAM Macro Reference Guide	SC30-3118
ACF/TCAM Application Programmer's Guide	SC30-3119
ACF/TCAM Installation and Migration Guide	SC30-3121
ACF/TCAM MSNF Program Reference Summary Supplement	LD21-0003
ACF/TCAM Program Reference Summary	LY30-3037

ACF/TCAM SAMPLE MCP

```
   TITLE '                            TCAM SAMPLE MCP'
   *********************************************************************
   *                         *                                        *
   * ACF/TCAM SYSTEM OPERATION *                                      *
   *                         *                                        *
   *****************************                                      *
   *                                                                  *
   *                                                                  *
   * TO START TCAM ENTER:       S TCAM                                *
   *                                                                  *
   * TO ACTIVATE AND USE LOCAL 3270'S ENTER:                          *
   *     FROM THE OS CONSOLE: V 4C8,ONTP                              *
   *                                                                  *
   * TO STOP TCAM:                                                    *
   *     1) FROM THE CONSOLE ENTER:      C TCAM(,DUMP)                *
   *     OR                                                           *
   *     2) FROM A LOGGED ON 3270 ENTER: CLOSE                        *
   *                               THEN: // Z TP,QUICK                *
   *                                                                  *
   * TO PRINT THE TRACES ENTER:        S TRACES                       *
   *                                                                  *
   * TO PRINT THE MESSAGE QUEUE ENTER:  S PRTQ                        *
   *                                                                  *
   *********************************************************************


   *********************************************************************
   *                                                                  *
   * TO INITIATE A SESSION THE FOLLOWING COMMANDS MAY BE USED - ENTER: *
   *                                                                  *
   * INITS        (FOR TCAM SESSIONS)                                 *
   * TCAM         (FOR TCAM SESSIONS)                                 *
   * LOGON (TSOID/PASSWORD) (FOR TSO)                                 *
   * TSO   (TSOID/PASSWORD) (FOR TSO)                                 *
   * IMS          (FOR VTAM SESSIONS)                                 *
   * CICS         (FOR VTAM SESSIONS)                                 *
   *                                                                  *
   * TO TERMINATE A SESSION THE FOLLOWING COMMANDS MAY BE USED - ENTER: *
   *                                                                  *
   * TERMS        (FOR TCAM SESSIONS)                                 *
   * LOGOFF       (FOR TSO)                                           *
   * TERMI        (FOR VTAM SESSIONS)                                 *
   * TERMC        (FOR VTAM SESSIONS)                                 *
   *                                                                  *
   * ALL FORMATS ARE VALID IN UPPER OR LOWER CASE.                    *
   *                                                                  *
```

```
* MODIFICATIONS TO THE SSCPMH (SEE FURTHER DISCUSSIONS THERE) WILL    *
* ENABLE THESE COMMANDS TO BE INTERPERTED FOR THE CORRECT LU AND      *
* BIND PARAMETERS. NOTE THAT THE REGULAR INITS AND TERMS FORMATS      *
* MAY STILL BE USED TO OVERRIDE THE DEFAULTS.                         *
*                                                                     *
***********************************************************************
*                                                                     *
* MESSAGE DEFINITION:                                                 *
*                                                                     *
* TYPE   FORMAT                  MEANING                              *
* ____   _____                  _____                             *
*                                                                     *
*  I    I XXXXX                  INQUIRY                              *
*                                                                     *
*  M    M DEST / (DATA)          MESSAGE SWITCH                       *
*                                                                     *
*  O    // (CMD)                 OPERATOR CONTROL                     *
*                                                                     *
*  X    X   (CMD)                EXTENDED OPERATOR CONTROL            *
*                                                                     *
*  N    NDS X  (X IS MODEL NO)   NDS TEST MESSAGE FOR ALL MODELS      *
*                                                                     *
*  S    /TCAMXXXX                SOF OPERATOR COMMANDS                *
*                                (OUTPUT GOES TO SDLC76P7)            *
*                                                                     *
***********************************************************************


***********************************************************************
*               *  ACF/TCAM: PROGID=IEDQTCAM   ACF/NCP: NEWNAME=NCPACFI *
* SYSTEM AS OF  *          UNITSZ=156                   UNITSZ=156     *
*  01/05/79     *          MAXSUBA=31                   MAXSUBA=31     *
*               *          SUBAREA=14                   SUBAREA=21     *
*****************                                       MAXBFRU=20     *
*                                                                     *
*                                                                     *
*TYPE  GROUP    LINE    CLUSTER(PU)    TERM(LU)        MESSAGE TYPES  *
*----  -----    ----    -----------    --------        -------------  *
*                                                                     *
* NCP SDLCSV1 SDLCI29                                                 *
*                       PU3270V        LU3270V0        I,M,O,X,S      *
*                                      LU3270V1                       *
*                                      TO                             *
*                                      LU3270V7        I,M,O,X,S      *
*                                                                     *
*              SDLCI22                                                *
*                       SDLC3274       SDLCPA01        I,M,O,X,N,S    *
*                                      TO                             *
*                                      SDLCPA08                       *
```

ACF/TCAM SAMPLE

```
*                                                                    *
*          SDLCI23                                                   *
*                   SDLC3276        SDLC76P1           I,M,O,X,N,S    *
*                                   TO                               *
*                                   SDLC76P8                         *
*                                                                    *
*          BSCI25                                                    *
*                   BSC3270         BSC32700          I,M,O,X,N,S     *
*                                   TO                I,M,O,X,N,S     *
*                                   BSC32707                         *
*                                                                    *
*..................................................................*
*                                                                    *
* OTHER TCAM LU'S: IEDQTCAM (DEFAULT MHS3270)                        *
*                  MHS3270  (3270 BSC,SDLC & LOCAL)    I,M,O,X,S      *
*                  NDSMH    (3270 NDS)                 I,M,O,X,N,S    *
*                  TSOMH                                             *
*                                                                    *
**********************************************************************


TCAM       CSECT
           EXTRN IEDN25          REQUIRED FOR USER EBCF TRANS TABLE
           INTRO ABEFMT=(PCB,SIB,PLCB,OPT),APDUMP=NO,APWAS=4024,        X
                 AUTHA=YES,BFRRTN=LO,BRACKET=YES,BTRACE=030,CDRVT=40,   X
                 CIB=10,CKREQS=0,COMWRTE=YES,CONTROL=//,CPB=30,         X
                 CPINTVL=1800,CPRCDS=2,CROSSRF=0,DISK=YES,DLQ=DLQ,      X
                 DTRACE=(500,POST),ENVIRON=MIXED,                      X
                 FEATURE=(,,,,MIXD3705,MIXDSNA,NETWORK),               X
                 INTVAL=0,LINETYP=BOTH,LNUNITS=300,MAXSUBA=31,MSMAX=70, X
                 MSMIN=1,MSUNITS=150,OLTEST=0,PASSWRD=0,PLCBNO=15,      X
                 PRIMARY=SYSCON,PROGID=IEDQTCAM,RESTART=0,ROUTE=NO,     X
                 SIBCNT=80,STARTUP=C,SUBAREA=14,THRESH=(255,1,1,1),     X
                 TOPMSG=YES,TRACE=(50,ON),TTRACE=200,UNITSZ=156,        X
                 USEREG=0,VM=YES
           LTR   15,15
           BZ    AOK                   BRANCH IF NO ERROR
           ABEND 4095,DUMP
      **********************************************************************
           DC    C'ACF/TCAM SNA MCP COMPILED'
           DC    C' &SYSDATE &SYSTIME'
      **********************************************************************
AOK        OPEN  (REQUEUE,(INOUT))     OPEN MESSAGE QUEUES DATA SET
           LTR   R15,R15               TEST OPEN RETURN CODE
           BNZ   BADOPEN               IF OPEN FAILED, BRANCH
           OPEN  (LOC3270,(INOUT,IDLE)) OPEN LOCAL 3270 DCB
           LTR   R15,R15               TEST OPEN RETURN CODE
           BNZ   BADOPEN               IF OPEN FAILED, BRANCH
```

```
            OPEN  (NCPDCB,(INOUT))    OPEN 3705 NCP
            LTR   R15,R15             TEST OPEN RETURN CODE
            BNZ   BADOPEN             IF OPEN FAILED, BRANCH
            ATTACH EP=APPL3270
            ATTACH EP=OPCTL
            ATTACH EP=APPLMDR
            WTO   'TCAM IS UP ........................'
            READY GMMSG=GDMRNG         READY WITH GOOD MORNING ROUTINE
            CLOSE NCPDCB               CLOSE 3705
            CLOSE LOC3270              CLOSE LOCAL 3270
            CLOSE REQUEUE              CLOSE MESSAGE QUEUES DATA SET
            L     13,4(13)             RESTORE SAVE AREA POINTER
            RETURN (14,12),RC=0        RETURN TO CALLER
BADOPEN     ABEND 4094,DUMP            AN OPEN MACRO WAS UNSUCCESSFUL
************************************************************************
*           THIS GOOD MORNING ROUTINE GETS CONTROL AT STARTUP.        *
*           IT IS EXECUTED ONCE FOR EACH TERMINAL IN THE TERMINAL      *
*           TABLE. THE TERMMODE OPTION FIELD IS CHECKED FOR A X'10'.   *
*           IF A X'10' IS FOUND A GOOD MORNING MESSAGE IS GENERATED.   *
************************************************************************
            USING *,R15
GDMRNG      STM   R0,R14,SAVE         SAVE REGISTERS AND ESTABLISH
            LA    R13,SAVE            ADDRESSABILITY
            BALR  R6,0
            USING *,R6
            L     R4,4(R1)
            TM    10(R4),X'10'        TERMMODE SPECIFY GM MSG ?
            BNO   NOGMMSG             NO, BRANCH
            LA    R15,GDMSG           REG 15 IS ADDR OF GM MSG
RETOS       LM    R0,R14,0(R13)       RESTORE REGISTERS
            BR    R14                 RETURN TO OS
NOGMMSG     SR    R15,R15             CLEAR REG 15
            B     RETOS
GDMSG       DC    AL1(18)
            DC    C'TCAM IS AVAILABLE'
            DROP  R6
SAVE        DC    15F'0'
************************************************************************
PCBDLQ   PCB   MH=MHDLQAP,BUFSIZE=1024,BUFIN=2,BUFOUT=2
PCBOPCTL PCB   MH=MHOPCTL,BUFSIZE=256,BUFIN=2,BUFOUT=2
PCB3270  PCB   MH=MH3270AP,BUFSIZE=256,BUFIN=10,BUFOUT=10
REQUEUE  DCB   DSORG=TQ,MACRF=(G,P),DDNAME=REQUEUE,OPTCD=R
NCPDCB   DCB   DSORG=TR,MACRF=(G,P),DDNAME=NCP
DUMPDCB  DCB   DSORG=PS,MACRF=(WP),DDNAME=NCPDUMP,BLKSIZE=512,RECFM=F, X
               LRECL=512
LOC3270  DCB   DSORG=TX,MACRF=(G,P),DDNAME=DD3270L,MH=MHS3270,CPRI=S,  X
               PCI=(N,N),BUFIN=1,BUFOUT=2,BUFMAX=2,BUFSIZE=2028,       X
               SCT=EBCD,TRANS=IEDN25,INVLIST=(LLST1,,,LLST2)
```

```
********************************************************************
RO       EQU   0
R1       EQU   1
R2       EQU   2
R3       EQU   3
R4       EQU   4
R5       EQU   5
R6       EQU   6
R7       EQU   7
R8       EQU   8
R9       EQU   9
R10      EQU   10
R13      EQU   13
R14      EQU   14
R15      EQU   15
  TITLE '                              TERMINAL TABLE'
********************************************************************
*              TERMINAL TABLE                                     *
*                                                                 *
* TERMTYPE X'80' 3270 TERMINAL                                    *
*          X'40' 2770/3770 TERMINAL                               *
*          X'20' 2741/3767 TERMINAL                               *
*          X'10' NDS 3270 TERMINAL                                *
*          X'08' S/S, BSC LINE CONTROL EP MODE                    *
*          X'04' S/S, BSC LINE CONTROL NCP MODE                   *
*          X'02' LOCAL SUPPORT                                    *
*          X'01' SDLC LINE CONTROL                                *
*                                                                 *
* TERMMODE X'80' BATCH                                            *
*          X'40' INQUIRY                                          *
*          X'20' MESSAGE SWITCH                                   *
*          X'10' GOOD MORNING MESSAGES REQUIRED                   *
*          X'08' NO IDLES NEEDED                                  *
*          X'04' SCREEN DEVICE                                    *
*          X'02' IDLES NEEDED                                     *
*          X'01' PRINTER                                          *
********************************************************************
         TTABLE MAXLEN=8,LAST=BSC32707
TERMNAME OPTION CL8         1    TERMINAL NAME FIELD
PATHSW   OPTION XL1         2    OPTION FIELD FOR PATH SWITCH
TERMTYPE OPTION XL1         3    TERMINAL TYPE & LINE CONTROL
TERMMODE OPTION XL1         4    TERMINAL AND APPL CHARACTERISTICS
ERRCT    OPTION XL1         5    TRANS ERROR COUNTER (IEDVOFF)
IEDLMODE OPTION CL8         6    BIND NAME FOR HOST INITIATED SESSION
PRNT3270 OPTION CL8         7    NAME OF 328X FOR 3277 TO PRINT
IEDLUNAM OPTION CL8         8    DMH FOR HOST INITIATED SESSION
IEDQFSCR OPTION XL1         9    TSO FULL SCREEN SUPPORT
********************************************************************
```

```
ERRQ       TPROCESS PCB=PCB3270,QUEUES=DR
DLQ        TPROCESS PCB=PCBDLQ,QUEUES=DR,ALTDEST=DLQ
DLQO       TPROCESS PCB=PCBDLQ
AOPCTLI    TPROCESS PCB=PCBOPCTL,QUEUES=DR,LU=YES
AOPCTLO    TPROCESS PCB=PCBOPCTL,QUEUES=DR
AOPCTLP    TPROCESS PCB=PCBOPCTL,ALTDEST=AOPCTLO,SECTERM=YES
ASOFO      TPROCESS PCB=PCBOPCTL,ALTDEST=SDLC76P7,SECTERM=YES
A3270I     TPROCESS PCB=PCB3270,QUEUES=DR,ALTDEST=A3270I
A3270O     TPROCESS PCB=PCB3270
APPLS      TLIST TYPE=D,LIST=(A3270I,AOPCTLI,DLQ)
```


ACF/TCAM 3270 LOCAL TERMINALS

```
**********************************************************************
*          3270 LOCAL TERMINALS            4C8,4C9                    *
**********************************************************************
L3277A     TERMINAL TERM=327L,DCB=LOC3270,RLN=1,QBY=T,QUEUES=MRT,     X
               ALTDEST=L3277A,SECTERM=YES,UTERM=NO,                   X
               SCRSIZE=(24,80),FEATURE=(NOBREAK,NOATTN),              X
               OPDATA=(L3277A,0,82,74,0,,LU3270V1,,0)
L3277B     TERMINAL TERM=327L,DCB=LOC3270,RLN=2,QBY=T,QUEUES=MRT,     X
               ALTDEST=L3277B,SECTERM=YES,UTERM=NO,                   X
               SCRSIZE=(24,80),FEATURE=(NOBREAK,NOATTN),              X
               OPDATA=(L3277B,0,82,74,0,,LU3270V1,,0)
**********************************************************************
*          TERMINAL ENTRIES FOR 3705 NCP AND SSCP                    *
**********************************************************************
NCP        TERMINAL TERM=LNCP,DCB=NCPDCB,DUMPDCB=DUMPDCB,ACTIVE=NO
SSCP       TERMINAL TERM=SSCP
```


ACF/TCAM CDRM DEFINITION

```
**********************************************************************
*          VTAM GROUP,CDRM  AND CDRM RESOURCES                       *
**********************************************************************
VTAM       GROUP MH=HOSTMH,BUFSIZE=256,BUFOUT=5,BUFMAX=10
MVSVMVT    TERMINAL TERM=CDRM,GROUP=VTAM,RLN=1,NETADDR=(13,1),ACTIVE=YES
IMS        TERMINAL TERM=LUNT,GROUP=VTAM,RLN=1,QBY=T,QUEUES=DR,LUCAP=PRI,X
               TCMSESN=LUTERM,OPDATA=(IMS)
CICS14     TERMINAL TERM=LUNT,GROUP=VTAM,RLN=1,QBY=T,QUEUES=DR,LUCAP=PRI,X
               TCMSESN=LUTERM,OPDATA=(CICS14)
```

ACF/TCAM SAMPLE

ACF/TCAM 3270 MODEL 12

```
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
X         GROUP                                                 X
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
GSNA     GROUP MH=MHS3270,TRANS=EBCF,BUFMAX=7,OPACING=5,BUFSIZE=2028
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
X         LINE 1                                                X
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
SDLCI29   TERMINAL TERM=LINE,GROUP=GSNA,RLN=1,ACTIVE=YES
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
X         3270 LEASED LINE SDLC                                 X
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
PU3270V   TERMINAL TERM=PUNT
LU3270V0  TERMINAL TERM=LUNT,GROUP=GSNA,RLN=1,QBY=T,QUEUES=MRT,USS=3270,X
            ALTDEST=LU3270V0,SECTERM=YES,                               X
            SCRSIZE=(24,80),FEATURE=(NOBREAK,NOATTN),                   X
            OPDATA=(LU3270V0,0,81,64,0,BI3270NB,LU3270V1,MHS3270,0)
LU3270V1  TERMINAL TERM=LUNT,GROUP=GSNA,RLN=1,QBY=T,QUEUES=DR,USS=3270, X
            ALTDEST=LU3270V1,                                           X
            OPDATA=(LU3270V1,0,81,61,0,BI3270NB,,MHS3270)

XXXXX
  Code deleted.
XXXXX

LU3270V7  TERMINAL TERM=LUNT,GROUP=GSNA,RLN=1,QBY=T,QUEUES=MRT,USS=3270,X
            ALTDEST=LU3270V7,SECTERM=YES,                               X
            SCRSIZE=(24,80),FEATURE=(NOBREAK,NOATTN),                   X
            OPDATA=(LU3270V7,0,81,64,0,BI3270NB,LU3270V1,MHS3270,0)
```


ACF/TCAM 3274 LEASED LINE

```
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
X         LINE 2                                                X
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
SDLCI22   TERMINAL TERM=LINE,GROUP=GSNA,RLN=2,ACTIVE=YES
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
X         3274 LEASED LINE SDLC                                 X
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
SDLC3274  TERMINAL TERM=PUNT
SDLCPA01  TERMINAL TERM=LUNT,GROUP=GSNA,RLN=2,QBY=T,QUEUES=MRT,USS=SCS, X
            ALTDEST=SDLCPA01,SECTERM=YES,BUFSIZE=3588,                  X
            SCRSIZE=(24,80,43,80),FEATURE=(NOBREAK,NOATTN),             X
            OPDATA=(SDLCPA01,0,11,64,0,NDS3278,SDLCPA07,NDSMH,0)
```

```
XXXXX
  Code deleted.
XXXXX

SDLCPA08 TERMINAL TERM=LUNT,GROUP=GSNA,RLN=2,QBY=T,QUEUES=DR,USS=SCS,  X
             ALTDEST=SDLCPA08,                                          X
             OPDATA=(SDLCPA08,0,11,61,0,NDS8789,,NDSMH)
```

ACF/TCAM 3276 LEASED LINE

```
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
X          LINE 3                                                     X
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
SDLCI23  TERMINAL TERM=LINE,GROUP=GSNA,RLN=3,ACTIVE=YES
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
X          3276 LEASED LINE SDLC                                      X
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
SDLC3276 TERMINAL TERM=PUNT,ACTIVE=YES
SDLC76P1 TERMINAL TERM=LUNT,GROUP=GSNA,RLN=3,QBY=T,QUEUES=MRT,USS=SCS,  X
             ALTDEST=SDLC76P1,SECTERM=YES,                              X
             SCRSIZE=(24,80,24,80),FEATURE=(NOBREAK,NOATTN),            X
             OPDATA=(SDLC76P1,0,11,64,0,NDS3278,SDLC76P7,NDSMH,0)

XXXXX
  Code deleted.
XXXXX

SDLC76P8 TERMINAL TERM=LUNT,GROUP=GSNA,RLN=3,QBY=T,QUEUES=DR,USS=SCS,  X
             ALTDEST=SDLC76P8,                                          X
             OPDATA=(SDLC76P8,0,11,61,0,NDS8789,,NDSMH)
```

ACF/TCAM BSC 3270

```
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
X          GROUP                                                      X
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
GBSC     GROUP MH=MHS3270,TRANS=EBCF,BUFSIZE=2028,PCI=(,N)
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
X          LINE 1                                                     X
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
BSCI25   TERMINAL TERM=LINE,GROUP=GBSC,RLN=1,ACTIVE=NO
```

```
*****************************************************************
*         3271 LEASED LINE BSC                                  *
*****************************************************************
BSC3270   TERMINAL TERM=327C,GROUP=GBSC,RLN=1,QBY=T
BSC32700  TERMINAL TERM=327R,GROUP=GBSC,RLN=1,QBY=T,QUEUES=DRT,      X
              ALTDEST=BSC32700,SECTERM=YES,                         X
              SCRSIZE=(24,80),FEATURE=(NOBREAK,NOATTN),             X
              OPDATA=(BSC32700,0,84,74,0,,BSC32706,,0)

*****
  Code deleted.
*****

BSC32707  TERMINAL TERM=327R,GROUP=GBSC,RLN=1,QBY=T,QUEUES=DR,      X
              ALTDEST=BSC32707,OPDATA=(BSC32707,0,84,71,0)
*****************************************************************
*         3270 LOCAL INVITATION LIST                            *
*****************************************************************
LLST1     INVLIST  ORDER=(L3277A+06)       LOCAL 3270 INVITATION LIST.
LLST2     INVLIST  ORDER=(L3277B+06)       ONE REQUIRED PER LOCAL DEVICE
*             MUST BE DEFINED IN THE SAME SEQUENCE AS THE TERMINAL MACROS
*****************************************************************
          TSINPUT
  TITLE '                          SSCP MESSAGE HANDLER'
*****************************************************************
*                                                               *
*         MESSAGE HANDLER FOR SYSTEM SERVICES CONTROL POINT      *
*                                                               *
*****************************************************************
*         IEDMHGEN SSCP=YES,TOTE=NO
IEDSCPMH  STARTMH MH=SSCP
IEDDCT1   EQU   X'01'               DISPLACEMENT FOR DCTBYTE1
IEDPREFG  EQU   X'03'               DISPLACEMENT FOR PRF1FLG1
IEDFDDCT  EQU   X'05'               DISPLACEMENT FOR DCTBYTE5
IEDTRMB0  EQU   X'0A'               DISPLACEMENT FOR TRMBYTE0
IEDCINDX  EQU   X'10'               DISPLACEMENT FOR TRMCHIN
IEDSRCE   EQU   X'10'               DISPLACEMENT FOR PRFSRCE
IEDDEST   EQU   X'28'               DISPLACEMENT FOR PRFDEST
IEDSTAT2  EQU   X'47'               DISPLACEMENT FOR LCBRSP
IEDFSTCH  EQU   X'100'              DISPLACEMENT FOR AVTCSTCS
IEDMKLEN  EQU   X'3E8'              DISPLACEMENT FOR AVTDCTLN
IEDLRSP   EQU   X'01'               EQUATE FOR LCBRESP
IEDTRMSN  EQU   X'02'               EQUATE FOR TRMSNA
IED3270R  EQU   X'04'               EQUATE FOR DCT3270
IEDCNVTD  EQU   X'08'               EQUATE FOR PRF1USS
IEDRHFMT  EQU   X'08'               EQUATE FOR FORMATTED INDICATOR
IEDPFLCB  EQU   X'0C'               EQUATE FOR PRFLCB
IEDF3270  EQU   X'40'               EQUATE FOR DCTL3270
```

```
        INHDR
        L       6,IEDADBUF              GET BUFFER ADDRESS
        SLR     1,1                     CLEAR REGISTER
        ICM     1,3,IEDSRCE(6)          GET SOURCE TERMINAL'S TNT
        L       15,IEDRNMPT             GET ADDRESS OF TNT ROUTINE
        BALR    14,15                   CONVERT TNT TO TTE
        LR      8,1                     SAVE SOURCE TERMINAL'S TTE ADDR
        LH      11,IEDMKLEN(13)         GET LENGTH FOR DCT MASK
        SLR     2,2                     CLEAR REGISTER
        IC      2,IEDCINDX(8)           GET DEVICE CHAR TABLE INDEX
        BCTR    2,0                     SUB 1 FROM DEVICE CHAR INDEX
        MR      10,2                    MULT DCT MASK LENGTH BY INDEX
        AL      11,IEDFSTCH(13)         ADD ADDRESS FOR FIRST ENTRY
        LR      7,1                     GET TTE ADDRESS
        SL      7,IEDTTPFL              BACK UP TO START OF NEG PREFIX
        TM      IEDTRMB0(7),IEDTRMSN    IS SOUREC A FID1 DEVICE
        BNZ     IEDFID1                 YES
        TM      IEDDCT1(11),IED3270R    IS SOURCE A REMOTE 3270
        BZ      IEDNR327                NO
        MSGEDIT ((R,,SCAN,(5))),BLANK=NO  REMOVE CU DEV AID CUR CUR
        MSGEDIT ((RA,,X'11',(2)))       REMOVE SBA ADDR ADDR
        B       IEDTRYFT                FORMAT 3270 FID0 INPUT
IEDNR327 MSGEDIT ((RA,,X'15'))
        MSGEDIT ((RA,,X'3C'))
        MSGEDIT ((RA,,X'1E'),(RA,,X'1F')) REMOVE IRS IUS
        B       IEDTRYFT                FORMAT FID0 INPUT
IEDFID1 TM      IEDFDDCT(11),IEDF3270   IS THIS 3270 DATA STREAM ?
        BZ      IEDN3270                NO
        MSGEDIT ((RA,,X'01',(3)),(RA,,X'11',(2)),(RA,,X'7D',(2))),    X
                BLANK=NO    (SOH % / STX),(SBA ADDR ADDR),(AID CUR CUR)
        B       IEDCKFMT                SEE IF FORMATTED
IEDN3270 MSGEDIT ((RA,,X'15'))          REMOVE NL
IEDCKFMT IEDRH  RHIND=(+FMH)
        LTR     15,15                   RU FORMATTED ?
        BZ      IEDSCPFD                YES
*********************************************************************** PASC
        CODE    IEDN25                  OP CTL AND TRANSLATE        PASC
*********************************************************************** PASC
        SETSCAN C'IEDTOTE/',BLANK=NO
        LTR     15,15                   IS THIS A TOTE COMMAND
        BNZ     IEDTRYFT                NO
        FORWARD TASK=TOTE
        L       6,IEDADBUF              GET BUFFER ADDRESS
        MVI     0(6),X'1C'              SET PRFKEY FOR TOTE
        B       IEDNDPRC                BRANCH TO END PROCESSING
IEDTRYFT EQU    *
*********************************************************************** PASC
* THIS CHANGE TESTS FOR A USS TYPE OF DEVICE AND FORMATS THE         PASC
```

```
* MESSAGES ACCORDING TO A USS TABLE FOR THAT TYPE OF DEVICE.        PASC
*                                                                    PASC
* EACH USS TABLE HAS STANDARD DEFAULTS THUS ELIMINATING THE          PASC
* REQUIREMENT TO KEY THESE IN AT SESSION INITIATION OR               PASC
* TERMINATION TIME BUT STILL ALLOWING USERS TO OVERRIDE THE          PASC
* DEFAULTS IF REQUIRED.                                              PASC
*                                                                    PASC
* IN ORDER TO LOGON TO TSO USING: LOGON TSOID/PASSWORD               PASC
* EACH USS TABLE HAS THE USER DATA FIELD DEFINED (LENGTH 14).        PASC
*                                                                    PASC
* THESE CHANGES ARE DEPENDENT ON USING THE TERMTYPE OPTION FIELD     PASC
* FOR EVERY TERMINAL AS DEFINED BELOW:                               PASC
*                                                                    PASC
* TERMTYPE OPTION XL1   X'80' 3270 TERMINAL                          PASC
*                       X'40' 3770 TERMINAL                          PASC
*                       X'20' 3767 TERMINAL                          PASC
*                       X'10' NDS 3270 TERMINAL                      PASC
************************************************************** PASC
          LOCOPT TERMTYPE,(5)           IS OPTION FIELD PRESENT  PASC
          LTR   15,15                   TEST RETURN              PASC
          BNZ   SSCPFMT                 NO - EXIT                PASC
          TM    0(5),X'80'              3270                     PASC
          BO    SSCP3270                YES                      PASC
          TM    0(5),X'20'              3767                     PASC
          BO    SSCP3767                .YES                     PASC
          TM    0(5),X'40'              3770                     PASC
          BO    SSCP3770                YES                      PASC
          TM    0(5),X'10'              NDS 3270                 PASC
          BO    SSCPNDS                 YES                      PASC
          B     SSCPFMT                 NONE OF THESE - EXIT     PASC
SSCP3270  EQU   *                                                PASC
          IEDFMT IN=IEDAREA1,OUT=IEDAREA2,TABLE=USS3270          PASC
          B     IEDSCPFD                                         PASC
SSCP3767  EQU   *                                                PASC
          IEDFMT IN=IEDAREA1,OUT=IEDAREA2,TABLE=USS3767          PASC
          B     IEDSCPFD                                         PASC
SSCP3770  EQU   *                                                PASC
          IEDFMT IN=IEDAREA1,OUT=IEDAREA2,TABLE=USS3770          PASC
          B     IEDSCPFD                                         PASC
SSCPNDS   EQU   *                                                PASC
          IEDFMT IN=IEDAREA1,OUT=IEDAREA2,TABLE=USSNDS           PASC
          B     IEDSCPFD                                         PASC
SSCPFMT   EQU   *                                                PASC
************************************************************** PASC
          IEDFMT IN=IEDAREA1,OUT=IEDAREA2,TABLE=IEDUSSTB
IEDSCPFD  EQU   *
          L     6,IEDADBUF              GET BUFFER ADDRESS
          L     4,IEDPFLCB(6)           GET PLCB ADDRESS
```

```
          NI      IEDSTAT2(4),X'FF'-IEDLRSP SO NO RESPONSE IS SENT
          FORWARD TASK=SSCP
IEDNDPRC  INEND
          OUTHDR
          L       2,IEDADBUF              GET BUFFER ADDRESS
          S       2,IEDNGPRF              BACK UP TO NEGATIVE PREFIX
          TM      IEDPREFG(2),IEDCNVTD    NEED TO BE CONVERTED
          BZ      IEDNFMT                 NO
          IEDFMT IN=IEDAREA1,OUT=IEDAREA2,TABLE=IEDFSSTB
          B       IEDOUTPC                BRANCH TO OUTEND PROCESSING
IEDNFMT   L       6,IEDADBUF              GET BUFFER ADDRESS
          SLR     1,1                     CLEAR REGISTER
          ICM     1,3,IEDDEST(6)          GET DEST'S TERMINAL'S TNT
          L       15,IEDRNMPT             GET ADDRESS OF TNT ROUNTINE
          BALR    14,15                   CONVERT TNT TO TTE
          LR      8,1                     SAVE DESTINATION'S TTE ADDR
          LH      11,IEDMKLEN(13)         GET LENGTH FOR DCT MASK
          SLR     2,2                     CLEAR REGISTER
          IC      2,IEDCINDX(8)           GET DEVICE CHAR TABLE INDEX
          BCTR    2,0                     TAKE 1 FROM DEV CHAR INDEX
          MR      10,2                    MUTPLY DCT MASK LEN * INDEX
          AL      11,IEDFSTCH(13)         ADDRESS FOR FIRST ENTRY
          S       6,IEDNGPRF              GET NEGATIVE PREFIX
          TM      0(6),IEDRHFMT           RU FORMATTED ?
          BO      IEDOUTPC                YES
          TM      IEDFDDCT(11),IEDF3270   IS THIS 3270 DATA STREAM?
          BZ      IEDCKFDO                CK FOR NL INSERTION
          TM      IEDPREFG(6),IEDCNVTD    CONVERTED DATA ?
          BO      IEDOUTPC                YES - EXIT
          MSGEDIT ((I,XL2'F1C3',,))
          B       IEDOUTPC                EXIT
IEDCKFDO  TM      IEDTRMBO(8),IEDTRMSN    FID1?
          BZ      IEDOUTPC                NO
          MSGEDIT ((I,X'15',,))           INSERT NL AT START OF BUFFER
          MSGEDIT ((I,X'15',0,)),LAST=YES INSERT NL AT END OF MSG
IEDOUTPC  OUTEND
          DS      0F
IEDTTPFL  DC      F'18'                   LENGTH OF TERM.  NEGATIVE PREFIX
IEDNGPRF  DC      F'8'                    LENGTH OF BUFFER NEGATIVE PREFIX
IEDAREA1  DC      XL6'010000000000'       AREA FOR IEDFMT MACRO
          DC      XL256'00'
IEDAREA2  DC      XL6'010000000000'       AREA FOR IEDFMT MACRO
          DC      XL256'00'
  TITLE '                                 APPLICATION MESSAGE HANDLERS'
*****************************************************************
*         MESSAGE HANDLER FOR OPERATOR CONTROL PROGRAM         *
*****************************************************************
MHOPCTL   STARTMH
```

```
          INHDR
          IEDOPCTL
          FORWARD  DEST=PUT
          INEND
          OUTEND
*******************************************************************
*         MESSAGE HANDLER FOR 3270 INQUIRY APPLICATION PROGRAM    *
*******************************************************************
MH3270AP STARTMH
          INHDR
          FORWARD  DEST=PUT
          INEND
          OUTEND
*******************************************************************
*    MESSAGE HANDLER FOR ALL MESSAGES SENT TO THE DEAD LETTER QUEUE *
*******************************************************************
MHDLQAP  STARTMH
          INHDR
          FORWARD DEST=PUT
          INEND
          OUTEND
*******************************************************************
*         CROSS DOMAIN MH                                         *
*******************************************************************
HOSTMH    STARTMH BEXIT=(BINDXHH),DFC=NONE
          INHDR
          INEND
          OUTEND
 TITLE '                              3270 BSC,SDLC AND LOCAL MH'
*******************************************************************
*              3 2 7 0   M E S S A G E   H A N D L E R            *
*                                                                 *
*         THIS MH SUPPORTS 3270 LOCAL,BSC AND SDLC.               *
*                                                                 *
*         INPUT DATA WILL APPEAR AS FOLLOWS:                      *
*         A. C D A C C S B B                                      *
*            U V I U U B U U (USER TEXT)                          *
*              C D R R A F F                                      *
*                                                                 *
*         B.  4 SNA SENSE BYTES                                   *
*                                                                 *
*         CU AND DVC ARE PRESENT FOR BSC ONLY.                    *
*         SBA, BUF AND BUF ARE PRESENT WITH FORMATTED SCREENS ONLY. *
*******************************************************************
MHS3270  STARTMH DFC=FULL,LU=YES,ALTMH=TSOMH
          INHDR
          PATH    X'00',PATHSW       RESET PATHSW TO IDENTIFY ERRORS
*         LOCATE THE ERRCT OPTION FIELD. IF IT IS EQUAL TO ZERO THEN IT
```

```
*           MUST BE RESET TO ONE TO PREVENT IEDVOFF FROM SUBTRACTING TO
*           MINUS ON GOOD TRANS. SEE INMSG AND OUTMSG.
            LOCOPT  ERRCT,(7)         REG 7 IS ADDR OF ERRCT OPTION
            LTR     R15,R15           GOOD RETURN CODE ?
            BNZ     S32LOPT           NO, FORGET IT, BRANCH
            CLI     0(R7),X'00'       TEST ERRCT EQUAL ZERO
            BNE     S32LOPT           BRANCH NOT EQUAL ZERO
            MVI     0(R7),X'01'       SET TO ONE TO PREVENT MINUS ON VOFF
S32LOPT     LOCOPT  TERMTYPE,(4)      REG 4 IS ADDR OF TERMTYPE OPTION
            LTR     R15,R15           GOOD RETURN CODE ?
            BZ      S32MODE           YES, GO LOCATE TERMMODE OPTION
S32PATH1    PATH    X'01',PATHSW      SET OPTION NOT FOUND PATHSW
            B       S32FMSG
S32MODE     LOCOPT  TERMMODE,(5)      REG 5 IS ADDR OF TERMMODE OPTION
            LTR     R15,R15           GOOD RETURN CODE ?
            BZ      S32TYPE           GO CHECK TERMTYPE
            PATH    X'01',PATHSW      SET OPTION NOT FOUND PATHSW
            B       S32FMSG
S32TYPE     SETSCAN 0                 SET SCAN POINTER
            LTR     R15,R15           TEST RC FOR -4 (ZERO LENGTH BUFFER)
            BM      S32FMSG           DO NOT PROCESS ZERO LENGTH BUFFERS
            LR      R3,R15            SAVE ADDR OF DATA-1 FROM SETSCAN
            CLC     1(3,R3),STATUS    IS IT STATUS MSG
            BE      S32STAT           YES
            TM      0(R4),X'81'       3270 SDLC
            BO      S32RH             YES
            TM      0(R4),X'82'       3270 LOCAL
            BO      S32CLR            YES
            MSGEDIT ((R,,,(2))),BLANK=NO
            TM      0(R4),X'84'       3270 BSC
            BO      S32CLR            YES
            PATH    X'04',PATHSW      TERMTYPE ERROR
            B       S32FMSG
S32RH       IEDRH   RHIND=(+EXR)      TEST FOR SENSE INCLUDED MSG
            CLM     R15,1,=X'08'      TEST RETURN CODE
            BNE     S32SENSE          YES EXR, BRANCH
S32CLR      CLI     1(R3),X'6D'       CLEAR KEY ?
            BNE     S32RPA1           NO, GO TEST FOR PA1
            TERRSET                   FOR CLEAR MSGGEN - DO NOT FORWARD
            B       S32IMG10
S32RPA1     CLI     1(R3),X'6C'       PA1 KEY ?
            BE      S32PRINT          YES, GO TO PRINT ROUTINE
            CLI     1(R3),X'7D'       ENTER KEY ?
            BNE     S32UKWN           NO, GO TO UNKNOWN INPUT
            CLI     4(R3),X'11'       IS 4TH BYTE AN SBA (FORMATTED)
            BNE     S32DEL3           NO, UNFORMATTED BRANCH
            MSGEDIT ((R,,,(6))),BLANK=NO   DEL AID 2(CUR) SBA 2(BUF)
            B       S32CODE           ONLY DATA LEFT, GO PROCESS
```

```
S32DEL3  MSGEDIT ((R,,,(3))),BLANK=NO   DELETE AID 2(CUR)
         *****************************************************************
         *          DATA STREAM IS NOW USER DATA ONLY.                   *
         *****************************************************************
S32CODE  CODE
         LOGON
         *****************************************************************
         *          PROCESS EXTENDED OPERATOR CONTROL COMMANDS           *
         *****************************************************************
         CLI     1(3),C'/'
         BNE     S32MTYP
         TERRSET
         B       S32MFWD
S32MTYP  MSGTYPE X
S32MFWD  FORWARD DEST=C'AOPCTLI'
         B       S32IMG10
         *****************************************************************
         *          PROCESS MESSAGE SWITCH    M DEST / USER MESSAGE       *
         *****************************************************************
         MSGTYPE M
         FORWARD DEST=**,EOA=/
         TERRSET
         B       S32IMG10
         *****************************************************************
         *          PROCESS INQUIRY MESSAGE   I 999999                   *
         *****************************************************************
         MSGTYPE I
         B       S32FWD
         *****************************************************************
         *          PROCESS CLOSE MSG TO CLOSE APPLICATIONS              *
         *****************************************************************
         MSGTYPE CLOSE
         TERRSET
         FORWARD DEST=C'APPLS'
         B       S32IMG10
         *****************************************************************
         *          PROCESS OTHER MESSAGES                               *
         *****************************************************************
         MSGTYPE ,                   UNIDENTIFIED MESSAGE
S32UKWN  PATH    X'10',PATHSW        SET UNKNOWN INPUT PATHSW
         B       S32FMSG
         *****************************************************************
         *          THIS ROUTINE WILL PROCESS PA1 REQUEST TO PRINT THE LAST  *
         *          MESSAGE SENT TO A DISPLAY. TO ALLOW THIS FUNCTION, THE    *
         *          PRNT3270 OPTION FIELD MUST BE DEFINED FOR THE 3277 GIVING *
         *          THE NAME OF THE 328X PRINTER TO RECEIVE THE MESSAGE.      *
         *          A SPECIAL PRINT REQUEST MESSAGE WILL BE BUILT AND SENT TO *
         *          THE 3270 APPLICATION. THE MESSAGE WILL CONTAIN THE NAME OF *
```

```
*           THE PRINTER AND THE SEQUENCE NUMBER OF THE LAST OUTPUT     *
*           MESSAGE SENT TO THE DISPLAY. THE APPLICATION WILL RETRIEVE *
*           THAT MESSAGE USING POINT AND GET MACROS AND BUILD A PRINT  *
*           MESSAGE.                                                   *
***********************************************************************
S32PRINT LOCOPT  PRNT3270,(6)       REG 6 ADDR OF PRINTER NAME OPTION
         LTR     R15,R15            GOOD RETURN CODE ?
         BZ      S32PR01            YES, GO TO BUILD PRINT MESSAGE
         PATH    X'20',PATHSW       SET PRINTER OPTION NOT FOUND PATHSW
         B       S32FMSG
S32PR01  MVC     S32MHPRT,0(R6)     MOVE PRINTER NAME TO MHPUT AREA
         L       R6,IEDADBUF        REG 6 IS ADDRESS OF CURRENT BUFFER
         LH      R1,16(0,R6)        LOAD TNT OFFSET INTO REG 1
*           IEDRNMPT IS AVT FIELD CONTAINING ADDRESS FOR ROUTINE IN
*           TERMINAL TABLE THAT CONVERTS TNT OFFSET TO TTE ADDRESS.
*           THIS ROUTINE EXPECTS TNT OFFSET IN LOWER TWO BYTES OF REG 1
         L       R15,IEDRNMPT       REG 15 IS ADDR OF TNT CONV ROUTINE
         BALR    R14,R15            CONVERT TNT OFFSET TO TTE ADDRESS
         LH      R6,6(0,R1)         REG 1 PLUS 6 IS OUTPUT SEQ NUM
         SH      R6,=H'1'           SEQ NUM ALWAYS NEXT NUM TO BE USED
         STH     R6,S32SEQWK        STORE SEQ NUM
         MVC     S32MHSEQ,S32SEQWK  PUT SEQ NUM IN MESSAGE
         MHPUT   WORK=S32MHWRK      PUT NEW PRINT REQUEST MSG IN BUFFER
         LTR     R15,R15            GOOD RETURN CODE ?
         BZ      S32SETER           YES, GO TO FORWARD MESSAGE
         PATH    X'80',PATHSW       SET BAD MHPUT PATHSW
         B       S32FMSG
***********************************************************************
*           SENSE INCLUDED MESSAGES FOR 3270S CONTAIN 4 SENSE BYTES    *
*           PRECEDING THE USER DATA. THE FIRST 2 BYTES ARE SNA SENSE   *
*           INFORMATION THAT IS MAPPED INTO THE MER BITS. THE 3RD AND  *
*           4TH BYTES ARE 'USER BYTES' AND FOR SDLC 3270S CONTAIN      *
*           INFORMATION SIMILAR TO THE BSC 3270 SOH % R STATUS         *
*           MESSAGES. WHEN BYTES 3 AND 4 ARE NONZERO THE UNDEFINED ERROR *
*           BIT 31 IS SET IN THE MER. THIS IS EQUIVALENT TO BIT 15 THE *
*           STATUS MESSAGE BIT FOR BSC DEVICES. THIS MH WILL CANCEL A  *
*           MESSAGE IF ANY SNA BITS ARE PRESENT, BUT IF ONLY 3270 SENSE *
*           INFORMATION IS PRESENT, IT WILL NOT BE ANALYZED OR CANCELED. *
***********************************************************************
S32SETER TERRSET                    SET USER BIT FOR CLEAR MSGGEN
S32FWD   FORWARD DEST=C'A3270I'
         B       S32IMG10
S32STAT  CLC     6(2,R3),DVCAVAIL   IS USER SENSE DEVICE AVAILABLE ?
         BNE     S32FMSG            NO, BRANCH
         B       S32RLS
S32SENSE CLC     3(2,R3),SDVCAVL    IS USER SENSE DEVICE AVAILABLE ?
         BNE     S32FMSG            NO, BRANCH
S32RLS   IEDRELS                    RELEASE QUEUE, DEVICE IS AVAIL
```

```
*            IT IS POSSIBLE TO HAVE SNA SENSE BYTES WITH A ZERO LENGTH
*            BUFFER. SINCE IT WILL BE AN ERROR AND WILL BE IN THE MER
*            BITS, NO EXAMINATION WILL BE DONE HERE.
S32FMSG FORWARD DEST=C'DLQ'        THIS MESSAGE IS TO BE CANCELED
*                                  A FORWARD IS REQ'D IF ERRORMSG USED
*************************************************************************
*            INMESSAGE SUBGROUPS ARE EXECUTED AFTER THE ENTIRE         *
*            MESSAGE HAS BEEN RECEIVED AND THE MESSAGE ERROR           *
*            BITS ARE SET. ONLY ONE SUBGROUP WILL EXECUTE AND          *
*            IT WILL BE THE FIRST ONE WHOSE PATH IS SATISIFIED.        *
*************************************************************************
S32IMG10 INMSG    PATH=(PATHSW,X'01')  OPTION FIELD NOT DEFINED
         CANCELMG ,                    CANCEL THE MSG
         ERRORMSG ,DATA=S32MSG04,HEADER=NO
         IEDHALT  ,                    BREAK SESSION
         INMSG    PATH=(PATHSW,X'04')  TERMTYPE NOT 3270 SDLC
         CANCELMG ,                    CANCEL THE MSG
         ERRORMSG ,DATA=S32MSG05,HEADER=NO
         IEDHALT  ,                    BREAK SESSION
         INMSG    PATH=(PATHSW,X'10')  UNKNOWN INPUT AID OR MSG TYPE
         CANCELMG ,                    CANCEL THE MSG
         ERRORMSG ,DATA=S32MSG06,HEADER=NO
         INMSG    PATH=(PATHSW,X'20')  PRNT3270 NOT DEFINED NO PRINT
         CANCELMG ,                    CANCEL THE MSG
         ERRORMSG ,DATA=S32MSG07,HEADER=NO
         INMSG    PATH=(PATHSW,X'80')  MHPUT FAILED
         CANCELMG ,                    CANCEL THE MSG
         ERRORMSG ,DATA=S32MSG08,HEADER=NO
         INMSG    PATH=(TERMTYPE,X'02') 3270 LOCAL
         CANCELMG X'430EC7F7FF'
         MSGGEN   X'0000080000',S32RSETL
         INMSG    ,                    WHATS LEFT SHOULD BE 3270 SDLC
         CANCELMG X'430EC6F7FF'   NOTE: BIT 31 UNDEF ERR NOT CANCELED
         MSGGEN   X'0000080000',S32RSETN   RESET 3277 NCP IF USER BIT
*            THE NEXT THREE IEDVOFF MACROS ARE TO COUNT TRANS ERRORS AND
*            IF 10 ERRORS ARE FOUND BEFORE GOOD TRANS RESET THE COUNTER TO
*            ZERO, THEN POLLING WILL BE STOPPED FOR THAT TERMINAL FOR ONE
*            MINUTE. THE SYSTEM CONSOLE WILL RECEIVE A TERMINAL STOPPED
*            MESSAGE.
*            TO PREVENT ERRCT FROM GOING NEGATIVE BECAUSE OF SUBTRACTING
*            ON GOOD MESSAGES, CODE IN INHDR AND OUTHDR RESETS ERRCT TO
*            ONE WHEN IT REACHES ZERO.
         IEDVOFF  X'010445F7FF',COUNT=(ERRCT,GT,9),INTVL=60
*                           ADD TO COUNTER IF ERROR. IF COUNTER EQUAL OR
*                           GREATER 8, STOP POLLING FOR 1 MINUTE, CLEAR
*                           COUNTER, NOTIFY SYSTEM CONSOLE.
         IEDVOFF  ,COUNT=(ERRCT,EQ,250),UPDATE=SUB    EVERY MESSAGE
         IEDVOFF  X'010445F7FF',COUNT=(ERRCT,EQ,250) BAD MSG ONLY
```

```
            ERRORMSG X'010405F7FF',DATA=S32MSG01,HEADER=NO
            ERRORMSG X'0200820000',DATA=S32MSG02,HEADER=NO
            ERRORMSG X'4002400000',DATA=S32MSG03,HEADER=NO
            ERRORMSG X'FF7FF7FF00',DATA=S32XX,DEST=C'ERRQ',EXIT=ERMSGXIT
            INEND
            OUTHDR
            PATH     X'00',PATHSW       RESET PATHSW TO IDENTIFY ERRORS
*           LOCATE THE ERRCT OPTION FIELD. IF IT IS EQUAL TO ZERO, THEN
*           RESET TO ONE TO PREVENT IEDVOFF FROM SUBTRACTING TO MINUS
*           FOR GOOD TRANS. SEE INMSG AND OUTMSG.
            LOCOPT   ERRCT,(7)          REG 7 IS ADDR OF ERRCT OP
            LTR      R15,R15            GOOD RETURN CODE ?
            BNZ      S32SCANA           NO, IGNORE IT, BRANCH
            CLI      0(R7),X'00'        TEST ERRCT EQUAL ZERO
            BNE      S32SCANA           BRANCH NOT EQUAL TO ONE
            MVI      0(R7),X'01'        SET TO ONE TO PREVENT MINUS ON VOFF
S32SCANA    SETSCAN  0                  SET SCAN POINTER
            LTR      R15,R15            TEST FOR ZERO LENGTH BUFFER
            BM       S320MG10           RC -4 IS ZERO BUFFER DO NOT PROCESS
            LR       R3,R15             SAVE ADDR OF DATA-1 FROM SETSCAN
            LOCOPT   TERMTYPE,(4)       REG 4 IS ADDR OF TERMTYPE OPTION
            LTR      R15,R15            GOOD RETURN CODE ?
            BZ       S320MODE           YES, GO LOCATE TERMMODE OPTION
            PATH     X'01',PATHSW       SET OPTION NOT FOUND PATHSW
            B        S320MG10           OUTHDR COMPLETE, GO CHECK MER BITS
S320MODE    LOCOPT   TERMMODE,(5)       REG 5 IS ADDR OF TERMMODE OPTION
            LTR      R15,R15            GOOD RETURN CODE ?
            BZ       S32ESC             YES
            PATH     X'01',PATHSW       SET OPTION NOT FOUND PATHSW
            B        S320MG10           OUTHDR COMPLETE, GO CHECK MER BITS
S32ESC      CLI      1(R3),X'27'        IS IT FORMATTED?
            BE       S32RESC            YES - DO NOT FORMAT
            MSGEDIT  ((I,X'27',SCAN))
            MSGEDIT  ((I,X'F17B1140401D4013',SCAN))
S32RESC     TM       0(R4),X'82'        IS IT LOCAL?
            BNE      S32DESC            NO
            SCREEN   WEA,RETRV=YES      SCREEN REQD FOR LOCALS
            MSGEDIT  ((R,,,(2)))        REMOVE ESC AND CMD
            B        S32DEOT
S32DESC     TM       0(R4),X'84'        IS IT BSC?
            BO       S32DEOT            YES
            MSGEDIT  ((RA,,XL1'27'))    REMOVE ESC FOR DATA STREAM
S32DEOT     MSGEDIT  ((RA,,XL1'37'))    REMOVE ANY EOTS (IED MSGS USUALLY)
*           IF THE USER WANTS TO EXAMINE THE SNA SENSE BYTES PRIOR TO
*           OUTMSG, THE CODE SHOULD BE INSERTED HERE.
*********************************************************************
*           OUTMESSAGE SUBGROUPS ARE EXECUTED AFTER THE COMPLETE       *
*           MESSAGE HAS BEEN SENT. ONLY ONE SUBGROUP WILL EXECUTE       *
```

```
*         AND IT WILL BE THE FIRST ONE WHOSE PATH IS SATISIFIED.     *
*******************************************************************
S320MG10 OUTMSG   PATH=(PATHSW,X'01')   OPTION FIELD NOT DEFINED
         HOLD     ,                     HOLD AND NOTIFY TCAM PRINTER
         ERRORMSG ,DATA=S32MSG04,DEST=C'LU3270V1',HEADER=NO
         OUTMSG   PATH=(ERRCT,X'F8')    ERRCT 8 OR MORE
         HOLD     ,                     HOLD FOR UNRECOVERABLE ERROR
         IEDVOFF  ,COUNT=(ERRCT,GE,0)   CLEAR ERRCT
         OUTMSG
         HOLD     X'000003F7FF',INTVL=15       RESEND AFTER 15 SEC
*        THE NEXT THREE IEDVOFF MACROS ARE TO COUNT TRANS ERRORS AND
*        THE NUMBER OF TEMPORARY HOLDS (HOLD WITH INTERVAL).
*        WHEN THE ERRCT IS 8, THEN A DIFFERENT OUTMSG WILL EXECUTE
*        WHICH WILL ISSUE A PERMANENT HOLD. IEDVOFF IS ONLY BEING
*        USED FOR ITS COUNTER CAPABILITY.
*        TO PREVENT ERRCT FROM GOING NEGATIVE BECAUSE OF SUBTRACTING
*        ON GOOD MESSAGES, CODE IN INHDR AND OUTHDR RESETS ERRCT TO
*        ONE WHEN IT REACHES ZERO.
         IEDVOFF  X'000003F7FF',COUNT=(ERRCT,EQ,250)  ADD IF ERROR
         IEDVOFF  ,COUNT=(ERRCT,EQ,250),UPDATE=SUB    EVERY MSG
         IEDVOFF  X'000003F7FF',COUNT=(ERRCT,EQ,250)  BAD MSGS ONLY
         ERRORMSG X'FF7FF7FF00',DATA=S32XX,DEST=C'ERRQ',EXIT=ERMSGXIT
         OUTEND
*******************************************************************
*        ERROR MESSAGES USED BY ERRORMSG MACRO AND WORK AREAS     *
*******************************************************************
S32XX    DC       AL1(25)
         DC       C'ERROR= XXXXXXXX
S32MSG01 DC       AL1(35)                      MESSAGE LENGTH
         DC       C'S32-01 TRANSMISSION ERROR, RE-ENTER'
S32MSG02 DC       AL1(42)                      MESSAGE LENGTH
         DC       C'S32-02 SYSTEM UNDER STRESS, RE-ENTER LATER'
S32MSG03 DC       AL1(34)                      MESSAGE LENGTH
         DC       C'S32-03 DESTINATION ERROR, RE-ENTER'
S32MSG04 DC       AL1(25)                      MESSAGE LENGTH
         DC       C'S32-04 OPTION FIELD ERROR'
S32MSG05 DC       AL1(38)                      MESSAGE LENGTH
         DC       C'S32-05 TERMTYPE NOT 3270 SDLC OR LOCAL'
S32MSG06 DC       AL1(30)                      MESSAGE LENGTH
         DC       C'S32-06 UNKNOWN INPUT, RE-ENTER'
S32MSG07 DC       AL1(42)                      MESSAGE LENGTH
         DC       C'S32-07 PRINT NOT DEFINED FOR THIS TERMINAL'
S32MSG08 DC       AL1(31)                      MESSAGE LENGTH
         DC       C'S32-08 MHPUT FAILED, CANT PRINT'
S32RSETN DC       AL1(08)                      SDLC 3277 CLEAR SCREEN
         DC       X'F5C31140401D4013'
S32RSETL DC       AL1(10)                      LOCAL 3277 CLEAR SCREEN
         DC       X'C31140401D4013124040'
```

```
*****************************************************************
*          WORK AREA TO BUILD PRINT REQUEST MESSAGE WHEN PA1 RECEIVED   *
*****************************************************************
S32MHWRK DS       0CL21              MHPUT WORKAREA
         DC       X'0000'            RESERVED
         DC       X'000F'            USER DATA LENGTHOF 15
         DC       X'0000'            RESERVED
         DC       C'PRINT'           MESSAGE TYPE FOR APP
S32MHPRT DC       CL8' '             PRINTER NAME
S32MHSEQ DC       CL2' '             SEQ NUMBER OF MSG TO BE PRINTED
*****************************************************************
*                   OTHER CONSTANTS AND WORKAREAS                  *
*****************************************************************
STATUS   DC       X'6CD902'          STATUS MESSAGE % R STX
DVCAVAIL DC       X'C240'            BSC SENSE FOR DEVICE AVAILABLE
SDVCAVL  DC       X'0200'            SDLC SENSE FOR DEVICE AVAILABLE
S32SEQWK DC       H'0'               SEQ NUMBER WORK AREA
         LTORG
  TITLE '                           NDS MESSAGE HANDLER'
*****************************************************************
*           NDS MESSAGE HANDLER                                  *
*                                                                *
*       WILL HANDLE BRACKETS AND CHANGE OF DIRECTION             *
*       USING HALF DUPLEX FLIP-FLOP PROTOCOL                     *
*                                                                *
*       INPUT DATA WILL APPEAR AS FOLLOWS:                       *
*       A.  A C C S B B                                          *
*             I U U B U U (USER TEXT)                            *
*             D R R A F F                                        *
*                                                                *
*       B. (4 BYTES SNA SENSE)(DATA OR DFC COMMAND)              *
*                                                                *
*       SBA, BUF AND BUF ARE PRESENT WITH FORMATTED SCREENS ONLY. *
*****************************************************************
NDSMH    STARTMH DFC=FULL,LU=YES,BEXIT=NDSBXIT
         INHDR
         PATH    X'00',PATHSW       RESET PATHSW
         SETSCAN 0                  TEST FOR ZERO LENGTH BUFFER
         LTR     R15,R15            TEST RC FOR -4 (ZERO LENGTH BUFFER)
         BM      NDSZERO            DO NOT PROCESS ZERO LENGTH BUFFERS
         LR      R3,R15             SAVE ADDR OF DATA-1 FROM SETSCAN
         IEDRH   RHIND=(+DFC)       GET RH
         CLM     R15,1,=X'08'       DFC COMMAND
         BE      NDNOTDFC           BRANCH IF NO
         IEDRH   RHIND=(+EXR)       GET RH
         CLM     R15,1,=X'08'       EXCEPTION REQUEST
         BE      NDNOEXR1           BRANCH IF NO
*                ADD SENSE ERROR TEST IF REQUIRED
```

```
          SETSCAN 4                      SKIP 4 SENSE BYTES TO COMMAND
NDNOEXR1 MSGTYPE X'83'                   CANCEL COMMAND?
          PATH    X'01',PATHSW           SET PATH FOR CANCEL
          B       NDSIBF10
          MSGTYPE X'04'                  LUSTAT COMMAND
          IEDRELS                        START OUTPUT
          B       NDSIBF10
          MSGTYPE X'C1'                  SHUTDOWN COMPLETE COMMAND
          HOLD                           STOP OUTPUT
          B       NDSIBF10
          MSGTYPE ,                      ALL OTHER DFC
          B       NDSIBF10               NO PROCESSING TO DO
NDNOTDFC CLI     1(R3),X'6D'             CLEAR KEY ?
          BNE     NDSENTR                NO, GO TEST FOR ENTER
          TERRSET                        FOR CLEAR MSGGEN - DO NOT FORWARD
          B       NDSIBF10
NDSENTR  CLI     1(R3),X'7D'             ENTER KEY ?
          BNE     NDSUKWN                NO, GO TO UNKNOWN INPUT
          CLI     4(R3),X'11'            IS 4TH BYTE AN SBA (FORMATTED)
          BNE     NDSDEL3                NO, UNFORMATTED BRANCH
          MSGEDIT ((R,,,(6))),BLANK=NO DEL AID 2(CUR) SBA 2(BUF)
          B       NDSCODE                ONLY DATA LEFT, GO PROCESS
NDSDEL3  MSGEDIT ((R,,,(3))),BLANK=NO DELETE AID 2(CUR)
*****************************************************************
*         DATA STREAM IS NOW USER DATA ONLY.                    *
*****************************************************************
NDSCODE  INHDR                          THIS INHDR RESETS MSGTYPE
          CODE
*****************************************************************
*         PROCESS EXTENDED OPERATOR CONTROL COMMANDS            *
*****************************************************************
          CLI     1(3),C'/'
          BNE     NDSMTYP
          TERRSET
          B       NDSMFWD
NDSMTYP  MSGTYPE X
NDSMFWD  FORWARD DEST=C'AOPCTLI'
          B       NDSIMG10
*****************************************************************
*         PROCESS MESSAGE SWITCH    M DEST / USER MESSAGE       *
*****************************************************************
          MSGTYPE M
          FORWARD DEST=**,EOA=/
          TERRSET
          B       NDSIBF10
*****************************************************************
*         PROCESS INQUIRY MESSAGE   I 999999                    *
*****************************************************************
```

```
          MSGTYPE I
          FORWARD DEST=C'A3270I'
          B         NDSIBF10
********************************************************************
*         PROCESS NDS MESSAGE                                      *
********************************************************************
          MSGTYPE NDS
          FORWARD DEST=C'A3270I'
          B         NDSIBF10
********************************************************************
*         PROCESS CLOSE MSG TO CLOSE APPLICATIONS                  *
********************************************************************
          MSGTYPE CLOSE
          TERRSET
          FORWARD DEST=C'APPLS'
          B         NDSIBF10
********************************************************************
*         PROCESS OTHER MSGS                                       *
********************************************************************
          MSGTYPE ,                      UNIDENTIFIED MESSAGE
NDSUKWN   PATH     X'10',PATHSW           SET UNKNOWN INPUT PATHSW
          B         NDSFMSG
NDSZERO   IEDRELS                          RELEASE QUEUE ON ERROR TO AVOID
*                                          MULTIPLE TIME DELAY ELEMENTS FOR
*                                          THIS QUEUE.
NDSFMSG   FORWARD DEST=C'DLQ'              THIS MESSAGE IS TO BE CANCELED
*                                          A FORWARD IS REQ'D IF ERRORMSG USED
NDSIBF10  INBUF
          IEDRH    RHIND=(+CHNGDIR)        CK FOR CHG DIR
          CLM      R15,1,=X'08'
          BE        NDSIMG10               NO
          IEDRELS                          RELEASE QUEUE
NDSIMG10  INMSG     PATH=(PATHSW,X'01')    CANCEL RECEIVED
          CANCELMG ,                       CANCEL THE MSG
          INMSG     PATH=(PATHSW,X'10')    UNKNOWN INPUT AID OR MSG TYPE
          CANCELMG ,                       CANCEL THE MSG
          ERRORMSG ,DATA=NDSMSG04,HEADER=NO
          INMSG     ,                      WHATS LEFT SHOULD BE 3270 SDLC
          CANCELMG X'430EC6F7FF'    NOTE: BIT 31 UNDEF ERR NOT CANCELED
          MSGGEN   X'0000080000',NDSRSETN,RH=X'0380E0'
          ERRORMSG X'010405F7FF',DATA=NDSMSG01,HEADER=NO
          ERRORMSG X'0200820000',DATA=NDSMSG02,HEADER=NO
          ERRORMSG X'4002400000',DATA=NDSMSG03,HEADER=NO
          ERRORMSG X'FF7FF7FF00',DATA=NDXX,DEST=C'ERRQ',EXIT=ERMSGXIT
          INEND
          OUTHDR                           BEGIN OUT HEADER PROCESSING
          PATH     X'00',PATHSW            RESET PATHSW TO IDENTIFY ERRORS
          SETSCAN 0                        TEST FOR DATA IN BUFFER
```

```
            LTR      R15,R15              ZERO LENGTH BUFFER
            BP       NDNOZERO             BRANCH IF NO
            IEDSENSE AREA=NDSENSE         GET THE SNA SENSE
            LTR      R15,R15              TEST RETURN CODE
            BNZ      NDSOMG10             NO SENSE AVAILABLE
   *        ADD SNA SENSE ERROR TEST IF REQUIRED
            B        NDSOMG10             BRANCH
NDNOZERO LR          R3,R15               SAVE ADDR OF DATA-1 FROM SETSCAN
            IEDRH  RHIND=(*BB,*EB)        TCAM CONTROLS BRACKETS
            LOCOPT   TERMMODE,(5)         REG 5 IS ADDR OF TERMMODE OPTION
            TM       0(5),X'01'           PRINTER ?
            BO       NDSPRTR              YES
            MSGEDIT ((I,X'F1F31140401D4013',SCAN))
NDSDESC  MSGEDIT ((RA,,XL1'27'))     REMOVE ESC
            MSGEDIT ((RA,,XL1'37'))     REMOVE ANY EOTS (IED MSGS USUALLY)
            MSGEDIT  ((RA,X'15',X'35',1))
            B        NDSOMG10
NDSPRTR  MSGEDIT ((I,X'15',,))        INSERT NL AT START OF PRINTER MSGS
            B        NDSDESC
NDSOMG10 OUTMSG
            HOLD     X'0004000013',RELEASE
            HOLD     X'0000006000',INTVL=10 RETRY AFTER WAIT
            HOLD     X'0000010600',INTVL=03 HOLD ON NON RECOV ERRORS
            ERRORMSG X'FF7FF7FF00',DATA=NDXX,DEST=C'ERRQ',EXIT=ERMSGXIT
            OUTEND
NDXX        DC       AL1(25)
            DC       C'ERROR= XXXXXXXX
NDSMSG01 DC          AL1(42)                   MESSAGE LENGTH
            DC       C'N32-01 TRANSMISSION ERROR, PLEASE RE-ENTER'
NDSMSG02 DC          AL1(49)                   MESSAGE LENGTH
            DC       C'N32-02 SYSTEM UNDER STRESS, PLEASE RE-ENTER LATER'
NDSMSG03 DC          AL1(34)                   MESSAGE LENGTH
            DC       C'N32-03 DESTINATION ERROR, RE-ENTER'
NDSMSG04 DC          AL1(30)                   MESSAGE LENGTH
            DC       C'N32-04 UNKNOWN INPUT, RE-ENTER'
NDSRSETN DC          AL1(08)                   SDLC 3277 CLEAR SCREEN
            DC       X'F5C31140401D4013'
NDSENSE  DC          XL4'00000000'          SNA SENSE
            LTORG
   TITLE '                              TSO MESSAGE HANDLER'
TSOMH       STARTMH TSOMH=YES,STOP=YES,CONV=YES,LC=IN,DFC=FULL,LU=YES,      X
                  ALTMH=MHS3270,BEXIT=NDSBXIT
            INHDR
            CODE
            LOGON
            IEDHALT CHARS=C'LOGOFF',FLUSH=YES
            IEDHALT CHARS=X'939687968686',FLUSH=YES
            INBUF
```

```
                CUTOFF 3800
                CARRIAGE
                SPFSCRN
                SIMATTN
                INMSG
                ATTEN
                HANGUP
        MSGGEN X'1000000000',C'IKJ54011I TSO IS NOT ACTIVE'
        MSGGEN X'8000000000',C'IKJ54012A ENTER LOGON -'
        MSGGEN X'4000000000',C'IKJ54013I LOGON FAILED, INVALID COMMAND'
        MSGGEN X'2000000000',C'IKJ54014I TERMINAL IS NOT USABLE WITH TSO'
        MSGGEN X'0000200000',C'IKJ54015I TSO MSGS CANNOT REACH THIS TERMINAL'
        MSGGEN X'0800000000',C'IKJ54016I MAXIMUM USERS LOGGED ON, TRY LATER'
        MSGGEN X'0000004000',C'IKJ54017A TERMINAL ERROR, REENTER INPUT'
        MSGGEN X'0100000000',C'IKJ54018A MESSAGE TOO LONG, REENTER INPUT'
        MSGGEN X'0200000000',C'IKJ54020A MESSAGE LOST, REENTER INPUT'
        MSGGEN X'0000800000',X'06145AC915'
        MSGGEN X'0000400000',X'06145AC415'
        MSGGEN X'0000120000',X'06145A15'
        MSGGEN 0,X'FF'
                INEND
                OUTHDR
                IEDRH RHIND=(*BB)
                OUTBUF
                SPFMCHK
                CODE
                OUTMSG
                ATTEN
                HANGUP
        MSGGEN X'0000800000',X'06145AC915'
        MSGGEN X'0000120000',X'06145A15'
        MSGGEN X'0000200000',C'IKJ54015I TSO MSGS CANNOT REACH THIS TERMINAL'
        MSGGEN 0,X'FF'
                OUTEND
                LTORG
        TITLE '                       ERRORMSG EXIT ROUTINE'
        * R1 HAS ADDR OF HEADER BUFFER
        * R5 HAS ADDR OF ERRORMSG TEXT
        *
        * THIS ROUTINE WILL SEND A MESSAGE TO THE ERRQ THAT CONTAINS
        * THE CONTENTS OF THE MER IN TRANSLATED FORMAT
                USING *,15
        ERMSGXIT LR   4,1                 PUT ADDR OF BUFFER IN 4
                 L    4,12(4)             GET PLCB ADDR
                 L    4,92(4)             GET SCB ADDR
                 LA   4,16(4)             LOAD ADDR OF MER
                 LA   5,7(5)              POINT TO 1ST POS TO PUT MER
                 BAL  6,CNVT              CONVERT BYTE 1
```

```
            BAL   6,CNVT              CONVERT BYTE 2
            BAL   6,CNVT              CONVERT BYTE 3
            BAL   6,CNVT              CONVERT BYTE 4
            BR    14                  RETURN
    CNVT    SR    7,7                 CLEAR R1
            IC    7,0(4)              INSERT CHAR TO TRANSLATE
            LA    2,15                INSERT X'0F'
            NR    2,7                 PUT RIGHT 4 BITS IN REG 2
            SRL   7,4                 SHIFT LEFT 4 BITS TO LOW ORDER
            STC   7,0(5)              STORE IN ERROR MSG
            STC   2,1(5)              STORE IN ERROR MSG
            TR    0(1,5),HEXTRAN      TRANSLATE HEX DIGIT
            TR    1(1,5),HEXTRAN      TRANSLATE HEX DIGIT
            LA    4,1(4)              BUMP POINTER BY 1
            LA    5,2(5)              BUMP POINTER BY 2
            BR    6                   RETURN
    HEXTRAN DC    C'0123456789ABCDEF' HEX TRANSLATE TABLE
            LTORG
        TITLE '                       BIND EXITS'
    BINDXHH CSECT
            USING *,15
            NI    5(4),256-X'20'   NO BRACKETS
            NI    6(4),256-X'C0'   SET FDX
            LA    15,2             RESOLVE CONTENTION
            BR    14               RETURN
            DROP  15
    NDSBXIT CSECT
            USING *,15
            STM   0,15,SVE
            LR    12,15
            USING NDSBXIT,12
            DROP  15
            IEDLSCR             MOVE TTE SCREEN SIZE TO BIND
            LM    0,14,SVE
            BR    14
    SVE     DS    16F
            LTORG
```

ACF/TCAM BIND PARAMETERS

```
        TITLE '                      BIND IMAGE TABLES'
            IEDBTAB CBI=(BI3767,EMU3790,BTCH3790,BI3770A,BI3270NB)
    NDS3278 IEDBENT COMPROT=XL2'3080',PRIPROT=X'B1',SECPROT=X'90',       X
                TSPROF=X'03',FMPROF=X'03',TSUSAGE=XL6'000087F80000',     X
                FMTYPE=X'01',                                            X
```

```
               LUPROF=X'02',PRESERC=XL11'0000000000185018507F00'
NDS8789 IEDBENT COMPROT=XL2'3080',PRIPROT=X'B1',SECPROT=X'90',            X
               TSPROF=X'03',FMPROF=X'03',TSUSAGE=XL6'000087C60000',       X
               FMTYPE=X'01',                                              X
               LUPROF=X'01',PRESERC=XL11'000000E100000000000000'
        ENTRY IEDTSOB0
IEDTSOB0 IEDBENT COMPROT=XL2'2000',PRIPROT=X'21',SECPROT=X'40',           X
               TSPROF=X'02',FMPROF=X'02',TSUSAGE=XL6'010000000100',       X
               LUPROF=X'00',PRESERC=XL11'00',FMTYPE=X'01',                X
               LOGON=C'   LOGON ',USRDATA=C'                   '
        ENTRY IEDTSOB1
IEDTSOB1 IEDBENT COMPROT=XL2'3040',PRIPROT=X'A1',SECPROT=X'90',           X
               TSPROF=X'03',FMPROF=X'03',TSUSAGE=XL6'010085850100',       X
               LUPROF=X'01',PRESERC=XL11'00',FMTYPE=X'01',                X
               LOGON=C'   LOGON ',USRDATA=C'                   '
        ENTRY IEDTSOB2
IEDTSOB2 IEDBENT COMPROT=XL2'3080',PRIPROT=X'B1',SECPROT=X'B0',           X
               TSPROF=X'03',FMPROF=X'03',TSUSAGE=XL6'000085850000',       X
               LUPROF=X'02',FMTYPE=X'01',                                 X
               PRESERC=XL11'0000000000185018507E00',                      X
               LOGON=C'   LOGON ',USRDATA=C'                   '
        ENTRY IEDTSOB8
IEDTSOB8 IEDBENT COMPROT=XL2'3080',PRIPROT=X'B1',SECPROT=X'90',           X
               TSPROF=X'03',FMPROF=X'03',TSUSAGE=XL6'000087F80000',       X
               LUPROF=X'02',PRESERC=XL11'0000000000185018507F00',         X
               FMTYPE=X'01',                                              X
               LOGON=C'   LOGON ',USRDATA=C'                   '
        IEDBEND TSO=NO,TOTE=NO
```

ACF/TCAM SAMPLE

ACF/TCAM USS TABLES


```
        PRINT NOGEN
USS3270 IEDUTAB  GEN=NO
        IEDUVERB INITS,CMD=INITS
        IEDUPARM INLU
        IEDUVAL
        IEDUVAL  ,C'MHS3270'
        IEDUPARM INMODE
        IEDUVAL
        IEDUVAL  ,C'BI3270NB'
        IEDUVERB TCAM,CMD=INITS
        IEDUPARM INLU
        IEDUVAL
        IEDUVAL  ,C'MHS3270'
        IEDUPARM INMODE
        IEDUVAL
        IEDUVAL  ,C'BI3270NB'
        IEDUVERB LOGON,CMD=INITS,UDATLEN=14
        IEDUPARM INUDATA
        IEDUVAL
        IEDUPARM INLU
        IEDUVAL
        IEDUVAL  ,C'TSOMH'
        IEDUPARM INMODE
        IEDUVAL
        IEDUVAL  ,C'IEDTSOB0'
        IEDUVERB TSO,CMD=INITS,UDATLEN=14
        IEDUPARM INUDATA
        IEDUVAL
        IEDUPARM INLU
        IEDUVAL
        IEDUVAL  ,C'TSOMH'
        IEDUPARM INMODE
        IEDUVAL
        IEDUVAL  ,C'IEDTSOB0'
        IEDUVERB IMS,CMD=INITS
        IEDUPARM INLU
        IEDUVAL
        IEDUVAL  ,C'IMS'
        IEDUPARM INMODE
        IEDUVAL
        IEDUVAL  ,C'BI3270NB'
        IEDUVERB CICS,CMD=INITS
        IEDUPARM INLU
        IEDUVAL
        IEDUVAL  ,C'CICS'
```

```
          IEDUPARM INMODE
          IEDUVAL
          IEDUVAL  ,C'BI3270NB'
          IEDUVERB TERMS,CMD=TERMS
          IEDUPARM TMLU
          IEDUVAL
          IEDUVAL  ,C'MHS3270'
          IEDUVERB LOGOFF,CMD=TERMS
          IEDUPARM TMLU
          IEDUVAL
          IEDUVAL  ,C'TSOMH'
          IEDUVERB TERMI,CMD=TERMS
          IEDUPARM TMLU
          IEDUVAL
          IEDUVAL  ,C'IMS'
          IEDUVERB TERMC,CMD=TERMS
          IEDUPARM TMLU
          IEDUVAL
          IEDUVAL  ,C'CICS'
          IEDUEND
          END
*
*
*
          PRINT NOGEN
USSNDS    IEDUTAB  GEN=NO
          IEDUVERB INITS,CMD=INITS
          IEDUPARM INLU
          IEDUVAL
          IEDUVAL  ,C'NDSMH'
          IEDUPARM INMODE
          IEDUVAL
          IEDUVAL  ,C'NDS3278'
          IEDUVERB TCAM,CMD=INITS
          IEDUPARM INLU
          IEDUVAL
          IEDUVAL  ,C'NDSMH'
          IEDUPARM INMODE
          IEDUVAL
          IEDUVAL  ,C'NDS3278'
          IEDUVERB LOGON,CMD=INITS,UDATLEN=14
          IEDUPARM INUDATA
          IEDUVAL
          IEDUPARM INLU
          IEDUVAL
          IEDUVAL  ,C'TSOMH'
          IEDUPARM INMODE
          IEDUVAL
```

```
                IEDUVAL  ,C'IEDTSOB8'
                IEDUVERB TSO,CMD=INITS,UDATLEN=14
                IEDUPARM INUDATA
                IEDUVAL
                IEDUPARM INLU
                IEDUVAL
                IEDUVAL  ,C'TSOMH'
                IEDUPARM INMODE
                IEDUVAL
                IEDUVAL  ,C'IEDTSOB8'
                IEDUVERB IMS,CMD=INITS
                IEDUPARM INLU
                IEDUVAL
                IEDUVAL  ,C'IMS'
                IEDUPARM INMODE
                IEDUVAL
                IEDUVAL  ,C'NDS3278'
                IEDUVERB CICS,CMD=INITS
                IEDUPARM INLU
                IEDUVAL
                IEDUVAL  ,C'CICS'
                IEDUPARM INMODE
                IEDUVAL
                IEDUVAL  ,C'NDS3278'
                IEDUVERB TERMS,CMD=TERMS
                IEDUPARM TMLU
                IEDUVAL
                IEDUVAL  ,C'NDSMH'
                IEDUVERB LOGOFF,CMD=TERMS
                IEDUPARM TMLU
                IEDUVAL
                IEDUVAL  ,C'TSOMH'
                IEDUVERB TERMI,CMD=TERMS
                IEDUPARM TMLU
                IEDUVAL
                IEDUVAL  ,C'IMS'
                IEDUVERB TERMC,CMD=TERMS
                IEDUPARM TMLU
                IEDUVAL
                IEDUVAL  ,C'CICS'
                IEDUEND
                END
        *
        *
        *
                PRINT NOGEN
USS3767         IEDUTAB  GEN=NO
                IEDUVERB INITS,CMD=INITS
```

```
          IEDUPARM INLU
          IEDUVAL
          IEDUVAL  ,C'MH3767'
          IEDUPARM INMODE
          IEDUVAL
          IEDUVAL  ,C'BI3767'
          IEDUVERB TCAM,CMD=INITS
          IEDUPARM INLU
          IEDUVAL
          IEDUVAL  ,C'MH3767'
          IEDUPARM INMODE
          IEDUVAL
          IEDUVAL  ,C'BI3767'
          IEDUVERB LOGON,CMD=INITS,UDATLEN=14
          IEDUPARM INUDATA
          IEDUVAL
          IEDUPARM INLU
          IEDUVAL
          IEDUVAL  ,C'TSOMH'
          IEDUPARM INMODE
          IEDUVAL
          IEDUVAL  ,C'IEDTSOB1'
          IEDUVERB TSO,CMD=INITS,UDATLEN=14
          IEDUPARM INUDATA
          IEDUVAL
          IEDUPARM INLU
          IEDUVAL
          IEDUVAL  ,C'TSOMH'
          IEDUPARM INMODE
          IEDUVAL
          IEDUVAL  ,C'IEDTSOB1'
          IEDUVERB IMS,CMD=INITS
          IEDUPARM INLU
          IEDUVAL
          IEDUVAL  ,C'IMS'
          IEDUPARM INMODE
          IEDUVAL
          IEDUVAL  ,C'BI3767'
          IEDUVERB CICS,CMD=INITS
          IEDUPARM INLU
          IEDUVAL
          IEDUVAL  ,C'CICS'
          IEDUPARM INMODE
          IEDUVAL
          IEDUVAL  ,C'BI3767'
          IEDUVERB TERMS,CMD=TERMS
          IEDUPARM TMLU
          IEDUVAL
```

```
            IEDUVAL  ,C'MH3767'
            IEDUVERB LOGOFF,CMD=TERMS
            IEDUPARM TMLU
            IEDUVAL
            IEDUVAL  ,C'TSOMH'
            IEDUVERB TERMI,CMD=TERMS
            IEDUPARM TMLU
            IEDUVAL
            IEDUVAL  ,C'IMS'
            IEDUVERB TERMC,CMD=TERMS
            IEDUPARM TMLU
            IEDUVAL
            IEDUVAL  ,C'CICS'
            IEDUEND
            END
    *
    *
    *
            PRINT NOGEN
USS3770     IEDUTAB  GEN=NO
            IEDUVERB INITS,CMD=INITS
            IEDUPARM INLU
            IEDUVAL
            IEDUVAL  ,C'SNAMH'
            IEDUPARM INMODE
            IEDUVAL
            IEDUVAL  ,C'BI3770A'
            IEDUVERB TCAM,CMD=INITS
            IEDUPARM INLU
            IEDUVAL
            IEDUVAL  ,C'SNAMH'
            IEDUPARM INMODE
            IEDUVAL
            IEDUVAL  ,C'BI3770A'
            IEDUVERB LOGON,CMD=INITS,UDATLEN=14
            IEDUPARM INUDATA
            IEDUVAL
            IEDUPARM INLU
            IEDUVAL
            IEDUVAL  ,C'TSOMH'
            IEDUPARM INMODE
            IEDUVAL
            IEDUVAL  ,C'IEDTSOB1'
            IEDUVERB TSO,CMD=INITS,UDATLEN=14
            IEDUPARM INUDATA
            IEDUVAL
            IEDUPARM INLU
            IEDUVAL
```

```
IEDUVAL  ,C'TSOMH'
IEDUPARM INMODE
IEDUVAL
IEDUVAL  ,C'IEDTSOB1'
IEDUVERB IMS,CMD=INITS
IEDUPARM INLU
IEDUVAL
IEDUVAL  ,C'IMS'
IEDUPARM INMODE
IEDUVAL
IEDUVAL  ,C'BI3770A'
IEDUVERB CICS,CMD=INITS
IEDUPARM INLU
IEDUVAL
IEDUVAL  ,C'CICS'
IEDUPARM INMODE
IEDUVAL
IEDUVAL  ,C'BI3770A'
IEDUVERB TERMS,CMD=TERMS
IEDUPARM TMLU
IEDUVAL
IEDUVAL  ,C'SNAMH'
IEDUVERB LOGOFF,CMD=TERMS
IEDUPARM TMLU
IEDUVAL
IEDUVAL  ,C'TSOMH'
IEDUVERB TERMI,CMD=TERMS
IEDUPARM TMLU
IEDUVAL
IEDUVAL  ,C'IMS'
1EDUVERB TERMC,CMD=TERMS
IEDUPARM TMLU
IEDUVAL
IEDUVAL  ,C'CICS'
IEDUEND
END
```

ACF/TCAM SAMPLE

CHAPTER 7 : <u>SAMPLE NCP SOURCE</u>

Two NCP samples are included. The first NCP source is designed to operate on an IBM 3704. The larger NCP illustrates various mixes of device types. All supported line disciplines are illustrated and are based on actual experience and industry recommendations. The DOS/VS or the OS/VS JCL for the assembly of these NCP's are contained in the appropriate section of this guide.

<u>REFERENCES</u>

IBM 3704 And 3705 Communications Controllers
  Network Control Program/VS Generation And Utilities
  Guide And Reference Manual (for OS/VS And DOS/VS
  VTAM Users)
	GC30-3008

Teleprocessing Preinstallation Guide For IBM 3704 And 3705 Communication Controllers	GC30-3020

IBM 3705 Advanced Communications Function for
  Network Control Program/VS Generation And Utilities
  Guide And Reference Manual
	SC30-3116

DOS/VS VTAM System Programmers Guide	GC27-6957
ACF/VTAM System Programmers Guide (DOS)	SC38-0268
ACF/VTAM Installation Guide (DOS)	SC38-0270
ACF/VTAM Reference Summary (DOS)	SX27-3022
OS/VS1 VTAM System Programmer's Guide	GC27-6996
OS/VS VTAM Reference Summary	GX27-0034
OS/VS2 SVS VTAM System Programmer's Guide	GC27-0049
OS/VS2 VTAM System Programming Library:VTAM	GC28-0688
ACF/VTAM System Programmers Guide	SC38-0258
ACF/VTAM Installation Guide	SC38-0269

SAMPLE NCP SOURCE

ACF/VTAM Reference Summary		SX27-3021
OS/VS	TCAM Concepts and Applications	GC30-2049
OS/VS	TCAM System Programmer's Guide	GC30-2051
OS/VS	TCAM Macro Reference Guide	GC30-2052
OS/VS	TCAM Application Programmer's Guide	GC30-3036
OS/VS TCAM Installation and Migration Guide		GC30-3039
OS/VS TCAM Program Reference Summary		GY30-1024
TCAM Migration To NCP and SNA Featuring IBM 3790		GG22-9100
ACF/TCAM General Information		GC30-2050
ACF/TCAM Concepts and Planning		GC30-3049
ACF/TCAM System Programmer's Guide		SC30-3117
ACF/TCAM Macro Reference Guide		SC30-3118
ACF/TCAM Application Programmer's Guide		SC30-3119
ACF/TCAM Installation and Migration Guide		SC30-3121
ACF/TCAM MSNF Program Reference Summary Supplement		LD21-0003
ACF/TCAM Program Reference Summary		LY30-3037

7.1 : SAMPLE NCP FOR 3704

```
*******************************************************************
*        NCP 5 ONLY, NOT SUPPORTED BY ACF/NCP/VS                  *
*        SOURCE FOR NCP GENERATION (ALL VTAM LEVELS AND TCAM 10)  *
*        SUPPORTS BATCH AND INQUIRY FOR SDLC PHYSICAL UNITS       *
*        THIS GENERATION IS FOR IBM 3704                          *
*******************************************************************


*******************************************************************
*                                                                 *
*        PCCU SPECIFICATIONS - OS/VS   (VTAM ONLY)                *
*                                                                 *
*******************************************************************


NCPSTART PCCU  CUADDR=07F,          3704 CONTROL UNIT ADDRESS      X
               AUTODMP=NO,          PROMPT BEFORE DUMPING NCP      X
               AUTOIPL=YES,         AUTOIPL AND RESTART            X
               DUMPDS=NCPDUMP,      AUTODUMP REQUESTED             X
               INITEST=YES          NCP INITIALIZATION TEST


*******************************************************************
*                                                                 *
*        PCCU SPECIFICATIONS FOR DOS/VS   (VTAM ONLY)             *
*                                                                 *
*******************************************************************


NCPSTART PCCU  CUADDR=07F,          3704 CONTROL UNIT ADDRESS      X
               AUTODMP=NO,          PROMPT WHEN NCP FAILS          X
               AUTOIPL=YES,          NO AUTOIPL AND RESTART        X
               DUMPDS=SYS007,       DS FOR DUMP OPTION             X
               INITEST=NO,          NO INITIAL TEST                X
               NCPLUB=SYS008        LOAD MODULE NAME
```

.

SAMPLE NCP FOR 3704


```
********************************************************************
*                                                                  *
*          BUILD MACRO SPECIFICATIONS FOR OS                       *
*                                                                  *
*                                                                  *
********************************************************************


NCPBUILD BUILD MAXSUBA=3,        MUST BE SAME AS IN VTAM STR DEF    X
               LOADLIB=NCPLOAD,  LIBRARY FOR NCP LOAD MODULE        X
               OBJLIB=NCPBAT,    LIBRARY FOR ASSEMBLER OUTPUTS      X
               LESIZE=320,       REGION SIZE FOR LINK-EDIT          X
               TYPSYS=OS,        OS USED FOR STAGE 2                X
               QUALIFY=SYS1,     1ST LEVEL QUALIFIER                X
               UNIT=SYSDA,       DATA SET FOR ASSEMBLY              X
               MEMSIZE=64,       3704 STORAGE SIZE IS  64K BYTES    X
               TYPGEN=NCP,       NCP ONLY                           X
               ABEND=YES,        ABEND FACILITY INCLUDED            X
               ANS=YES,          AUTOMATIC NETWORK SHUTDOWN (DEFAULT)X
               ASMXREF=NO,       NO ASSEMBLER CROSS-REFERENCE       X
               BFRS=64,          NCP BUFFER SIZE                    X
               CHANTYP=TYPE1,    PRIMARY CHANNEL ADAPTER            X
               ERASE=NO,         DO NOT ERASE BUFFERS (DEFAULT)     X
               ENABLTO=2.2,      LEASED LINE ONLY (DEFAULT)         X
               JOBCARD=MULTI,    JOBCARDS PROVIDED BY NCP GEN       X
               MODEL=3704,                                          X
               NEWNAME=NCPBAT,   NAME OF THIS LOAD MODULE           X
               OLT=YES,          ONLINE TEST AVAILABLE(DEFAULT)     X
               SLODOWN=12,       SLOWDOWN WHEN 12% OF BUFFERS AVAIL X
               SUBAREA=3,        SUBAREA ADDRESS = 3                X
               TRACE=(YES,10)    10 ADDRESS-TRACE ENTRIES(DEFAULT)
```

```
*********************************************************************
*                                                                   *
*          BUILD MACRO SPECIFICATIONS DOS                           *
*                                                                   *
*********************************************************************


NCPBUILD BUILD MAXSUBA=3,           MUST BE SAME AS IN VTAM STR DEF    X
               TYPSYS=DOS,          DOS USED FOR STAGE 2              X
               MEMSIZE=64,          3704 STORAGE SIZE IS  64K BYTES   X
               TYPGEN=NCP,          NCP ONLY                          X
               ABEND=YES,           ABEND FACILITY INCLUDED           X
               ANS=YES,             AUTOMATIC NETWORK SHUTDOWN(DEFAULT) X
               ASMXREF=NO,          NO ASSEMBLER CROSS-REFERENCE(DEFAULTX
               BFRS=64,             NCP BUFFER SIZE                   X
               CHANTYP=TYPE1,       PRIMARY CHANNEL ADAPTER           X
               ERASE=NO,            DO NOT ERASE BUFFERS (DEFAULT)    X
               ENABLTO=2.2,         LEASED LINE ONLY(DEFAULT)         X
               JOBCARD=MULTI,       JOBCARDS PROVIDED BY NCP GEN      X
               MODEL=3704,                                            X
               NEWNAME=NCPBAT,      NAME OF THIS LOAD MODULE          X
               OLT=YES,             ONLINE TEST AVAILABLE (DEFAULT)   X
               SLODOWN=12,          SLOWDOWN WHEN 12% OF BUFFERS AVAIL X
               SUBAREA=3,           SUBAREA ADDRESS = 3               X
               TRACE=(YES,10)       10 ADDRESS-TRACE ENTRIES(DEFAULT)


*********************************************************************
*                                                                   *
*          SYSCNTRL OPTIONS FOR VTAM OR TCAM                        *
*                                                                   *
*          NOTE THAT OPERATOR CONTROLS ARE NOT INCLUDED.            *
*                                                                   *
*********************************************************************
NCPSYSC SYSCNTRL OPTIONS=(MODE,                                       X
                RCNTRL,RCOND,RECMD,RIMM,ENDCALL,                      X
                BHSASSC)
```

SAMPLE NCP FOR 3704


```
*********************************************************************
*         HOST MACRO SPECIFICATIONS OS VTAM                        *
*         UNITSZ TIMES MAXBFRU MINUS BFRPAD EQUALS MAX MESSAGE SIZE *
*         FOR INBOUND MESSAGES                                     *
*********************************************************************


NCPHOST   HOST   INBFRS=5,         INITIAL 3704 ALLOCATION                X
                 MAXBFRU=4,        VTAM BUFFER UNIT ALLOCATION            X
                 UNITSZ=84,                                               X
                 BFRPAD=28,        VTAM(OS=28, DOS=15, ACF=0), EXTM=2     X
                 DELAY=.2,         .2 SECOND ATTENTION DELAY              X
                 STATMOD=YES,      YES VTAM, NO FOR EXTM                  X
                 TIMEOUT=(120.0)   AUTO SHUT DOWN IF NO RESP IN 120SEC


*********************************************************************
*         HOST MACRO SPECIFICATIONS DOS/VS                         *
*         DOS VTAM REQUIRES BFRPAD=15                              *
*                                                                  *
*********************************************************************


NCPHOST   HOST   INBFRS=5,         INITIAL 3704 ALLOCATION                X
                 MAXBFRU=6,        VTAM BUFFER UNIT ALLOCATION            X
                 UNITSZ=88,        VTAM BUFFER SIZE MUST BE MULT OF 8     X
                 BFRPAD=15,        DOS VTAM 15, EXTM=2                    X
                 DELAY=.5,         .5 SECOND ATTENTION DELAY              X
                 STATMOD=YES,      YES FOR DOS VTAM, NO FOR EXTM          X
                 TIMEOUT=(120.0)   AUTO SHUT DOWN IF NO RESP IN 120SEC


*********************************************************************
*         CSB MACRO SPECIFICATIONS                                 *
*                                                                  *
*********************************************************************


NCPCSB    CSB    SPEED=(134),      BUS MACH CLOCK                         X
                 MOD=0,            SCANNER ADDRESS 000 TO 01F             X
                 TYPE=TYPE1        TYPE 1 COMM SCANNER (DEFAULT
```

```
*********************************************************************
*                                                                   *
*           SPECIFICATIONS FOR SDLC LEASED LINES                    *
*           GROUP MACRO SPECIFICATIONS                              *
*                                                                   *
*********************************************************************


SDLCGP1    GROUP LNCTL=SDLC,         SYNCHRONOUS DATA LINK           X
                 DIAL=NO,            REQUIRED FOR LEASED LINE        X
                 REPLYTO=1.0,        USE DEFAULT                     X
                 TYPE=NCP            NCP ONLY


*********************************************************************
*                                                                   *
*           LINE MACRO SPECIFICATION - FULL-DUPLEX, LEASED          *
*           MAY BE USED FOR 3790, 3600, OR 3650                     *
*                                                                   *
*           NOTE: LINE SPEED MAY BE RAISED TO 2400 FOR              *
*                 ALL PHYSICAL UNITS AND TO 4800 FOR 3600 AND 3650  *
*                 WITHOUT DOING A NEW GEN OF NCP.                   *
*                 RETRIES VALUE FOR LINE SHOULD BE GREATER THAN 30  *
*                 SECONDS AND LESS THAN ONE MINUTE FOR 3650.        *
*                                                                   *
*                                                                   *
*********************************************************************


SDLC1     LINE  ADDRESS=(000),       TRANSMIT AND RECEIVE ADDRESS    X
                DUPLEX=HALF,         REQUIRED FOR SWITCHED BACKUP    X


    OR


SDLC1     LINE  ADDRESS=(000,001),   TRANSMIT AND RECEIVE ADDRESSES  X
                DUPLEX=FULL,         MODEM IS STRAPPED FOR FULL DUPLEX X
                SPEED=1200,          SPEED MAY BE HIGHER(SEE NOTES)  X
                NRZI=YES,            SPECIFY YES ONLY IF REQUIRED    X
                NEWSYNC=NO,          CHECK MODEM REQUIREMENTS        X
                CLOCKNG=EXT,         MODEM PROVIDES CLOCKING         X
                POLLED=YES,                                          X
                RETRIES=(5,10,4)     5 RETRIES PER RECOVERY SEQUENCE
```

SAMPLE NCP FOR 3704

```
    ***********************************************************
    *                                                         *
    *           SERVICE ORDER FOR SDLC LINK                   *
    *                                                         *
    ***********************************************************^**************
             SERVICE ORDER=(CL3790)


    ***********************************************************
    *                                                         *
    *           PU MACRO SPECIFICATION FOR 3790 LINK          *
    *                                                         *
    ***********************************************************


    CL3790   PU      ADDR=C1,            PU ADDRESS = A (EBCDIC)         X
                     MAXDATA=265,        MAXIMUM AMOUNT OF DATA          X
                     PUTYPE=2,                                           X
                     PACING=(1,1),       MAX FOR 3790                    X
                     VPACING=(2,1),      TWICE PACING VALUE              X
                     PASSLIM=7,          EQUAL TO MAXOUT                 X
                     MAXOUT=7,           MAX PATH INFO UNITS BEFORE RES  X
                     ISTATUS=INACTIVE    ACTIVATE VIA OPERATOR


    ***********************************************************
    *                                                         *
    *           LOGICAL UNIT SPECIFICATIONS                   *
    *                                                         *
    ***********************************************************


    INBATCH2 LU      LOCADDR=1,          IN REQ'D FOR 1ST LU             X
                     ISTATUS=ACTIVE
    INQDEM12 LU      LOCADDR=2,                                          X
                     ISTATUS=ACTIVE
    INQDEM13 LU      LOCADDR=3,                                          X
                     ISTATUS=ACTIVE
    INQDEM14 LU      LOCADDR=4
```

```
****************************************************************
*                                                              *
*        SERVICE ORDER FOR 3600'S FOR SSS TRANSFER ONLY AND FOR *
*        OPERATIONAL USE.                                      *
*                                                              *
****************************************************************
         SERVICE ORDER=(CL3600,C36SS)


****************************************************************
*                                                              *
*        PU MACRO SPECIFICATION FOR 3600 LINK                  *
*                                                              *
****************************************************************

CL3600   PU     ADDR=C1,            PU ADDRESS = A (EBCDIC)         X
                PUTYPE=2,                                           X
                MAXDATA=80,         MATCH BUFFER VALUE IN 3601      X
                MAXOUT=3,           MAX PATH INFO UNITS BEFORE RES  X
                PASSLIM=1,                                          X
                PACING=(0),         BEST FOR INQUIRY RESPONSE       X
                VPACING=(0),        CHANGE IF NCP SLOWDOWN          X
                ISTATUS=INACTIVE    ACTIVATE VIA OPERATOR
****************************************************************
*                                                              *
*        LOGICAL UNIT SPECIFICATIONS                           *
*                                                              *
****************************************************************
FALUA1   LU     LOCADDR=1,ISTATUS=INACTIVE                         X
FALUA2   LU     LOCADDR=2,                                         X
                ISTATUS=ACTIVE
FALUA3   LU     LOCADDR=3,                                         X
                ISTATUS=ACTIVE
FALUA4   LU     LOCADDR=4,                                         X
                ISTATUS=ACTIVE
```

```
******************************************************************
*                                                                *
*         PU MACRO SPECIFICATION FOR 3600 FOR SSS                *
*                                                                *

******************************************************************
CL36SS    PU    ADDR=C1,             PU ADDRESS = A (EBCDIC)       X
                PUTYPE=2,                                          X
                MAXDATA=265,         MAXIMUM AMOUNT OF DATA        X
                MAXOUT=3,            MAX PATH INFO UNITS BEFORE RES X
                PASSLIM=1,                                         X
                ISTATUS=INACTIVE     ACTIVATE VIA OPERATOR
******************************************************************
*                                                                *
*         LOGICAL UNIT SPECIFICATIONS                            *
*                                                                *
******************************************************************
FALUA1SS  LU    LOCADDR=1,           FA REQ'D FOR 1ST LU           X
                PACING=(3,1),                                      X
                VPACING=(4,1),       IF NO SLOWDOWN, INCREASE VPACING X
                ISTATUS=ACTIVE
```

```
**********************************************************************
*                                                                    *
*           SERVICE ORDER FOR SDLC 3650 (FULL DUPLEX)                 *
*                                                                    *
**********************************************************************
          SERVICE ORDER=(STORE1)



**********************************************************************
*                                                                    *
*           PU MACRO SPECIFICATION FOR 3650                          *
*                                                                    *
**********************************************************************


STORE1    PU      ADDR=C4,            PU ADDRESS = D (EBCDIC)          X
                  CUTYPE=SDLC1,                                        X
                  MAXOUT=7,           MAX PATH INFO UNITS BEFORE RES   X
                  MAXDATA=265,        6 BYTE TH, 3 BYTE RH, 256 BYTE RU X
                  PASSLIM=5,          LIMIT IS 5 PIUS PER INDUSTRY SPEC X
                  ISTATUS=INACTIVE,   ACTIVATE VIA OPERATOR            X
                  PACING=(1,1),                                       X
                  VPACING=(3,1)
**********************************************************************
*                                                                    *
*           LOGICAL UNIT SPECIFICATIONS                              *
*                                                                    *
**********************************************************************
QESTORE1 LU       LOCADDR=1,          REQ'D FOR 1ST LU                 X
                  PACING=(7,1),       IMPROVES LOADING 3651            X
                  VPACING=(4,1),      DECREASE IF SLOWDOWN WITH SSS    X
                  ISTATUS=ACTIVE
QECREDIT LU       LOCADDR=2,                                           X
                  PACING=(0),                                         X
                  VPACING=(0)
QE365311 LU       LOCADDR=3
QE365312 LU       LOCADDR=4
QE365313 LU       LOCADDR=5
QE365314 LU       LOCADDR=6
QE365315 LU       LOCADDR=7
QE327511 LU       LOCADDR=8
QE327512 LU       LOCADDR=9,PACING=(2,1)
QE327513 LU       LOCADDR=10,PACING=(2,1)
QE327514 LU       LOCADDR=11,PACING=(2,1)
QE327515 LU       LOCADDR=12,PACING=(2,1)
QEINT1   LU       LOCADDR=13,PACING=(2,1)
QEINT2   LU       LOCADDR=14
```

```
*****************************************************************
*                                                               *
*         GENEND DELIMITER                                      *
*                                                               *
*****************************************************************
          GENEND
          END
/*
```

7.2 : SAMPLE NCP FOR 3705 (MULTI-PURPOSE)

```
*****************************************************************
*        SOURCE FOR NCP 5.0 OR ACF/NCP/VS                       *
*        SUPPORTS BASIC, SDLC AND REMOTE 370X                   *
*****************************************************************
```

PCCU SPECIFICATIONS - OS/VS (VTAM)

```
*****************************************************************

NCPSTART PCCU  CUADDR=0BF,       3705 CONTROL UNIT ADDRESS      X
               AUTODMP=NO,       PROMPT BEFORE DUMPING NCP      X
               AUTOSYN=NO,       PROMPT OPERATOR IF NCP LOADED  X
               MAXDATA=3000,     ALLOW FOR 3270 BSC             X
               CONFGDS=NCP001,   VTAM 2 ONLY                    X
               AUTOIPL=YES,      AUTOIPL AND RESTART            X
               DUMPDS=NCPDUMP,   AUTODUMP REQUESTED             X
               INITEST=YES       NCP INITIALIZATION TEST
```

PCCU SPECIFICATIONS FOR DOS/VS(VTAM)

```
*****************************************************************

NCPSTART PCCU  CUADDR=0BF,       3705 CONTROL UNIT ADDRESS      X
               AUTODMP=NO,       PROMPT WHEN NCP FAILS          X
               AUTOSYN=YES,      NO PROMPT IF ALREADY LOADED    X
               MAXDATA=3000,     ALLOW FOR 3270 BSC             X
               AUTOIPL=YES,      AUTOIPL AND RESTART            X
               DUMPDS=SYS007,    DS FOR DUMP OPTION             X
               INITEST=NO,       NO INITIAL TEST                X
               NCPLUB=SYS008     LOAD MODULE NAME
```

NOTE: MAXDATA must be less than MAXBFRU X UNITSZ - BFRPAD. It must be
       be greater than the largest PIU passed through the NCP.

SAMPLE NCP FOR 3705

PCCU SPECIFICATIONS FOR ACF/VTAM OS/VS


```
*         PCCU SPECIFICATIONS - ACF/VTAM  OS/VS                    *
*****************************************************************


NCPACF   PCCU   CUADDR=418,       3705 CONTROL UNIT ADDRESS         X
                MAXDATA=3000,     MAX OUTBOUND PIU                  X
                AUTOSYN=YES,      NO PROMPT IF ALREADY LOADED       X
                AUTODMP=NO,       PROMPT BEFORE DUMPING NCP         X
                AUTOIPL=YES,      AUTOIPL AND RESTART NOT AUTO      X
                DUMPDS=NCPDUMP,   AUTODUMP REQUESTED                X
                SUBAREA=13,       SAME AS HOST MACRO                X
                INITEST=NO        NCP INITIALIZATION TEST
```


PCCU SPECIFICATIONS FOR ACF/VTAM DOS/VS


```
*         PCCU SPECIFICATIONS - ACF/VTAM  DOS/VS
*****************************************************************


NCPACF   PCCU   CUADDR=070,       3705 CONTROL UNIT ADDRESS         X
                AUTODMP=NO,       PROMPT WHEN NCP FAILS             X
                MAXDATA=3000,     ALLOW FOR 3270 BSC                X
                AUTOIPL=YES,      AUTOIPL AND RESTART               X
                DUMPDS=SYS007,    DS FOR DUMP OPTION                X
                INITEST=NO,       NO INITIAL TEST                   X
                AUTOSYN=YES,      NO PROMPT IF ALREADY LOADED       X
                SUBAREA=12,       SAME AS HOST MACRO                X
                NCPLUB=SYS008     LOAD MODULE NAME
```

NOTE: MAXDATA must be less than MAXBFRU X UNITSZ - BFRPAD. It must be
       be greater than the largest PIU passed through the NCP.
       If using IBM 3278 Model 4, MAXDATA should be 4000.

BUILD MACRO SPECIFICATIONS FOR OS/VS

```
********************************************************************

NCPBUILD BUILD MAXSUBA=15,          MUST BE SAME AS IN VTAM STR DEF       X
              LOADLIB=NCPLOAD,      LIBRARY FOR NCP LOAD MODULE           X
              OBJLIB=NCPOBJ,        LIBRARY FOR ASSEMBLER OUTPUTS         X
              LESIZE=320,           REGION SIZE FOR LINK-EDIT             X
              TYPSYS=OS,            OS USED FOR STAGE 2                    X
              QUALIFY=SYS1,         1ST LEVEL QUALIFIER                    X
              UNIT=SYSDA,           DATA SET FOR ASSEMBLY                  X
              MEMSIZE=112,          3705 STORAGE SIZE IS 112K BYTES        X
              TYPGEN=NCP-LR,        NCP WITH REMOTE SUPPORT                X
              ABEND=YES,            ABEND FACILITY INCLUDED                X
              ANS=YES,              AUTOMATIC NETWORK SHUTDOWN             X
NOTE: Should be yes for PEP generation.
              ASMXREF=NO,           NO ASSEMBLER CROSS-REFERENCE           X
              BFRS=64,              NCP BUFFER SIZE                        X
NOTE: Note channel type
              CHANTYP=TYPE2,        PRIMARY CHANNEL ADAPTER                X
              CSMHDR=27F5C711C3F0405C40C8C4D9405C, 3270 CRITSIT HEADERX
              CSMHDRC=40E3C5E7E3405C5C, 3270 CRITST HEADER EXTRA TEXT X
              CSMSG=C3D9C9E3E2C9E35A40E385819440F040, CRITSIT MESG    X
              CSMSGC=6040C1D5E240828587A4954B, CRITST MESG EXTRA TEXT X
              CUID=,                NO SWITCHED BSC ID SEQUENCE DEVICES X
              ERASE=NO,             DO NOT ERASE BUFFERS                   X
              ENABLTO=,             NO SWITCHWD BACK_UP SUPPORT            X
              ITEXTTO=60,           TEXT TIME OUT PROVIDED BY BUILD MACRX
              JOBCARD=MULTI,        JOBCARDS PROVIDED BY NCP GEN           X
              MODEL=3705,                                                  X
              MTARTO=30,                                                   X
              MTARTRY=10,                                                  X
              NEWNAME=NCPSDL,       NAME OF THIS LOAD MODULE               X
              PNLTEST=YES,          PANEL TEST INCLUDED                    X
              OLT=YES,              ONLINE TEST AVAILABLE                  X
              SLODOWN=12,           SLOWDOWN WHEN 12% OF BUFFERS AVAIL  X
              SUBAREA=3,            SUBAREA ADDRESS = 3                    X
              TIME=,                NO TIME ON STAGE 2 EXEC CARDS          X
              TRACE=(YES,64),       64 ADDRESS-TRACE ENTRIES              X
              UT1=SYSUT1,           PREALLOCATED WORK SPACE                X
              UT2=SYSUT2,           PREALLOCATED WORK SPACE                X
              UT3=SYSUT3,           PREALLOCATED WORK SPACE                X
              XBREAK=4,             4 BREAK CHARS. FOR 300 BPS             X
              XITB=NO               NO ITB SUPPORTED BSC UNITS
```

SAMPLE NCP FOR 3705

BUILD MACRO SPECIFICATIONS DOS/VS

```
*********************************************************************

NCPBUILD BUILD MAXSUBA=15,          MUST BE SAME AS IN VTAM STR DEF    X
                TYPSYS=DOS,         DOS USED FOR STAGE 2               X
                MEMSIZE=112,        3705 STORAGE SIZE IS 112K BYTES    X
                TYPGEN=NCP-LR,      NCP WITH REMOTE SUPPORT            X
                ABEND=YES,          ABEND FACILITY INCLUDED            X
                ANS=YES,            AUTOMATIC NETWORK SHUTDOWN         X
        NOTE: Should be yes for PEP generation.
                ASMXREF=NO,         NO ASSEMBLER CROSS-REFERENCE       X
                BFRS=64,            NCP BUFFER SIZE                    X
        NOTE: Note channel type
                CA=TYPE2,           NEW FOR NCP5                       X
                CHANTYP=TYPE2,      PRIMARY CHANNEL ADAPTER            X
                CSMHDR=27F5C711C3F0405C40C8C4D9405C, 3270 CRITSIT HEADERX
                CSMHDRC=40E3C5E7E3405C5C, 3270 CRITST HEADER EXTRA TEXT X
                CSMSG=C3D9C9E3E2C9E35A40E385819440F040, CRITSIT MESG   X
                CSMSGC=6040C1D5E240828587A4954B, CRITST MESG EXTRA TEXT X
                CUID=,              NO SWITCHED BSC ID SEQUENCE DEVICES X
                ERASE=NO,           DO NOT ERASE BUFFERS               X
                ENABLTO=,           NO MANUAL SWITCHED BACKUP          X
                ITEXTTO=60,         TEXT TIME OUT PROVIDED BY BUILD MACRX
                JOBCARD=MULTI,      JOBCARDS PROVIDED BY NCP GEN       X
                MODEL=3705,                                            X
                MTARTO=30,                                             X
                MTARTRY=10,                                            X
                NEWNAME=NCP500,     NAME OF THIS LOAD MODULE           X
                PNLTEST=YES,        PANEL TEST INCLUDED                X
                OLT=YES,            ONLINE TEST AVAILABLE              X
                SLODOWN=12,         SLOWDOWN WHEN 12% OF BUFFERS AVAIL X
                SUBAREA=3,          SUBAREA ADDRESS = 3                X
                TIME=,              NO TIME ON STAGE 2 EXEC CARDS      X
                TRACE=(YES,64),     64 ADDRESS-TRACE ENTRIES           X
                XBREAK=4,           4 BREAK CHARS FOR 300 BPS          X
                XITB=NO             NO ITB SUPPORTED BSC UNITS
```

BUILD MACRO SPECIFICATIONS FOR OS/VS (TWO CHANNELS)

```
*                                                           *
*       BUILD MACRO SPECIFICATIONS - TWO TYPE 4 CHANNELS    *
*                                                           *
************************************************************
HONEDEV  BUILD TYPGEN=NCP,                                        X
                MAXSUBA=31,                                       X
                PARTIAL=NO,                                       X
                MAXSSCP=2,           BOTH HOSTS ACTIVE            X
                MEMSIZE=256,                                      X
                MODEL=3705-2,                                     X
                NEWNAME=NCPACFI,                                  X
                CA=(TYPE4,TYPE4-0),                               X
                NCPCA=(ACTIVE,ACTIVE),                            X
                LTRACE=2,                                         X
                TYPSYS=OS,                                        X
                LESIZE=200,                                       X
                QUALIFY=NCP6,                                     X
                LOADLIB=NCPLIB,                                   X
                OBJLIB=NCPACFI,                                   X
                ABEND=YES,           ABEND FACILITY INCLUDED      X
                ANS=YES,             AUTOMATIC NETWORK SHUTDOWN    X
NOTE: Should be yes for PEP generation.
                ASMXREF=NO,          NO ASSEMBLER CROSS-REFERENCE X
                BFRS=64,             NCP BUFFER SIZE              X
                CSMHDR=27F5C711C3F0405C40C8C4D9405C, 3270 CRITSIT HEADERX
                CSMHDRC=40E3C5E7E3405C5C, 3270 CRITST HEADER EXTRA TEXT X
                CSMSG=C3D9C9E3E2C9E35A40E385819440F040, CRITSIT MESG     X
                CSMSGC=6040C1D5E240828587A4954B, CRITST MESG EXTRA TEXT X
                ERASE=NO,            DO NOT ERASE BUFFERS         X
                JOBCARD=MULTI,       JOBCARDS PROVIDED BY NCP GEN X
                OLT=YES,             ONLINE TEST AVAILABLE        X
                SLODOWN=12,          SLOWDOWN WHEN 12% OF BUFFERS AVAIL X
                SUBAREA=21,                                       X
                TIME=,               NO TIME ON STAGE 2 EXEC CARDS X
                TRACE=(YES,64),      64 ADDRESS-TRACE ENTRIES     X
                UNIT=VIO,            DATA SET FOR ASSEMBLY AND LINK EDIT X
                XITB=NO              NO ITB SUPPORTED BSC UNITS
```

SAMPLE NCP FOR 3705

SYSCNTRL OPTIONS FOR VTAM AND TCAM

```
****************************************************************
NCPSYSC SYSCNTRL OPTIONS=(MODE,                                 X
             RCNTRL,RCOND,RECMD,RIMM,ENDCALL,SSPAUSE,           X
             BHSASSC,NAKLIM,SESSION,XMTLMT)
```

NOTE: If the NCP does not contain Start/Stop or BSC devices, SYSCNTRL
        options will not be included in the ACF/NCP generation even if
        included in the source deck.

HOST MACRO SPECIFICATIONS OS/VS (VTAM)

```
*       OS/VS VTAM REQUIRES BFRPAD=28, STATMOD=YES, SUBAREA = 1       *
****************************************************************

NCPHOST  HOST  INBFRS=4,         INITIAL 3705 ALLOCATION        X
               MAXBFRU=20,       VTAM BUFFER UNIT ALLOCATION    X
               UNITSZ=152,       OS VTAM BUFFER SIZE            X
               BFRPAD=28,        OS VTAM 28, DOS VTAM 15,ETM 2  X
               DELAY=.1,         .1 SECOND ATTENTION DELAY -OS  X
               STATMOD=YES,      YES OS AND DOS VTAM, NO EXTM   X
               TIMEOUT=(120.0)   AUTO SHUT DOWN IF NO RESP IN 120SEC
```

HOST MACRO SPECIFICATIONS DOS/VS (VTAM)

```
*       DOS VTAM REQUIRES BFRPAD=15, STATMOD=YES, SUBAREA = 1       *
****************************************************************

NCPHOST  HOST  INBFRS=4,         INITIAL 3705 ALLOCATION          X
               MAXBFRU=20,       VTAM BUFFER UNIT ALLOCATION      X
               UNITSZ=88,        VTAM BUFFER SIZE MUST BE MULT OF 8 X
               BFRPAD=15,        OS VTAM 28, DOS VTAM 15          X
               DELAY=.1,         .1 SECOND ATTENTION DELAY        X
               STATMOD=YES,       NO FOR EXTM                     X
               TIMEOUT=(120.0)   AUTO SHUT DOWN IF NO RESP IN 120SEC
```

NOTE: UNITSZ times MAXBFRU minus BFRPAD equals MAX message size
        for HOST inbound messages.

HOST MACRO SPECIFICATIONS ACF/TCAM OR TCAM 10

```
************************************************************************
*                                                                     *
*          HOST MACRO SPECIFICATIONS OS ACF/TCAM OR TCAM 10           *
*                                                                     *
************************************************************************
NCPHOST3 HOST  INBFRS=8,            INITIAL 3705 ALLOCATION          X
               MAXBFRU=20,          TCAM BUFFER UNIT ALLOCATION      X
               SUBAREA=14,                                           X
               UNITSZ=156,          MUST MATCH MCP UNITSZ            X
               BFRPAD=17,                                            X
               DELAY=.1,            .1 SECOND ATTENTION DELAY        X
               STATMOD=YES,                                          X
               TIMEOUT=(180)        AUTO SHUT DOWN IF NO RESP IN 180SEC
```

HOST MACRO SPECIFICATIONS ACF/VTAM

```
************************************************************************
*                                                                     *
*          HOST MACRO SPECIFICATIONS OS ACF/VTAM                      *
*                                                                     *
************************************************************************
NCPHOST4 HOST  INBFRS=8,            INITIAL 3705 ALLOCATION          X
               MAXBFRU=20,          VTAM BUFFER UNIT ALLOCATION      X
               SUBAREA=13,                                           X
               UNITSZ=152,                                           X
               BFRPAD=0,                                             X
               DELAY=.1,            .1 SECOND ATTENTION DELAY -OS    X
               STATMOD=YES,                                          X
               TIMEOUT=(180)        AUTO SHUT DOWN IF NO RESP IN 180SEC
```

```
************************************************************************
*                                                                     *
*          HOST MACRO SPECIFICATIONS DOS ACF/VTAM                     *
*                                                                     *
************************************************************************
NCPHOST4 HOST  INBFRS=8,            INITIAL 3705 ALLOCATION          X
               MAXBFRU=20,          VTAM BUFFER UNIT ALLOCATION      X
               SUBAREA=12,                                           X
               UNITSZ=136,                                           X
```

```
                   BFRPAD=0,                                           X
                   DELAY=.1,          .1 SECOND ATTENTION DELAY -OS    X
                   STATMOD=YES,                                        X
                   TIMEOUT=(180)      AUTO SHUT DOWN IF NO RESP IN 180SEC
```

PATH MACRO SPECIFICATIONS ACF

```
NCPPATH4 PATH  ADJSUB=14,                                             X
               DESTSUB=9
```

CSB MACRO SPECIFICATIONS

```
     ***********************************************************************

NCPCSB    CSB    SPEED=(134,300,1200),  BUS MACH CLOCKS                X
                 MOD=0,                 SCANNER ADDRESS 020 TO 05F      X
                 TYPE=TYPE2             TYPE 2 COMM SCANNER
```

LUPOOL MACRO SPECIFICATION

```
*         (MUST BE SPECIFIED BEFORE FIRST GROUP MACRO)*
***********************************************************************

POOL1    LUPOOL  NUMBER=120        ALLOW FOR LARGE POOL
```

MTA SUPPORT

```
*    MTALCST MACROS  - MULTIPLE TERMINAL ACCESS                      *
*****************************************************************************
C2741COR MTALCST GROUP=G2741,CLOCKNG=INT,CODE=COR,                    X
              LCTYPE=2741,SPEED=134


*   MTALIST MACRO                                                     *
*****************************************************************************
MTALIST1 MTALIST LCTYPE=(2741)


* MTATABL MACROS                                                      *
*****************************************************************************
T3767COR MTATABL LCST=(C2741COR),LCTYPE=2741,CODE=COR


*   MTA GROUP                                                         *
*****************************************************************************
MTAGROUP GROUP CRETRY=6,DIAL=YES,LNCTL=SS,                            X
              TYPE=NCP


* START-STOP LINE SPECIFICATIONS                                      *
*****************************************************************************
LNMTA LINE ADDRESS=025,SPEED=134,MTALIST=MTALIST1,POLLED=NO,          X
              DUPLEX=FULL,CALL=IN,RETRIES=(2,1,2),TRANSFR=2,          X
              MONITOR=YES,DIRECTN=INOUT,                              X
              LOGAPPL=NETSOL,LOGTAB=TABLE01

MTA       TERMINAL TERM=MTA,CTERM=YES,ATTN=ENABLED,                   X
              FEATURE=(ATTN,BREAK,TOSUPPR),CRDLAY=YES

VMTA      VTERM LCST=C2741COR,BUFLIM=2
```

Note- This sample will work with VSPC and TSO through TCAM9/VTAM.

SAMPLE NCP FOR 3705

   2740 MULTI-DROP LINE

   ****

   EURGRP   GROUP CDATA=NO,CRETRY=5,DIRECTN=INOUT,ENDTRNS=EOT,   X
                   CLOCKNG=EXT,DUPLEX=HALF,LNCTL=SS,SPEED=1200,TYPE=NCP,   X
                   LOGAPPL=NETSOL,LOGTAB=TABLE01

   EURLINE   LINE ADDRESS=026,CODE=EBCD,SERVLIM=1,POLLED=YES,   X
                   RETRIES=(8,6,2),CUTOFF=1,SESSION=2,CRITSIT=YES,   X
                   SERVPRI=OLD,TERM=2740-2,XMITLIM=1,FEATURE=(CHECK),   X

   *** This POLIMIT will reduce system overhead but increase response time.

                   POLIMIT=(20,QUEUE)

                   SERVICE ORDER=(LON,BON)

   LON   TERMINAL ADDR=C1,POLL=C1

   BON   TERMINAL ADDR=C2,POLL=C2

3767 SWITCHED LINE AT 300 BAUD START/STOP

XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX

```
G3767     GROUP CRETRY=6,            RETRY 6 TIMES                      X
                DIAL=YES,            SWITCHED LINE                      X
                CRDLAY=YES,          REQUIRED                           X
                CRRATE=5,            REQUIRED FOR 300 BPS               X
                LINESIZ=130,                                            X
                MONITOR=YES,                                            X
                REPLYTO=NONE,        NO REPLY TIME OUT                  X
                TEXTTO=NONE,         NO TEXT TIME OUT                   X
                LNCTL=SS             START STOP LINE TYPE


L3767     LINE  ADDRESS=027,         LINE ADDRESS                       X
                SPEED=300,           LINE SPEED 300 BPS                 X
                CALL=IN,             CALL IN ONLY                       X
                DIRECTN=INOUT,                                          X
                TYPE=NCP,            NCP ONLY                           X
                CLOCKNG=INT,         INTERNAL CLOCKING                  X
                CODE=EBCD,           EBCD CODE CONVERSION               X
                DUPLEX=FULL          MODEM STRAPPING IS FULL DUPLEX


T3767     TERMINAL TERM=2741,        3767 DEFINED AS 2741               X
                UTERM=T3767A,        LOGICAL TERMINAL NAME              X
                ATTN=ENABLED,        ENABLE ATTENTION FUNCTION          X
                LOGAPPL=NETSOL,                                         X
                LOGTAB=TABLE01,                                         X
                FEATURE=(ATTN,BREAK,TOSUPPR),                           X
                CTERM=YES            LOGICAL CONNECTION
```

Note- This sample will work with VSPC and TSO through TCAM9/VTAM.

SAMPLE NCP FOR 3705

2741 SWITCHED LINE AT 134 BAUD START/STOP

XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX


```
G2741    GROUP CRETRY=6,              RETRY 6 TIMES              X
               CRDLAY=YES,                                       X
               DIAL=YES,              SWITCHED LINE              X
               MONITOR=YES,                                      X
               REPLYTO=NONE,                                     X
               TEXTTO=NONE,                                      X
               LNCTL=SS               START STOP LINE TYPE


L2741    LINE  ADDRESS=028,           LINE ADDRESS               X
               SPEED=134,             LINE SPEED 134 BPS         X
               TYPE=NCP,                                         X
               MONITOR=YES,                                      X
               DIRECTN=INOUT,                                    X
               CALL=IN,               CALL IN ONLY               X
               CLOCKNG=INT,           INTERNAL CLOCKING          X
               CODE=COR2,             COR2 CODE CONVERSION       X
               DUPLEX=FULL            MODEM STRAPPING IS FULL DUPLEX


T2741    TERMINAL TERM=2741,          2741 DEFINED AS 2741       X
               UTERM=T2741A,          LOGICAL TERMINAL NAME      X
               ATTN=ENABLED,          ENABLE ATTENTION FUNCTION  X
               LOGAPPL=NETSOL,                                   X
               LOGTAB=TABLE01,                                   X
               FEATURE=(ATTN,BREAK,TOSUPPR),                     X
               CTERM=YES              LOGICAL CONNECTION
```


Note- This sample will work with VSPC and TSO through TCAM9/VTAM.

SWITCHED TWX GROUP

```
*********************************************************************
*********************************************************************
*********************************************************************
*                                                                   *
*      TTY SWITCHED LINE  AT 300 BAUD START/STOP MODE               *
*                                                                   *
*********************************************************************
*********************************************************************
*********************************************************************
GTTY      GROUP CRETRY=6,              RETRY 6 TIMES                  X
                DIAL=YES,              SWITCHED LINE                  X
                REPLYTO=NONE,          NO REPLY TIME OUT              X
                TEXTTO=NONE,           NO TEXT TIME OUT               X
                LNCTL=SS               START STOP LINE TYPE
LTTY      LINE  ADDRESS=029,           LINE ADDRESS                   X
                MONITOR=YES,           TEST FOR BREAK                 X
                TYPE=NCP,              NCP ONLY                       X
                CRDLAY=YES,                                           X
                DIRECTN=INOUT,                                        X
                CRRATE=10,                                            X
                LINESIZ=80,                                           X
                CODE=DIC3,                                            X
                CUTOFF=1,              STOP RUNAWAY TTY               X
                SPEED=300,             LINE SPEED 300 BPS             X
                CALL=IN,               CALL IN ONLY                   X
                CLOCKNG=INT,           INTERNAL CLOCKING              X
                DUPLEX=FULL            MODEM STRAPPING IS FULL DUPLEX
TTY1      TERMINAL TERM=TWX,           TTY  DEFINED AS TWX            X
                UTERM=TTY1A,           LOGICAL TERMINAL NAME          X
                ATTN=ENABLED,          ENABLE ATTENTION FUNCTION      X
                FEATURE=(ATTN,BREAK,TOSUPPR),                         X
                LOGAPPL=NETSOL,                                       X
                LOGTAB=TABLE01,                                       X
                CTERM=YES              LOGICAL CONNECTION
```

Note- This sample will work with VSPC and TSO through TCAM9/VTAM.

SAMPLE NCP FOR 3705

SWITCHED BSC LINE GROUP


```
        ***************************************************************

SWBSCLG  GROUP DIAL=YES,            SWICHED BSC                        X
               LNCTL=BSC,           BSC LINE CONTROL                   X
               TYPE=NCP,            FCR USE BY NCP ONLY                X
               WACKCNT=15,          WACK COUNT OF 15                   X
               LOGAPPL=NETSOL,                                         X
               WAKDLAY=2.2,         WACK DELAY OF 2.2 SEC              X
               SYNDLAY=1,           SYNC INTERVAL RATE                 X
               REPLYTO=3            REPLY TIME OUT = 3 SECONDS
        ***************************************************************
        *                                                             *
        *      LINE SPEC FOR DIAL-IN BSC TERMINALS                    *
        *                                                             *
        ***************************************************************
SWBSCLA LINE   ADDRESS=045,         LINE ADDRESS ON 3705              X
               CLOCKNG=EXT,         EXTERNAL MODEM CLOCKING           X
               TRANSFR=5,           PASS IT ON IF LARGER THAN 5       X
               SPEED=1200,          LINE SPEED                        X
               CODE=EBCDIC,         EBCDIC ONLY                       X
               DUPLEX=HALF,         MODEM STRAPPING IS HALF DUPLEX    X
               CALL=IN,             INCOMING  CALLS ONLY              X
               INTPRI=1,            INTERRUPT PRIORITY IS 1           X
               NEWSYNC=NO,          3705 WILL NOT PROVIDE NEW SYNC    X
               CUTOFF=10,           ALLOW FOR FULL RECEIPT OF MESSAGE X
               RETRIES=(4,1,6)      4 RETRY EVERY 1 SEC FOR 6 TIMES
        ***************************************************************
        *                                                             *
        *       TERMINAL MACROS                                       *
        *                                                             *
        ***************************************************************
T3780   TERMINAL TERM=3780,         3770 DEFINED AS 2770              X
               CTERM=YES,                                             X
               UTERM=T3780A         CONTROLLING STATION
```

PT. TO PT. BSC LINES

```
*****************************************************************
*                                                               *
*        GROUP SPECIFICATION FOR LEASED POINT TO POINT LINE     *
*                                                               *
*****************************************************************

GRPPTPT GROUP  DIAL=NO,            NON-SWITCHED LINES            X
               LNCTL=BSC,          BSC LINE CONTROL              X
               TRANSFR=5,          LIMIT NUMBER OF RECEIVE BUFFERS  X
               CUTOFF=10,          LIMIT NUMBER OF SUBBLOCKS     X
               TYPE=NCP,           FOR USE BY NCP ONLY           X
               REPLYTO=3           REPLY TIME OUT


*****************************************************************
*                                                               *
*        LINE SPEC FOR PT TO PT BSC LINK SYSTEM/7               *
*        LINE CODED TO SUPPORT SDLC/BSC PATH FUNCTION           *
*                                                               *
*****************************************************************

LINE48  LINE   ADDRESS=048,        LINE ADDRESS ON 3705          X
               CLOCKNG=EXT,        EXTERNAL MODEM CLOCKING       X
               SPEED=2400,         LINE SPEED                    X
               CODE=EBCDIC,        EBCDIC ONLY                   X
               DUPLEX=HALF,        MODEM STRAPPING IS HALF DUPLEX  X
               YIELD=NO,           NCP DOES NOT YIELD IN CONTENTION  X
               TERM=SYS3


*****************************************************************
*                                                               *
*        TERMINAL MACRO SYSTEM/7                                *
*                                                               *
*****************************************************************

SYSTEM7 TERMINAL BHEXEC=PT3,                                     X
                 BHSET=BHSET,                                    X
                 EXEC=YES,                                       X
                 CONV=YES,                                       X
                 PT3EXEC=YES,                                    X
                 CRITSIT=YES,                                    X
                 TERM=SYS3
```

NOTE- This line will interface with the SDLC/BSC Path function.

SAMPLE NCP FOR 3705


```
*********************************************************************
*                                                                   *
*         LINE SPEC FOR PT TO PT BSC LINK SYSTEM/3                   *
*         MAYBE USED AS STATION FOR PREVIOUS LINE                    *
*                                                                   *
*********************************************************************

LINE49  LINE   ADDRESS=049,       LINE ADDRESS ON 3705               X
                CLOCKNG=EXT,       EXTERNAL MODEM CLOCKING            X
                SPEED=2400,        LINE SPEED                         X
                CODE=EBCDIC,       EBCDIC ONLY                        X
                DUPLEX=HALF,       MODEM STRAPPING IS HALF DUPLEX     X
                YIELD=YES,         NCP DOES YIELDS TO CONTENTION      X
                TERM=SYS3


*********************************************************************
*                                                                   *
*         TERMINAL MACRO SYSTEM/3                                    *
*                                                                   *
*********************************************************************

SYSTEM3  TERMINAL TERM=SYS3,                                         X
                CONV=YES
```


Note- This line may be used as a driver for line on the preceeding page.

3270 BSC SPECIFICATIONS


```
*         GROUP SPECIFICATION FOR REMOTE 3270'S                    *
********************************************************************


BSC3270 GROUP  DIAL=NO,           NON-SWITCHED LINES                X
               CRETRY=7,          TIME OUT WILL TAKE ABOUT 63 SECONDS X
               LNCTL=BSC,         BSC LINE CONTROL                  X
```

*** TRANSFR times the BFRS value in the BUILD macro should be a value
    greater than 256 but not exceed 400.

```
               TRANSFR=5,         LIMIT NUMBER OF RECEIVE BUFFERS   X
```

*** CUTOFF=1 is required for 3270 BSC cluster control units.

```
               CUTOFF=1,          LIMIT NUMBER OF SUBBLOCKS         X
               TYPE=NCP,          FOR USE BY NCP ONLY               X
```

*** XMITLIM=1 is required for BSC 3270 Clusters.

```
               XMITLIM=1,         TRANSMISSION LIMIT                X
               WACKCNT=15,        WACK COUNT OF 15                  X
               WAKDLAY=2.2,       WACK DELAY OF 2.2 SEC             X
               SYNDLAY=1,         SYNC INTERVAL RATE                X
               REPLYTO=3          REPLY TIME OUT
```

SAMPLE NCP FOR 3705

```
*          LINE SPEC FOR 3271                                          *
*****************************************************************
SSCBSC  LINE    ADDRESS=044,        LINE ADDRESS ON 3705            X
                ISTATUS=INACTIVE,   ACF/VTAM USE ONLY               X
                CLOCKNG=EXT,        EXTERNAL MODEM CLOCKING         X
                SPEED=4800,         LINE SPEED                      X
                CODE=EBCDIC,        EBCDIC 3270'S ONLY              X
                DUPLEX=FULL,        DUPLEX FACILITY IS USED         X

*** NEWSYNC=NO is required for IBM 3274/3276 if DUPLEX=FULL is coded.

                NEWSYNC=YES,        3705 WILL PROVIDE NEW SYNC      X
                INTPRI=1,           INTERRUPT PRIORITY IS 1         X

*** POLIMIT=(1,QUEUE) is recommended for best performance.

                POLIMIT=(1,QUEUE),                                  X
                POLLED=YES,         POLLED DEVICE                   X
                NEGPOLP=.1,         NEGATIVE POLL PAUSE             X
                PAUSE=1,            DELAY BETWEEN SERVICE CYCLES    X
                RETRIES=(7,4,3),                                    X
                SERVPRI=OLD,        PRIORITY TO OLD SESSIONS        X

*** The SESSION=N  should be equal to the number of clusters and
    terminals on the link.

                SESSION=8,          SPECIFY 1 FOR EACH CLUSTER      X
                                    AND TERMINAL

*** The following parameter is for ACF/VTAM only.

                PU=YES              ACF/VTAM ONLY

*** The following parameter may be used with VTAM or ACF/VTAM
    but can not be used with PU=YES.

                LOGAPPL=NETSOL

*** LOGTAB= is required when the terminals are allocated to NETSOL.

                LOGTAB=TABLE01      LOGON TABLE FOR NETSOL
```

```
*        SERVICE ORDER MACRO SPECIFICATIONS                        *
***********************************************************************

*** Each cluster and terminal must be contained in the SERVICE macro.

SSCSOR SERVICE ORDER=(SSC3270,SSCT1,SSCT2,SSCT3,                    X
            SSCT4,SSCT5,SSC3275,SSCT6)




*        CLUSTER MACRO FOR 3270 VTAM2, ACF/VTAM BASIC, OR ACF/TCAM
***********************************************************************
SSC3270   CLUSTER CUTYPE=3271,       3271 DEFINED                   X
            FEATUR2=(MODEL2,ANKEY,PFK), 3277 FEATURES               X
            CRITSIT=YES,             SEND CLOSE-DOWN MESSAGE        X
            GPOLL=40407F7F           GENERAL POLL ADDRESS




*        CLUSTER MACRO FOR 3270  ACF/VTAM (PU=YES)                  *
***********************************************************************
SSC3270   CLUSTER CUTYPE=3271,       3271 DEFINED                   X
            CRITSIT=YES,             SEND CLOSE-DOWN MESSAGE        X
            GPOLL=40407F7F,          GENERAL POLL ADDRESS           X

*** The following parameters are ACF/VTAM only.

            DLOGMOD=S3270,      MODE    FOR BSC3270                 X
            USSTAB=VUSS3270,                                        X
            MODETAB=NOSPTAB     MODETAB FOR BSC3270
```

```
*          TERMINAL MACROS
***************************************************************
SSCT1     TERMINAL TERM=3277,        3277 DISPLAY STATION              X
                    FEATUR2=(MODEL2,ANKEY,PFK), 3277 FEATURES          X
*** ACF/VTAM requires FEATUR2= to be on terminal macro.
                    ISTATUS=ACTIVE,    WILL ACTIVATE WITH CLUSTER      X
                    ADDR=60604040,     SELECTION ADDRESS FOR T1        X
                    POLL=40404040      POLL ADDRESS OF TERM T1
SSCT2     TERMINAL TERM=3277,        3277 DISPLAY STATION              X
                    FEATUR2=(MODEL2,ANKEY,PFK), 3277 FEATURES          X
                    ISTATUS=ACTIVE,    WILL ACTIVATE WITH CLUSTER      X
                    ADDR=6060C1C1,     SELECTION ADDRESS FOR T2        X
                    POLL=4040C1C1      POLL ADDRESS FOR T2
SSCT3     TERMINAL TERM=3277,        3277 DISPLAY STATION              X
                    FEATUR2=(MODEL2,ANKEY,PFK), 3277 FEATURES          X
                    ISTATUS=ACTIVE,    WILL ACTIVATE WITH CLUSTER      X
                    ADDR=6060C2C2,     SELECTION ADDRESS FOR T3        X
                    POLL=4040C2C2      POLL ADDRESS FOR T3
SSCT4     TERMINAL TERM=3277,        3277 DISPLAY TERMINAL             X
                    FEATUR2=(MODEL2,ANKEY,PFK), 3277 FEATURES          X
                    ISTATUS=ACTIVE,    WILL ACTIVATE WITH CLUSTER      X
                    ADDR=6060C3C3,     SELECTION ADDRESS FOR T4        X
                    POLL=4040C3C3      POLL ADDRESS FOR T4
SSCT5     TERMINAL TERM=3286,        3286 PRINTER                      X

*** DIRECTN=OUT is required by VTAM.

                    DIRECTN=OUT,       REQUIRED FOR VTAM               X
                    ISTATUS=ACTIVE,    WILL ACTIVATE WITH CLUSTER      X
                    ADDR=6060C4C4,     SELECTION ADDRESS FOR T5        X
                    BFRDLAY=13,        ALLOW 13 SECONDS TIME DELAY     X
                    POLL=4040C4C4      SELECTION ADDRESS FOR T5

**** Terminal addresses must be sequential. No address may be skipped
     and no device should be attached to the 3271 controller that is
     not defined in the NCP generation.
```

CLUSTER MACRO FOR 3275

```
*********************************************************************
SSC3275  CLUSTER CUTYPE=3275,        3275 DEFINED                    X
             FEATUR2=(MODEL2,ANKEY,PFK,PRINTR),    3275 FEATURES     X
             CRITSIT=YES,            SEND CLOSE-DOWN MESSAGE          X
             GPOLL=C1C17F7F,         GENERAL POLL ADDRESS            X
             ISTATUS=INACTIVE,       DO NOT ACTIVATE



*********************************************************************
*        TERMINAL MACROS
*
SSCT6    TERMINAL TERM=3275,         3275 DISPLAY STATION            X
             ISTATUS=ACTIVE,         WILL ACTIVATE WITH CLUSTER      X
             BFRDLAY=13,             REQUIRED IF 3275 HAS PRINTER    X
             ADDR=61614040,          SELECTION ADDRESS FOR T6        X
             POLL=C1C14040           POLL ADDRESS OF TERM T6
```

SAMPLE NCP FOR 3705

GROUP SPECIFICATIONS FOR SDLC LEASED LINES

****

```
SDLCGP1    GROUP LNCTL=SDLC,        SYNCHRONOUS DATA LINK        X
                 DIAL=NO,           REQUIRED FOR LEASED LINE     X
                 REPLYTO=1.0,       USE DEFAULT                  X
                 TYPE=NCP           NCP ONLY
```


LINE MACRO SPECIFICATION - HALF-DUPLEX, LEASED


```
*        MAY BE USED FOR 3790, 3600, 3650, 3770, 3270 AND 3767       *
******************************************************************
```

*** The following line will also work as a manual switched backup
    line if the ENABLTO parameter on the BUILD macro is increased
    from the default to at least 60.

```
SDLC1      LINE ADDRESS=(022),      TRANSMIT AND RECEIVE ADDRESS       X
                DUPLEX=HALF,        MODEM IS STRAPPED FOR HALF DUPLEX  X
                SPEED=1200,         LINE SPEED TO BE 1200 OR HIGHER    X
                NRZI=NO,                                               X
                NEWSYNC=NO,                                            X
                CLOCKNG=EXT,        MODEM PROVIDES CLOCKING            X
                POLLED=YES,                                            X
                RETRIES=(5)         5 RETRIES PER RECOVERY SEQUENCE
```


LINE MACRO SPECIFICATION - HALF-DUPLEX, LEASED, INTERNAL CLOCK


```
*        MAY BE USED FOR 3790, 3600, 3650, 3770, 3270 AND 3767       *
******************************************************************
SDLC1A     LINE ADDRESS=(024),      TRANSMIT AND RECEIVE ADDRESS       X
                DUPLEX=FULL,                                           X
                SPEED=1200,         CSB TIMER IS 1200                  X
                NRZI=YES,           REQUIRED FOR INTERNAL CLOCKING     X
                NEWSYNC=NO,                                            X
                CLOCKNG=INT,        INTERNAL CLOCKING                  X
                POLLED=YES,                                            X
                RETRIES=(5)         5 RETRIES PER RECOVERY SEQUENCE
```

SDLC LINE MACRO SPECIFICATION   FULL DUPLEX LINK

```
**********************************************************************
SDLC2    LINE    ADDRESS=(020,021),   TRANSMIT AND RECEIVE ADDRESSES      X
                 DUPLEX=FULL,         MODEM STRAPPING IS FULL-DUPLEX      X
                 SPEED=2400,          LINE SPEED IS 2400 BPS              X
                 NEWSYNC=NO,          CHECK IF MODEM REQUIRES IT          X
                 CLOCKNG=EXT,         MODEM PROVIDES CLOCKING             X
                 NRZI=NO,             DEPENDS ON MODEM                    X
                 POLLED=YES,                                              X
                 RETRIES=(5)          5 RETRIES PER RECOVERY SEQUENCE
```

SDLC DUPLEX LINE SPECIFICATION (SINGLE PORT)

```
**********************************************************************
SDLC3    LINE    ADDRESS=(046),       TRANSMIT AND RECEIVE ADDRESS       X
                 DUPLEX=FULL,         MODEM STRAPPING IS FULL DUPLEX     X
                 SPEED=2400,          SPEED IS 2400BPS                   X
                 CLOCKNG=EXT,         MODEM PROVIDES CLOCKING            X
                 POLLED=YES,                                             X
                 RETRIES=(5)          5 RETRIES PER RECOVERY SEQUENCE
```

SERVICE MACRO FOR SDLC LINK

```
*    EACH PU MUST BE IN SERVICE ORDER LIST                              *
*                                                                       *
**********************************************************************
         SERVICE ORDER=(PU3790Y,CL3600,STORE1,PU3770R,HD3767,CL3270D)
```

SAMPLE NCP FOR 3705

3790 PU MACRO SPECIFICATION


```
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX

PU3790Y  PU     ADDR=C1,                                                 X
                PUTYPE=2,                                                X
                ISTATUS=INACTIVE,                                        X
                MODETAB=MODE3790,                                        X
                MAXOUT=7,         MAX PATH INFO UNITS BEFORE RESPONSE X
                MAXDATA=265,      MAXIMUM AMOUNT OF DATA                  X

XXX MAXDATA = 265 is required for 3790

                PASSLIM=7,                                               X
                RETRIES=(,1,4)    4 RETRIES, 1 SECOND BETWEEN
```


   3790 LOGICAL UNIT SPECIFICATIONS


```
   XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
   INBATCHY LU    LOCADDR=1,PACING=(2,2),VPACING=(4,2),ISTATUS=ACTIVE
   BT3790Y1 LU    LOCADDR=2,PACING=(1,1),VPACING=(2,1),ISTATUS=ACTIVE
   BT3790Y2 LU    LOCADDR=3,PACING=(7,7),VPACING=(10,7),ISTATUS=ACTIVE
   CM3790Y1 LU    LOCADDR=4,PACING=(0),VPACING=(0),ISTATUS=ACTIVE
   CM3790Y2 LU    LOCADDR=5,PACING=(0),VPACING=(0),ISTATUS=ACTIVE
   RJE1Y    LU    LOCADDR=8,PACING=(3,3),VPACING=(4,3),ISTATUS=ACTIVE
   RJE2Y    LU    LOCADDR=9,PACING=(3,1),VPACING=(4,2),ISTATUS=ACTIVE
   RJE3Y    LU    LOCADDR=10,PACING=(1,1),VPACING=(2,1),ISTATUS=ACTIVE
   RJE4Y    LU    LOCADDR=11,PACING=(1,1),VPACING=(2,1),ISTATUS=ACTIVE
   INQ1Y    LU    LOCADDR=12,PACING=(1,1),VPACING=(2,1),ISTATUS=ACTIVE
   INQ2Y    LU    LOCADDR=13,PACING=(1,1),VPACING=(2,1),ISTATUS=ACTIVE
   INQ3Y    LU    LOCADDR=14,PACING=(1,1),VPACING=(2,1),ISTATUS=ACTIVE
   INQ4Y    LU    LOCADDR=15,PACING=(1,1),VPACING=(2,1),ISTATUS=ACTIVE
   INQ5Y    LU    LOCADDR=16,PACING=(1,1),VPACING=(2,1),ISTATUS=ACTIVE
   BP3790Y1 LU    LOCADDR=17,PACING=(1,1),VPACING=(2,1),ISTATUS=ACTIVE
   BP3790Y2 LU    LOCADDR=18,PACING=(1,1),VPACING=(2,1),ISTATUS=ACTIVE
   UP3790Y1 LU    LOCADDR=19,PACING=(1,1),VPACING=(2,1),ISTATUS=ACTIVE
   UP3790Y2 LU    LOCADDR=20,PACING=(1,1),VPACING=(2,1),ISTATUS=ACTIVE
```

   NOTE - If ACF/VTAM, all pacing parameters will be changed to (m,1).
          After generating the NCP witH the above definitions, change the
          source to VTAM to indicate a pacing of (m,1).

3600 CLUSTER MACRO SPECIFICATION

```
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX


CL3600   PU     ADDR=C1,          pu        ADDRESS = A (EBCDIC)        X
                PUTYPE=2,                                               X
```

XXX The MAXDATA value should be 9 greater then the buffer value
defined in the 3600 CPGEN. The retries operand for the SDLC link
should be less than the Time-Out value specified in the CPGEN.

```
                MAXDATA=265,      MAXIMUM AMOUNT OF DATA               X
                MAXOUT=7,         MAX PATH INFO UNITS BEFORE RES       X
                PASSLIM=7,                                             X
                ISTATUS=INACTIVE, ACTIVATE VIA OPERATOR                X
                RETRIES=(,4,2),   SHOULD BE LESS THAN 20 SECONDS       X
                PACING=(0),                                            X
                VPACING=(0)
```

3600 LOGICAL UNIT SPECIFICATIONS

```
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
FALUA1SS LU    LOCADDR=1,        FA REQ'D FOR 1ST LU                  X
               PACING=(3,1),                                          X
               VPACING=(6,1),                                         X
               ISTATUS=INACTIVE
FALUA2   LU    LOCADDR=2,                                             X
               ISTATUS=ACTIVE
FALUA3   LU    LOCADDR=3,                                             X
               ISTATUS=ACTIVE
FALUA4   LU    LOCADDR=4,                                             X
               ISTATUS=ACTIVE
```

3650 CLUSTER MACRO SPECIFICATION

```
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX

STORE1    PU     ADDR=C4,            PU ADDRESS = D (EBCDIC)            X
                 PUTYPE=2,                                             X
                 MAXOUT=7,           MAX PATH INFO UNITS BEFORE RES     X

XXX MAXDATA = 265 is required for 3650

                 MAXDATA=265,        6 BYTE TH, 3 BYTE RH, 256 BYTE RU  X
                 PASSLIM=7,                                            X
                 ISTATUS=INACTIVE,   ACTIVATE VIA OPERATOR             X
                 RETRIES=(,10,3),    SHOULD BE LESS THAN 60 SECONDS    X
                 PACING=(1,1),                                         X
                 VPACING=(2,1)
```

3650 LOGICAL UNIT SPECIFICATIONS

```
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
QESTORE1 LU     LOCADDR=1,           REQ'D FOR 1ST LU                  X
                PACING=(7,1),        IMPROVES LOADING 3651             X
                VPACING=(7,6),                                         X
                BATCH=YES,                                             X
                ISTATUS=ACTIVE
QECREDIT LU     LOCADDR=2,MODETAB=CRMODTB,DATASW=SYSTEM7
QE365311 LU     LOCADDR=3
QE365312 LU     LOCADDR=4
QE365313 LU     LOCADDR=5
QE365314 LU     LOCADDR=6
QE365315 LU     LOCADDR=7
QE327511 LU     LOCADDR=8
QE327512 LU     LOCADDR=9,PACING=(2,1),VPACING=(3,1)
QE327513 LU     LOCADDR=10,PACING=(2,1),VPACING=(3,1)
QE327514 LU     LOCADDR=11,PACING=(2,1),VPACING=(3,1)
QE327515 LU     LOCADDR=12,PACING=(2,1),VPACING=(3,1)
QEINT1   LU     LOCADDR=13,PACING=(2,1)
QEINT2   LU     LOCADDR=14
```

3777 PU SPECIFICATION

```
********************************************************************

PU3777R  PU    ADDR=C2,                                           X
               ISTATUS=ACTIVE,                                    X
               PACING=(1,1),                                      X
               MODETAB=RJEMODE,                                   X
               VPACING=(2,1),                                     X
               MAXDATA=521,        MAXIMUM AMOUNT OF DATA         X

*** MAXDATA = 265 or 521 may be specified for 3777.

               MAXOUT=1,           MAX PATH INFO UNITS BEFORE RES  X
               PASSLIM=1,                                          X
               PUTYPE=2            DEFINE AS PU
```

   3770 LU SPECIFICATION

```
*        IBM 3777-1 REQUIRES ONE LU                              *
********************************************************************
LU3777R  LU    LOCADDR=1,                                        X
               ISTATUS=ACTIVE,                                   X
               SSCPFM=USSSCS,      REQUIRED FOR 3770             X
               USSTAB=ASUSST70,    USSTAB FOR 3770               X
               BATCH=YES           BATCH DEVICE
```

3770 PU SPECIFICATION (MLU)

```
*******************************************************************

*******************************************************************
*                                                                 *
*          PU   SPECIFICATION FOR   IBM 3770 PROGRAMABLE           *
*                                                                 *
*******************************************************************
PU70P     PU      ADDR=C1,             PU ADDRESS = A (EBCDIC)       X
                  PACING=(1,1),                                      X
                  ISTATUS=ACTIVE,                                    X
                  VPACING=(2,1),                                     X
                  MAXDATA=265,         MAXIMUM AMOUNT OF DATA        X
                  MAXOUT=1,            MAX PATH INFO UNITS BEFORE RES X
                  PASSLIM=1,                                         X
                  PUTYPE=2             DEFINE AS PU
```

3770 LU SPECIFICATION (MLU)

```
*******************************************************************
P70LU1    LU      LOCADDR=1,                                         X
                  MODETAB=MODE3770,    REQUIRED FOR 3770 SLU1        X
                  SSCPFM=USSSCS,       REQUIRED FOR 3770             X
                  USSTAB=ASUSST70,     USSTAB FOR 3770               X
                  ISTATUS=ACTIVE,                                    X
                  BATCH=YES            BATCH DEVICE
*******************************************************************
P70LU2    LU      LOCADDR=2,                                         X
                  SSCPFM=USSSCS,       REQUIRED FOR 3770             X
                  USSTAB=ASUSST70,     USSTAB FOR 3770               X
                  ISTATUS=INACTIVE,                                  X
                  BATCH=YES            BATCH DEVICE
P70LU3    LU      LOCADDR=3,                                         X
                  SSCPFM=USSSCS,       REQUIRED FOR 3770             X
                  USSTAB=ASUSST70,     USSTAB FOR 3770               X
                  ISTATUS=INACTIVE,                                  X
                  BATCH=YES            BATCH DEVICE
```

3271 SDLC PU SPECIFICATION

```
**********************************************************************
CL3270D  PU     ADDR=C5,            CONTROLLER ADDRESS= E  (EBCDIC)    X
                PUTYPE=1,           REMOTE NCP                         X
                BNNSUP=3270,        REQUIRED FOR 3270'S                X
                SSCPFM=USS3270,                                        X
                MODETAB=S3270,      REQUIRED IF LU IS TO BE ACQUIRED   X

*** MAXDATA = 261 is required for 3270

                MAXDATA=261,        MAXIMUM AMOUNT OF DATA             X
                ISTATUS=INACTIVE,   ACTIVATE VIA OPERATOR              X
                PASSLIM=12,         MAXIMUM OUTBOUND PIU               X
                MAXOUT=7,           MAX PATH INFO UNITS                X
                USSTAB=ASUSST70,    LOGON USSTAB                       X
                RETRIES=(,10,4),    4 RETRIES, 10 SECONDS BETWEEN      X
                PACING=(1,1)
```

3271 LU SPECIFICATION

```
**********************************************************************
CL3270D0 LU     LOCADDR=0,ISTATUS=ACTIVE,USSTAB=VUSS3270
CL3270D1 LU     LOCADDR=1,ISTATUS=ACTIVE,USSTAB=VUSS3270
CL3270D2 LU     LOCADDR=2,ISTATUS=ACTIVE,USSTAB=VUSS3270
CL3270D3 LU     LOCADDR=3,ISTATUS=ACTIVE,USSTAB=VUSS3270
CL3270D4 LU     LOCADDR=4,ISTATUS=ACTIVE,USSTAB=VUSS3270
CL3270D5 LU     LOCADDR=5,ISTATUS=ACTIVE,USSTAB=VUSS3270
CL3270D6 LU     LOCADDR=6,ISTATUS=ACTIVE,USSTAB=VUSS3270
CL3270D7 LU     LOCADDR=7,ISTATUS=ACTIVE        NO USSTAB FOR PRINTER
```

3274 SDLC PU SPECIFICATION

```
**********************************************************************
SDLC3274 PU      ADDR=C1,                                            X
                 PUTYPE=2,                                           X
                 ISTATUS=ACTIVE,                                     X
                 MODETAB=MT3274C,                                    X
                 SSCPFM=USSSCS,                                      X
                 MAXOUT=7,       MAX PATH INFO UNITS BEFORE RESPONSE X
                 MAXDATA=265,    MAXIMUM AMOUNT OF DATA              X
                 PASSLIM=7,                                          X
                 PACING=0,       FOR DISPLAYS AND DSC PRINTERS       X
                 VPACING=0,      FOR DISPLAYS AND DSC PRINTERS       X
                 DISCNT=(NO),                                        X
                 RETRIES=(,1,4)  4 RETRIES, 1 SECOND BETWEEN


**********************************************************************
*                                                                    *
*          LOGICAL UNIT SPECIFICATIONS                               *
*                                                                    *
**********************************************************************
SDLCPA01 LU      LOCADDR=2,USSTAB=USST3270,DLOGMOD=T3278M4
SDLCPA02 LU      LOCADDR=3,USSTAB=USST3270,DLOGMOD=T3278M4
SDLCPA03 LU      LOCADDR=4,USSTAB=USST3270,DLOGMOD=T3278M3
SDLCPA04 LU      LOCADDR=5,USSTAB=USST3270,DLOGMOD=T3278M3
SDLCPA05 LU      LOCADDR=6,USSTAB=USST3270,DLOGMOD=T3278M2
SDLCPA06 LU      LOCADDR=7,USSTAB=USST3270,DLOGMOD=T3278M4
SDLCPA07 LU      LOCADDR=8,DLOGMOD=DSC4K,MODETAB=MTNDSPTR
SDLCPA08 LU      LOCADDR=9,DLOGMOD=SCS,MODETAB=MTNDSPTR
SDLCPB01 LU      LOCADDR=10,USSTAB=USST3270,DLOGMOD=T3277M2
SDLCPB02 LU      LOCADDR=11,USSTAB=USST3270,DLOGMOD=T3277M2
SDLCPB03 LU      LOCADDR=12,USSTAB=USST3270,DLOGMOD=T3277M2
SDLCPB04 LU      LOCADDR=13,USSTAB=USST3270,DLOGMOD=T3277M2
```

NOTE - USSTAB should be specified at LU level to eliminate sending
       USS Message 10 to printers.

```
***********************************************************************
*                                                                     *
*          PU MACRO SPECIFICATION FOR 3276                            *
*                                                                     *
***********************************************************************
SDLC3276 PU     ADDR=C2,                                              X
                PUTYPE=2,                                             X
                ISTATUS=INACTIVE,                                     X
                MODETAB=MT3276,                                       X
                SSCPFM=USSSCS,                                        X
                MAXOUT=7,          MAX PATH INFO UNITS BEFORE RESPONSE X
                MAXDATA=265,       MAXIMUM AMOUNT OF DATA             X
                PASSLIM=7,                                            X
                PACING=0,          FOR DISPLAYS                       X
                VPACING=0,         FOR DISPLAYS                       X
                DISCNT=(NO),                                          X
                RETRIES=(,1,4)     4 RETRIES, 1 SECOND BETWEEN




***********************************************************************
*                                                                     *
*          LOGICAL UNIT SPECIFICATIONS                                *
*                                                                     *
***********************************************************************
SDLC76P1 LU     LOCADDR=2,USSTAB=USST3270,DLOGMOD=T3278M2
SDLC76P2 LU     LOCADDR=3,USSTAB=USST3270,DLOGMOD=T3278M2
SDLC76P3 LU     LOCADDR=4,USSTAB=USST3270,DLOGMOD=T3278M2
SDLC76P4 LU     LOCADDR=5,USSTAB=USST3270,DLOGMOD=T3278M2
SDLC76P5 LU     LOCADDR=6,USSTAB=USST3270,DLOGMOD=T3278M2
SDLC76P6 LU     LOCADDR=7,USSTAB=USST3270,DLOGMOD=T3278M2
SDLC76P7 LU     LOCADDR=8,DLOGMOD=DSC4K,MODETAB=MTNDSPTR
SDLC76P8 LU     LOCADDR=9,DLOGMOD=SCS,MODETAB=MTNDSPTR
```

NOTE - USSTAB should be specified at LU level to eliminate sending
       USS Message 10 to printers.

3767 PU SPECIFICATION

```
**********************************************************
HD3767   PU    ADDR=C2,           PU ADDRESS = B (EBECDIC)         X
               PUTYPE=1,          TERMINAL NODEX                   X

*** MAXDATA = 261 is required for 3767

               MAXDATA=261,       MAXIMUM AMOUNT OF DATA           X
               MAXOUT=1,          MAX PATH INFO UNITS BEFORE RES   X
               PACING=(1,1)
```

3767 LU SPECIFICATION

```
*        IBM 3767 REQUIRES ONE LU                               *
**********************************************************
TR3767HD LU    LOCADDR=0,                                        X
               ISTATUS=ACTIVE,                                   X
               USSTAB=ASUSSTAB,                                  X
               SSCPFM=USSSCS,                                    X
               MODETAB=ALL3767    OPTIONAL, DEPENDING UPON APPLICATION
```

SDLC DIAL GROUP SPECIFICATIONS

```
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
SDLCGP2   GROUP LNCTL=SDLC,        SYNCHRONOUS DATA LINK              X
                DIAL=YES,          REQUIRED FOR DIAL LINE             X
                TYPE=NCP           NCP ONLY
```

SDLC LINE MACRO SPECIFICATION - HALF-DUPLEX, SWITCHED

```
X         MAY BE USED FOR 3790, 3650, 3770, AND 3767                 X
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
SDLC4     LINE  ADDRESS=(023),     TRANSMIT AND RECEIVE ADDRESS       X
                CALL=INOUT,        REQUIRED BY VTAM FOR IN/OUT        X
                DUPLEX=HALF,       MODEM IS STRAPPED FOR HALF DUPLEX  X
                SPEED=1200,        3601 TO OPERATE AT 1200 BPS        X
                NRZI=NO,           UNITS NOT SPECIFIED WITH NRZI      X
                CLOCKNG=EXT,       MODEM PROVIDES CLOCKING            X
                POLLED=YES,                                          X
                RETRIES=(5,10,3),  5 RETRIES PER RECOVERY SEQUENCE    X
                VPACING=(2,1)      SEND 2 FOR 1
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
X                                                                    X
X      NO SERVICE ORDER FOR SDLC SWITCHED LINE                       X
X                                                                    X
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
```

PU MACRO SPECIFICATION FOR SWITCHED LINK

```
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
PU1       PU    PUTYPE=(1,2),      SUPPORT TYPE 1 AND 2 PU'S          X
                MAXLU=60           MAXIMUM NUMBER OF LU'S FOR LINE
```

XXX MAXLU = must be greater than total LU's on PU.

SPECIFICATIONS FOR REMOTE NCP

```
*          GROUP MACRO SPECIFICATIONS                                  *
*********************************************************************
SDLCGP3    GROUP LNCTL=SDLC,        SYNCHRONOUS DATA LINK              X
                 DIAL=NO,           REQUIRED FOR LEASED LINE           X
                 TYPE=NCP           NCP ONLY
*********************************************************************
*                                                                    *
* FULL DUPLEX SDLC LINE SPECIFICATIONS FOR REMOTE NCP INTERFACE      *
*                                                                    *
*********************************************************************
REMLN      LINE ADDRESS=(040,041),  TRANSMIT AND RECEIVE ADDRESSES    X
                 NEWSYNC=NO,        DO NOT USE WITH REMOTE NCP        X
                 DUPLEX=FULL,       MODEM STRAPPING IS FULL DUPLEX     X
                 SPEED=2400,        SPEED IS 2400BPS                   X
                 CLOCKNG=EXT,       MODEM PROVIDES CLOCKING            X
                 POLLED=YES,                                           X
                 RETRIES=(7)        7 RETRIES PER RECOVERY SEQUENCE
*********************************************************************
*                                                                    *
* SERVICE ORDER FOR DUPLEX LINK                                      *
*                                                                    *
*********************************************************************
           SERVICE ORDER=NCPVR      ONLY ONE REMOTE CONTROLLER
*********************************************************************
*   PU4 (INNODE) SPECIFICATION FOR REMOTE NCP                        *
*                                                                    *
*********************************************************************
NCPVR      PU   ADDR=C1,            CONTROLLER ADDRESS= A  (EBCDIC)    X
                 PUTYPE=4,          REMOTE NCP                         X
                 MAXOUT=7,          MAX PATH INFO UNITS BEFORE RESTORE X
                 RETRIES=(,10,5),   5 RETRIES, 10 SECONDS BETWEEN      X
                 SUBAREA=5,         REMOTE SUBAREA ADDRESS=5           X
                 DATMODE=FULL       FULL DUPLEX DATA TRANSFER
```

BLOCK HANDLER DEFINITIONS


```
**********************************************************************
*         BLOCK HANDLER DEFINITIONS FOR SDLC/BSC PATH FUNCTION       *
*                                                                    *



STARTBH    STARTBH BHEXEC=PT3
SPAFPT3    SPAFPT3
ENDBH      ENDBH
           SPACE 2
BHSET      BHSET EXEC=YES,PT3=STARTBH
```


GENEND DELIMITER


```
**********************************************************************
           GENEND
           END
/*
```

CHAPTER 8 : SWITCHED SNA DEFINITIONS

REFERENCES

DOS/VS VTAM System Programmers Guide	GC27-6957
DOS/VS VTAM Reference Summary	GX27-0033
ACF/VTAM System Programmers Guide (DOS)	SC38-0268
ACF/VTAM Installation Guide (DOS)	SC38-0270
ACF/VTAM Reference Summary (DOS)	SX27-3022
OS/VS1 VTAM System Programmer's Guide	GC27-6996
OS/VS VTAM Reference Summary	GX27-0034
OS/VS2 SVS VTAM System Programmer's Guide	GC27-0049
OS/VS2 VTAM System Programming Library:VTAM	GC28-0688
ACF/VTAM System Programmers Guide	SC38-0258
ACF/VTAM Installation Guide	SC38-0269
ACF/VTAM Reference Summary	SX27-3021

VBUILD MACRO SPECIFICATIONS - SWITCHED

```
*                                                                    *
*********************************************************************
*********************************************************************
*********************************************************************
SWITCH01 VBUILD TYPE=SWNET,        SWITCHED NET                     X
                SUBAREA=4,         SUBAREA ADDRESS = 4              X
                CONFGDS=SWT001,    RESTART FILE                     X
                MAXNO=4,           4  DIALNO                        X
                MAXGRP=1           1 PATH GROUP
```

IBM 3790 SWITCHED DEFINITION

```
*********************************************************************
CL3790A  PU    ADDR=C1,            CLUSTER ADDRESS = I (EBCDIC)     X
               PUTYPE=2,                                           X
               IDBLK=006,          IDENTIFICATION BLOCK             X
               IDNUM=03791,        IDENTIFICATION NUMBER            X
               MAXDATA=265,        MAXIMUM AMOUNT OF DATA           X
               MAXOUT=7,           MAX PATH INFO UNITS BEFORE RES   X
               MAXPATH=1,          DIAL-IN ONLY                     X
               PASSLIM=7,          EQUAL TO MAXOUT                  X
               PACING=(1,1),                                       X
               VPACING=(2,1),                                      X
               ISTATUS=ACTIVE,                                     X
               MODETAB=MODE3790,                                   X
               IRETRY=YES
*********************************************************************
*                                                                    *
*         PATH STATEMENT                                             *
*                                                                    *
*********************************************************************
PATH01   PATH  GID=1,                                               X
               GRPNM=SDLCGV2,      NCP SWITCHED LINE GROUP          X
               PID=1,              ID FOR THIS PATH                 X
               USE=YES,                                            X
               DIALNO=3464
*********************************************************************
*                                                                    *
*         LOGICAL UNIT SPECIFICATIONS                                *
```

```
*                                                                          *
****************************************************************************
INBATCH1 LU      LOCADDR=1,ISTATUS=ACTIVE,BATCH=YES
INQ02    LU      LOCADDR=2,ISTATUS=ACTIVE
INQ03    LU      LOCADDR=3,ISTATUS=ACTIVE
INQ04    LU      LOCADDR=4,ISTATUS=ACTIVE
INQ05    LU      LOCADDR=5,ISTATUS=ACTIVE
BT379011 LU      LOCADDR=20,ISTATUS=ACTIVE
BT379012 LU      LOCADDR=21,ISTATUS=ACTIVE
RJE01    LU      LOCADDR=25,ISTATUS=ACTIVE
RJE02    LU      LOCADDR=26,ISTATUS=ACTIVE
RJE03    LU      LOCADDR=27,ISTATUS=ACTIVE
RJE04    LU      LOCADDR=28,ISTATUS=ACTIVE
RJE05    LU      LOCADDR=29,ISTATUS=ACTIVE
CM379011 LU      LOCADDR=30,ISTATUS=ACTIVE
CM379012 LU      LOCADDR=31,ISTATUS=ACTIVE
CM379013 LU      LOCADDR=32,ISTATUS=ACTIVE
CM379014 LU      LOCADDR=33,ISTATUS=ACTIVE
BP379011 LU      LOCADDR=35,ISTATUS=ACTIVE
BP379012 LU      LOCADDR=36,ISTATUS=ACTIVE
BP379013 LU      LOCADDR=37,ISTATUS=ACTIVE
UP379011 LU      LOCADDR=40,ISTATUS=ACTIVE
UP379013 LU      LOCADDR=42,ISTATUS=ACTIVE
UP379014 LU      LOCADDR=43,ISTATUS=ACTIVE
UP379015 LU      LOCADDR=44,ISTATUS=ACTIVE
UP379016 LU      LOCADDR=45,ISTATUS=ACTIVE
UP379017 LU      LOCADDR=46,ISTATUS=ACTIVE
UP379018 LU      LOCADDR=47,ISTATUS=ACTIVE
UP379019 LU      LOCADDR=48,ISTATUS=ACTIVE
UP379021 LU      LOCADDR=50,ISTATUS=ACTIVE
UP379022 LU      LOCADDR=51,ISTATUS=ACTIVE
UP379023 LU      LOCADDR=52,ISTATUS=ACTIVE
UP379024 LU      LOCADDR=53,ISTATUS=ACTIVE
UP379025 LU      LOCADDR=54,ISTATUS=ACTIVE
UP379026 LU      LOCADDR=55,ISTATUS=ACTIVE
UP379027 LU      LOCADDR=56,ISTATUS=ACTIVE
UP379028 LU      LOCADDR=57,ISTATUS=ACTIVE
UP379029 LU      LOCADDR=58,ISTATUS=ACTIVE
```

IBM 3650 SWITCHED DEFINITION

```
*        PU STATEMENT FOR 3650                                             *
****************************************************************************
STORS1   PU      ADDR=C4,            CLUSTER ADDRESS = D (EBCDIC)         X
                 PUTYPE=2,                                               X
```

```
                    MAXOUT=7,            MAX PATH INFO UNITS BEFORE RES    X
                    MAXDATA=265,         6 BYTE TH, 3 BYTE RH, 256 BYTE RU X
                    PASSLIM=5,           PER INDUSTRY SPECS                X
                    PACING=(1,1),                                         X
                    MAXPATH=0,           NO DIAL OUT PATH
                    MODETAB=ISTINCLM,    LOGMODE=IBM3650                  X
                    IDBLK=005,           IDENTIFICATION BLOCK(WRONG ?)    X
                    IDNUM=03651,         IDENTIFICATION NUMBER            X
                    ISTATUS=INACTIVE,    ACTIVATE VIA OPERATOR            X
                    VPACING=(2,1),                                       X
                    IRETRY=YES

    *        PATH STATEMENT                                              *
    *****************************************************************************
PATH02  PATH  GID=1,                                                     X
              GRPNM=SDLCGP2,     NCP SWITCHED LINE GROUP(NCPRAL)         X
              PID=4,             ID FOR THIS PATH                       X
              USE=YES,                                                  X
              DIALNO=3650
    *        LOGICAL UNIT SPECIFICATIONS                                *
    *****************************************************************************
QESTORS1 LU   LOCADDR=1,          REQ'D FOR 1ST LU                      X
              PACING=(7,1),       IMPROVES LOADING 3651                 X
              VPACING=(7,6),                                            X
              ISTATUS=ACTIVE
```

NOTE:
The rest of the LU's are for backup only. The system operator must activate each one as needed.

```
QECREDST LU   LOCADDR=2,                                                X
              PACING=(0),                                               X
              VPACING=(0)
QE3653S1 LU   LOCADDR=3
QE3653S2 LU   LOCADDR=4
QE3653S3 LU   LOCADDR=5
QE3653S4 LU   LOCADDR=6
QE3653S5 LU   LOCADDR=7
QE3275S1 LU   LOCADDR=8
QE3275S2 LU   LOCADDR=9,PACING=(2,1)
QE3275S3 LU   LOCADDR=10,PACING=(2,1)
```

IBM 3770 SWITCHED DEFINITION

```
*******************************************************************
*                                                                 *
*           PU  SPECIFICATION FOR  IBM 3770                       *
*                                                                 *
*******************************************************************
CL3770   PU     ADDR=C3,              PU ADDRESS = C (EBCDIC)      X
                PUTYPE=2,             DEFINE AS TYPE 2 PU          X
                MODETAB=RJEMODE,                                   X
                IDBLK=004,            IDENTIFICATION BLOCK         X
                IDNUM=03770,          IDENTIFICATION NUMBER        X
                MAXDATA=265,          MAXIMUM AMOUNT OF DATA       X
                MAXPATH=2,            2 PATHS                      X
                MAXOUT=7,             MAX PATH INFO UNITS BEFORE RES X
                PASSLIM=7,            EQUAL TO MAXOUT              X
                ISTATUS=INACTIVE,     ACTIVATE VIA OPERATOR        X
                PACING=(1,1),                                      X
                VPACING=(2,1),                                     X
                IRETRY=YES
*                                                                 *
*  1ST   PATH STATEMENT                                           *
*                                                                 *
*******************************************************************
PATH03   PATH GID=1,                                               X
                GRPNM=SDLCGP2,        NCP SWITCHED LINE GROUP(NCPRAL) X
                PID=2,                ID FOR THIS PU               X
                DIALNO=84422215
*                                                                 *
*  2ND   PATH STATEMENT                                           *
*                                                                 *
*******************************************************************
PATH03B  PATH GID=1,                                               X
                GRPNM=SDLCGP2,        NCP SWITCHED LINE GROUP(NCPRAL) X
                PID=3,                ID FOR THIS PU               X
                DIALNO=19197552215
*                                                                 *
*       IBM 3770 REQUIRES ONE LU                                  *
*                                                                 *
*******************************************************************
CL3770SU LU     LOCADDR=1,                                         X
                BATCH=YES             BATCH DEVICE
```

IBM 3767 SWITCHED DEFINITION

```
**********************************************************************
**********************************************************************
**********************************************************************
*                                                                    *
*         PU SPECIFICATION FOR   IBM 3767                            *
*                                                                    *
**********************************************************************
**********************************************************************
**********************************************************************
SD3767   PU     ADDR=C2,            PU ADDRESS = B (EBECDIC)        X
                PUTYPE=1,           TERMINAL NODEX                  X
                MAXDATA=261,        MAXIMUM AMOUNT OF DATA          X
                IDBLK=007,          IDENTIFICATION BLOCK            X
                IDNUM=00000,        IDENTIFICATION NUMBER           X
                MAXOUT=1,           MAX PATH INFO UNITS BEFORE RES  X
                MAXPATH=0,          DIAL-IN ONLY                    X
                PASSLIM=1,          EQUAL TO MAXOUT                 X
                ISTATUS=INACTIVE,   ACTIVATE VIA OPERATOR           X
                PACING=(1,1),                                       X
                VPACING=(2,1),                                      X
                IRETRY=YES
**********************************************************************
*                                                                    *
*      NO PATH STATEMENT IBM3767 DIAL-IN ONLY                        *
*                                                                    *
**********************************************************************
**********************************************************************
*                                                                    *
*         IBM 3767 REQUIRES ONE LU                                   *
*                                                                    *
**********************************************************************
TR3767SD LU     LOCADDR=0,                                          X
                ISTATUS=ACTIVE,                                     X
                SSCPFM=USSSCS,                                      X
                MODETAB=ALL3767
**********************************************************************
```

Notes- The VTAM System Programmer's Guide describes the definition of
Switched SNA major nodes.

CHAPTER 9 : LOCAL DEVICE DEFINITIONS

REFERENCES

DOS/VS VTAM System Programmers Guide	GC27-6957
DOS/VS VTAM Reference Summary	GX27-0033
ACF/VTAM System Programmers Guide (DOS)	SC38-0268
ACF/VTAM Installation Guide (DOS)	SC38-0270
ACF/VTAM Reference Summary (DOS)	SX27-3022
OS/VS1 VTAM System Programmer's Guide	GC27-6996
OS/VS VTAM Reference Summary	GX27-0034
OS/VS2 SVS VTAM System Programmer's Guide	GC27-0049
OS/VS2 VTAM System Programming Library:VTAM	GC28-0688
ACF/VTAM System Programmers Guide	SC38-0258
ACF/VTAM Installation Guide	SC38-0269
ACF/VTAM Reference Summary	SX27-3021

LOCAL DEVICE DEFINITIONS

VBUILD MACRO SPECIFICATIONS - LOCAL 3274-1A

LHA3274A VBUILD SUBAREA=7,TYPE=LOCAL

IBM 3274-1A PU DEFINITION

```
LHA3274  PU     BUFLIM=10,                                              X
                CUADDR=4F0,   *** NOTE: Defined to OS as local 3791 *** X
                DISCNT=NO,                                              X
                ISTATUS=INACTIVE,                                       X
                USSTAB=USST3270,                                        X
                MAXBFRU=15,                                             X
                MODETAB=MT3274A,                                        X
                PUTYPE=2,                                               X
                SSCPFM=USSSCS,                  *** NOTE: USSSCS ***     X
                VPACING=0
```

IBM 3274-1A LU DEFINITION

```
LHAPA01   LU      LOCADDR=2,ISTATUS=ACTIVE     *** NOTE: LOCADDR=2 ***
LHAPA02   LU      LOCADDR=3,ISTATUS=ACTIVE
LHAPA03   LU      LOCADDR=4,ISTATUS=ACTIVE
LHAPA04   LU      LOCADDR=5,ISTATUS=ACTIVE
LHAPA05   LU      LOCADDR=6,ISTATUS=ACTIVE
LHAPA06   LU      LOCADDR=7,ISTATUS=ACTIVE
LHAPA07   LU      LOCADDR=8,ISTATUS=ACTIVE
LHAPA08   LU      LOCADDR=9,ISTATUS=ACTIVE
LHAPB01   LU      LOCADDR=10,ISTATUS=ACTIVE
LHAPB02   LU      LOCADDR=11,ISTATUS=ACTIVE
LHAPB03   LU      LOCADDR=12,ISTATUS=ACTIVE
LHAPB04   LU      LOCADDR=13,ISTATUS=ACTIVE
```

Notes- The VTAM System Programmer's Guide describes the definition of Local SNA major nodes.

LOCAL(3270) TERMINAL DEFINITION (VTAM)

```
*****************************************************************
*                                                               *
*  LOCAL 3270 TERMINAL DEFINITION                               *
*                                                               *
*****************************************************************
LOC11 LBUILD  SUBAREA=5   SHOULD BE BETWEEN 2 AND VALUE OF MAXSUBA
*****************************************************************
*                                                               *
*  LOCAL OPERAND OPTIONS ARE AS FOLLOWS:                        *
*          CUADDR=ADDRESS,        CHANNEL ADDRESS               *
*          TERM=3277|3284|3286,   TERMINAL TYPE                 *
*          BUFLIM=N|2,            READ AHEAD BUFFERS            *
*          FEATURE2=(MODEL1|MODEL2,  MODEL NUMBER              *
*            ANKEY|NOANKEY,       ALPHANUMERIC KEYBOARD         *
*            DEKEY|NODEKEY,       DATA-ENTRY KEYBOARD           *
*            PFK|NOPFK,           PROGRAM FUNCTION KEYS         *
*            SELPEN|NOSELPEN),    SELECTOR PEN                  *
*          ISTATUS=ACTIVE|INACTIVE, INITIAL VTAM STATUS        *
*          LOGAPPL=NAME,          NAME OF APPLICATION PROGRAM IF *
*                                 AUTO LOG ON WHEN TERMINAL     *
*                                 IS MADE ACTIVE BY VTAM.       *
*          LOGTAB=NAME            NAME OF LOGON TABLE           *
*                                                               *
*****************************************************************
LOC20     LOCAL CUADDR=020,TERM=3277,FEATUR2=(MODEL2,ANKEY,PFK),      X
               LOGTAB=TABLE01,LOGAPPL=NETSOL
LOC21     LOCAL CUADDR=021,TERM=3277,FEATUR2=(MODEL2,ANKEY),          X
               ISTATUS=INACTIVE
LOC23     LOCAL CUADDR=023,TERM=3277,FEATUR2=(MODEL2,ANKEY)
LOC24     LOCAL CUADDR=024,TERM=3286
```

NOTES- Chapter 3 of the VTAM System Programmer's Guide describes the definition and filing of local terminals. This example will allow cause VTAM to 'LOG' LOC20 on to the 'NETSOL' when 'NETSOL' is started.

LOCAL SNA(3790) DEFINITION(VTAM)

```
****************************************************************
*                                                              *
*  LOCAL 3790 TERMINAL DEFINITION                              *
*                                                              *
****************************************************************
LOCAL      VBUILD TYPE=LOCAL,      LOCAL MAJOR NODE             = X
                  SUBAREA=7        SUBAREA ADDRESS              ++
LC3790     PU     ISTATUS=INACTIVE, ACTIVATE VIA OPERATOR    $$ ++ X
                  MAXBFRU=14,      NO. OF BUFFERS NEEDED FOR READ ++ X
                  CUADDR=010,      3790 ADDRESS                    X
                  DISCNT=NO        HOLD CONN AFTER END OF LU SESS  ++
INCL3790 LU       LOCADDR=1,       IN REQ'D FOR 1ST LU FOR SSS $$ = X
                  ISTATUS=ACTIVE,  ACTIVATE WITH PU             ++ X
                  VPACING=(1,1)    AVOID BUFFER FLOODING 3790    +
PGM3       LU     LOCADDR=2,       INTERACT LU USED FOR APPL  $$ = X
                  ISTATUS=ACTIVE,  ACTIVATE WITH PU             ++ X
                  BUFLIM=4,                                        X
                  VPACING=(1,1)    AVOID BUFFER FLOODING 3790    +
```

NOTES- Chapter 3 of the DOS/VS VTAM System Programmer's Guide describes
the definition and filing of local SNA terminals. Local terminals do
not have to be on the same control unit to be defined in a local major
node. If the local terminals do not exist, it is better not to put them
in the VTAM definition as VTAM tables are created for each defined
terminal.

ACF/VTAM LOCAL 3277 TERMINAL DEFINITION


```
***********************************************************************
*                                                                     *
*  LOCAL 3270 TERMINAL DEFINITION                                     *
*                                                                     *
***********************************************************************
        LBUILD  SUBAREA=8
***********************************************************************
*                                                                     *
*  LOCAL OPERAND OPTIONS ARE AS FOLLOWS:                              *
*             CUADDR=ADDRESS,         CHANNEL ADDRESS                 *
*             TERM=3277|3284|3286,    TERMINAL TYPE                   *
*             BUFLIM=N|2,             READ AHEAD BUFFERS,             *
*             FEATURE2=(MODEL1|MODEL2,   MODEL NUMBER                 *
*               ANKEY|NOANKEY,        ALPHANIMERIC KEYBOARD           *
*               DEKEY|NODEKEY,        DATA-ENTRY KEYBOARD             *
*               PFK|NOPFK,            PROGRAM FUNCTION KEYS           *
*               SELPEN|NOSELPEN),     SELECTOR PEN                    *
*             ISTATUS=ACTIVE|INACTIVE, INITIAL VTAM STATUS           *
*             LOGAPPL=NAME,           NAME OF APPLICATION PROGRAM IF  *
*                                     AUTO LOG ON WHEN TERMINAL       *
*                                     IS MADE ACTIVE BY VTAM.         *
*             DLOGMODE=S3270,         DEFAULT MODETAB ENTRY           *
*             LOGTAB=NAME             NAME OF LOGON TABLE             *
*                                                                     *
***********************************************************************
LU4C0 LOCAL CUADDR=4C0,TERM=3277,DLOGMOD=S3270,                     X
            FEATUR2=(MODEL2,ANKEY,PFK),ISTATUS=ACTIVE,             X
            LOGAPPL=NETSOL,LOGTAB=TABLE01
LU4C1 LOCAL CUADDR=4C1,TERM=3277,DLOGMOD=S3270,                     X
            FEATUR2=(MODEL2,ANKEY,PFK),ISTATUS=ACTIVE,             X
            LOGAPPL=NETSOL,LOGTAB=TABLE01
LU4C2 LOCAL CUADDR=4C2,TERM=3277,DLOGMOD=S3270,                     X
            FEATUR2=(MODEL2,ANKEY,PFK),ISTATUS=ACTIVE,             X
            LOGAPPL=NETSOL,LOGTAB=TABLE01
LU4C3 LOCAL CUADDR=4C3,TERM=3277,DLOGMOD=S3270,                     X
            FEATUR2=(MODEL2,ANKEY,PFK),ISTATUS=ACTIVE,             X
            LOGAPPL=NETSOL,LOGTAB-TABLE01
LU4C4 LOCAL CUADDR=4C4,TERM=3277,DLOGMOD=S3270,                     X
            FEATUR2=(MODEL2,ANKEY,PFK),ISTATUS=ACTIVE,             X
            LOGAPPL=NETSOL,LOGTAB=TABLE01
LU4C5 LOCAL CUADDR=4C5,TERM=3277,DLOGMOD=S3270,                     X
            FEATUR2=(MODEL2,ANKEY,PFK),ISTATUS=ACTIVE,             X
            LOGAPPL=NETSOL,LOGTAB=TABLE01
```

CHAPTER 10 : MSNF NETWORK DEFINITIONS

The following definitions are samples used to define a Multidomain operation that allows communication between ACF/VTAM on an MVS system with either ACF/TCAM on a MVS system or ACF/VTAM on a DOS system. The cross domain path between the domains is via a multi-tailed 3705. The sample ACF/TCAM MCP in Chapter 6 contains the MSNF definitions for ACF/VTAM from the ACF/TCAM end.

Each VTAM node in the network which wants to become an owner of a certain NCP must provide that VTAM node with access to the NCP generation Stage I input source. (Access method sends an Activate Physical to NCP to become an owner) The Resource Resolution Table (RRT) produced by Stage II of the NCP generation must also be provides to the host access method node (VTAM and TCAM). The NCP load modules must be provided to any host access method which will load the 3705. Installation planning should consider how these files will be provided to the necessary locations. This is especially important when host CPU's are in multiple geographic locations.

REFERENCES

ACF/VTAM System Programmers Guide (DOS)	SC38-0268
ACF/VTAM Installation Guide (DOS)	SC38-0270
ACF/VTAM Reference Summary (DOS)	SX27-3022
ACF/VTAM System Programmers Guide	SC38-0258
ACF/VTAM Network Operating Procedures	SC38-0259
ACF/VTAM Installation Guide	SC38-0269
ACF/VTAM Reference Summary	SX27-3021
ACF/TCAM General Information	GC30-2050
ACF/TCAM Concepts and Planning	GC30-3049
ACF/TCAM System Programmer's Guide	SC30-3117
ACF/TCAM Macro Reference Guide	SC30-3118
ACF/TCAM Application Programmer's Guide	SC30-3119
ACF/TCAM Installation and Migration Guide	SC30-3121
ACF/TCAM Operator's Guide	SC30-3123
ACF/TCAM MSNF Program Reference Summary Supplement	LD21-0003
ACF/TCAM Program Reference Summary	LY30-3037

10.1 : NETWORK DEFINITIONS (AUTO-STARTED)

VTAM STARTUP CONFIGURATION DEFINITION

```
IMSAPAC,TSOAPAC,CICSAPAC,JESAPAC,NOSP,DSXAPPL,                    X
SWITCHAC,LOC3272,NCPACFI,LHA3274A,                               X
CDRPATH,CDRMLIST,CAPLSDOS,CAPLSTCM
```

The following ACF/VTAM defintions are started at start-up time.

VBUILD MACRO SPECIFICATIONS - CDRM: CDRMLIST (MVS SYSTEM)

```
CDRMLIST VBUILD TYPE=CDRM
MVSVTAM   CDRM  SUBAREA=18,ELEMENT=1,ISTATUS=INACTIVE
MVSVMVT   CDRM  SUBAREA=13,ELEMENT=1,ISTATUS=ACTIVE,VPACING=2
MVSVMTC   CDRM  SUBAREA=14,ELEMENT=0,ISTATUS=ACTIVE,VPACING=2
VS1VTAM   CDRM  SUBAREA=11,ELEMENT=1,ISTATUS=INACTIVE
DOSVTAM   CDRM  SUBAREA=12,ELEMENT=1,ISTATUS=ACTIVE,VPACING=2
```

VBUILD MACRO SPECIFICATIONS - CDR PATHS: CDRPATH (MVS SYSTEM)

```
MVSVMTC   PATH  ADJSUB=21,DESTSUB=(14)
MVSVTAM   PATH  ADJSUB=22,DESTSUB=(18)
VS1VTAM   PATH  ADJSUB=22,DESTSUB=(11)
DOSVTAM   PATH  ADJSUB=21,DESTSUB=(12)
```

VBUILD MACRO SPECIFICATIONS - CDRSC: CAPLSDOS (DOS APPLICATION)

```
CAPLSDOS VBUILD TYPE=CDRSC
POWER     CDRSC CDRM=DOSVTAM,ISTATUS=ACTIVE
CICSA     CDRSC CDRM=DOSVTAM,ISTATUS=ACTIVE
CICSB     CDRSC CDRM=DOSVTAM,ISTATUS=ACTIVE
```

```
NOSPD      CDRSC CDRM=DOSVTAM,ISTATUS=ACTIVE
NOSPD000 CDRSC CDRM=DOSVTAM,ISTATUS=ACTIVE
NOSPD001 CDRSC CDRM=DOSVTAM,ISTATUS=ACTIVE
NOSPD002 CDRSC CDRM=DOSVTAM,ISTATUS=ACTIVE
NOSPD003 CDRSC CDRM=DOSVTAM,ISTATUS=ACTIVE
NOSPD004 CDRSC CDRM=DOSVTAM,ISTATUS=ACTIVE
NOSPD005 CDRSC CDRM=DOSVTAM,ISTATUS=ACTIVE
```

VBUILD MACRO SPECIFICATIONS - CDRSC: CAPLSTCM (TCAM APPLICATIONS)

```
CAPLSTCM VBUILD TYPE=CDRSC
NDSMH      CDRSC CDRM=MVSVMTC,ISTATUS=ACTIVE
MHS3270  CDRSC CDRM=MVSVMTC,ISTATUS=ACTIVE
TSOMH      CDRSC CDRM=MVSVMTC,ISTATUS=ACTIVE
```

10.2 : NETWORK DEFINITIONS (ACTIVATED AS REQUIRED)

The following definitions are activated as required.

VBUILD MACRO SPECIFICATIONS - CDRSC: C3270DOS (DOS OWNED 3270)

```
C3270DOS VBUILD TYPE=CDRSC
LU3270V0 CDRSC CDRM=DOSVTAM,ISTATUS=ACTIVE
LU3270V1 CDRSC CDRM=DOSVTAM,ISTATUS=ACTIVE
LU3270V2 CDRSC CDRM=DOSVTAM,ISTATUS=ACTIVE
LU3270V3 CDRSC CDRM=DOSVTAM,ISTATUS=ACTIVE
LU3270V4 CDRSC CDRM=DOSVTAM,ISTATUS=ACTIVE
LU3270V5 CDRSC CDRM=DOSVTAM,ISTATUS=ACTIVE
LU3270V6 CDRSC CDRM=DOSVTAM,ISTATUS=ACTIVE
LU3270V7 CDRSC CDRM=DOSVTAM,ISTATUS=ACTIVE
```

VBUILD MACRO SPECIFICATIONS - CDRSC: C3270TCM (TCAM OWNED 3270)

```
C3270TCM VBUILD TYPE=CDRSC
LU3270V0 CDRSC CDRM=MVSVMTC,ISTATUS=ACTIVE
```

```
LU3270V1 CDRSC CDRM=MVSVMTC,ISTATUS=ACTIVE
LU3270V2 CDRSC CDRM=MVSVMTC,ISTATUS=ACTIVE
LU3270V3 CDRSC CDRM=MVSVMTC,ISTATUS=ACTIVE
LU3270V4 CDRSC CDRM=MVSVMTC,ISTATUS=ACTIVE
LU3270V5 CDRSC CDRM=MVSVMTC,ISTATUS=ACTIVE
LU3270V6 CDRSC CDRM=MVSVMTC,ISTATUS=ACTIVE
LU3270V7 CDRSC CDRM=MVSVMTC,ISTATUS=ACTIVE
```

VBUILD MACRO SPECIFICATIONS - CDRSC: C3274DOS (DOS OWNED 3274)

```
C3274DOS VBUILD TYPE=CDRSC
SDLCPA01 CDRSC CDRM=DOSVTAM,ISTATUS=ACTIVE
SDLCPA02 CDRSC CDRM=DOSVTAM,ISTATUS=ACTIVE
SDLCPA03 CDRSC CDRM=DOSVTAM,ISTATUS=ACTIVE
SDLCPA04 CDRSC CDRM=DOSVTAM,ISTATUS=ACTIVE
SDLCPA05 CDRSC CDRM=DOSVTAM,ISTATUS=ACTIVE
SDLCPA06 CDRSC CDRM=DOSVTAM,ISTATUS=ACTIVE
SDLCPA07 CDRSC CDRM=DOSVTAM,ISTATUS=ACTIVE
SDLCPA08 CDRSC CDRM=DOSVTAM,ISTATUS=ACTIVE
```

VBUILD MACRO SPECIFICATIONS - CDRSC: C3274TCM (TCAM OWNED 3274)

```
C3274TCM VBUILD TYPE=CDRSC
SDLCPA01 CDRSC CDRM=MVSVMTC,ISTATUS=ACTIVE
SDLCPA02 CDRSC CDRM=MVSVMTC,ISTATUS=ACTIVE
SDLCPA03 CDRSC CDRM=MVSVMTC,ISTATUS=ACTIVE
SDLCPA04 CDRSC CDRM=MVSVMTC,ISTATUS=ACTIVE
SDLCPA05 CDRSC CDRM=MVSVMTC,ISTATUS=ACTIVE
SDLCPA06 CDRSC CDRM=MVSVMTC,ISTATUS=ACTIVE
SDLCPA07 CDRSC CDRM=MVSVMTC,ISTATUS=ACTIVE
SDLCPA08 CDRSC CDRM=MVSVMTC,ISTATUS=ACTIVE
```

NOSP INSTALLATION PRE-PLANNING

The following procedures should be done prior to the actual coding of the Network Operation Support Program (NOSP) definition statements.

1. Pictorially define the entire network as defined by the ACF/VTAM and ACF/NCP programs. This definition should initially be done assuming that there will be only one NOSP operator who will have all and complete authorization for the control of the network. However, since in most uses of NOSP there will be multiple NOSP operators each of whom will control different and sometimes overlapping parts of the network, the initial definition should be designed for the future and actual operation. In other words, plan for at least one operator that can control the entire network, and additional operators that have limited spans of control.

   Terminals that may be NOSP operator stations must be defined ahead of time. Likewise, NOSP hardcopy terminals must be predefined. Part of the network definition must be to determine which LU's will be used as operator stations and hardcopy printers and what their various spans of control will be.

   The people involved in the definition of the control of the network should include ACF/VTAM systems programmers as well as Operations personnel. This will insure that the operational aspects are thorough as well as practical. After all, it will be the Operations staff who will be using the product.

2. After the pictorial definition is complete, coding of the initial and single NOSP operator concept should take into consideration the future spans which will be assigned to other NOSP operators. By using this coding approach you will avoid having to recode the NOSP definition for the final configuration.

3. NOSP only requires the "SPAN" parameter if specific profiles are used. If you intend to have all global operators then omit the "SPAN" parameter. CAUTION: If you intend to run NOSP in a multidomain environment then omit the "SPAN" parameter. (See the example for coding RRD statements.)

If specific profiles are used then NOSP requires that the 'SPAN' parameter be coded in the ACF/VTAM definition program, it would be judicious to plan for the inclusion of NOSP as early as possible. ACF/NCP and NCP/VS (5.0) will both ignore this parameter, thus it can be coded even before NOSP is installed. The only thing that might cause a recoding of the 'spanname' is that the network control definition is not complete at the time of the network definition. But since this is a VTAM parameter, it takes effect at VTAM initialization and can be easily changed. CAUTION: Always place spanname in parenthesis. eg SPAN=(spanname).

4.   The various NOSP definitions are stored as several individual members in the NOSP data sets as opposed to, say, VTAM which has a single member for the definition of the network which is running at the time. Thus in order to ease your definition of the NOSP members, define one span of control at a time (as shown by your pictorial configuration).

5.   To ease and confine the extent of the NOSP testing, bring up a single NOSP definition which controls the entire network. This test will check that the NOSP program and commands are working. As mentioned previously you will probably want to keep at least one operator in your final defintior. that has this global authority.

6.   The next level of testing should be to define another NOSP operator in this single NOSP environment. This is done by adding another set of OPERATOR and PROFILE definitions to the NOSP definition. Keep the original (and completely authorized) operator definition intact. You will always want to have one operator who has the authority to control all of the network. After this definition is complete, then bring up and test all of the commands and extents of this operator's control in the network.

Continue doing this step as many times as there are NOSP operators to be defined in this NOSP definition. However, be sure to do this for only one operator at a time to assure that the testing is complete and controllable.

7.   After the complete single NOSP definition is completely tested and is operational the way desired, and if there is to be more than one domain in the network, then start the NOSP definition for the next domain. Again, you want to step through the NOSP definition and testing one step at a time.

8.   When two (or more) NOSP domain definitions are complete and working individually as desired, then test them together. Again, if there are other domains to be included, bring them on one at a time.

NOSP DOCUMENTATION

NOSP General Information	GC38-0251
NOSP Program Product Specifications	GC38-0277
NOSP Program Information and Maintenance Manual	SC38-0278
NOSP Operator's Manual	SC38-0281
NOSP Logic	LY27-8026

NOSP INSTALLATION STEPS

1. Install NOSP distribution tape and apply necessary PTF's.

2. Code and file NOSP definition statements. These statements may be
filed as members in the ACF/VTAM definition library (SYS1.VTAMLST),
or may be put into any partitioned data set.The following members are
defined and filed:

MEMBER	CONTENTS
a. DSIOPF	OPERATOR and PROFILEN statements to define all operators, their passwords, and point to their profiles.(See example 1).
b. User defined proflie name	PROFILE, ISPAN, SPAN, DOMAINS, and AUTH statements to define the operator's span of control. (See example 2).
c. DSISPN	SPANLIST which associates spans and major nodes. Defer this member until you need operators with specific profiles. Be sure to specify all defined profile names as valid for the master terminal operator or Systems Programmer. NOSP may be checked out with one operator by logging on with different profiles. OPERATOR PROFILEN profl,prof2,....(profl is the default)
d. DSIDMN	NOSPID, POS, HARDCOPY, RRD, CDMNSESS, MAXSPAN, MAXABEND, and MAXLOGON which specify system information for NOSP as a whole, rather than a particular operator. (See example 3). MAXABEND should be a low number 2 or 3. This

number determines when NOSP will place a
device in ERROR status. If a device
is NOT in error status, (ie. MAXABEND has
not been reached) then the MOVE command will
not work. MAXLOGON should be about 2 or 3.
When this number is reached because of incorrect
information on the logon screen, NOSP issues
CLSDST RELEASE.

e. DSICMD   CMDMDL and PARMSYN which define all valid
commands, including standard VTAM commands, that
may be entered from a NOSP terminal. These
statements may point to command lists or command
processors. (See example 4).

f. User command   Command list(s). (See example 5).
   list name(s)

3. Create NOSP start procedure using a dataset for disk logging of all
   messages if desired. (See example 6).

4. Code, assemble, and linkedit any desired command processors and/or
   user exits. Defer this step until you are sure you need them. Once
   an exit is there it cannot be disabled.

5. Add NOSP APPL statements to current APPL major node or create a new
   major node and include it in the configuration list (ATCCONxx). (See
   example 7).

6. Modify logon mode tables. NOSP requires a mode table ENTRY of
   DSILGMOD for its bind. Therefore, each terminal type that uses NOSP
   must have a separate logon mode table with a DSILGMOD entry in it.
   (See example 8).

7. Update USS tables and logon intrepet tables as necessary for NOSP
   logon. (See examples 9 and 10).

8. Create procedure for printing a hard copy of NOSP's disk log. (See
   example 11).

NOSP OPERATIONAL CONSIDERATIONS

1. VTAM messages will no longer go to the system console, they will go to the NOSP operator and the hard copy log. System operators will no longer be aware of many network problems, for example, line and modem problems. This, of course, is the intention of NOSP but it will require some operational changes that must be planned for. In addition it will require good communication between the system operators and the NOSP operators.

2. PFK's can be used for standard commands but cannot be used to point to a CLIST since a member name beginning with a numeric is not allowed by the Operating System. This may be handled by an exit routine (DSIEX01) which converts PFK input to something that begins with an alpha character, eg. convert 1 to P1, 2 to P2, etc. Then the member that DSICCP reads and executes will be P1, P2, etc.

3. Since NOSP operator terminals and hardcopy log must be predefined to NOSP by their LU name, some consideration should be given to a backup plan. If a NOSP terminal is unavailable for some reason (terminal problem, line problem, etc.) it would be ideal to have a backup terminal already defined. In this case the operator could move to the backup terminal, sign on and resume operation. In the case of a hardcopy log, the START and STOP commands may be used to change to a backup printer.

4. It is probably advisable to have at least one local NOSP operator station. In the case that the NCP becomes unavailable, it will be valuable to have a local operator who will be notified and take any recovery action necessary.

5. To terminate NOSP, any NOSP operator or the system operator can request a CLOSE. If a CLOSE IMMED is requested, NOSP abends and is terminated immediately. If entered without IMMED (the usual method of termination), each terminal will be sent a message that termination has been requested. Before termination occurs, all operators must logoff. The hardcopy terminal will be automatically logged off when the last operator using it logs off.

6. You MUST code FEATUR2=(MODEL2) on ALL 3270 definitions. Default is model 1 and NOSP does not support this terminal type. (The ACF/VTAM Systems Programmer's Guide left out the defaults.)

7. For NOSP in multiple domains you must have a BIND image and CDRSC definitions.

   a. Here is the logmode entry for NOSP-to-NOSP sessions. Either same domain or X-domain.

```
NOSPXDOM MODETAB
DSILGMOD MODEENT LOGMODE=DSILGMOD,FMPROF=X'03',TSPROF=X'03',        *
            PRIPROT=X'20',SECPROT=X'20',COMPROT=X'4000',            *
            PSERVIC=X'0000000000000000000000000',RUSIZES=X'86A3'
         MODEEND
         END
```

   b. Here is the CDRSC definition if NOSPD were cross-domain to NOSP1

```
      ./ ADD NAME=NOSP2MJX
      CDNOSP2 VBUILD TYPE=CDRSC
      NOSPD      CDRSC CDRM=DOSVTAM,ISTATUS=ACTIVE
      NOSPD000   CDRSC CDRM=DOSVTAM,ISTATUS=ACTIVE
      NOSPD001   CDRSC CDRM=DOSVTAM,ISTATUS=ACTIVE
      NOSPD002   CDRSC CDRM=DOSVTAM,ISTATUS=ACTIVE
      NOSPD003   CDRSC CDRM=DOSVTAM,ISTATUS=ACTIVE
      NOSPD004   CDRSC CDRM=DOSVTAM,ISTATUS=ACTIVE
```

8. For an operator with a specific profile to go cross domain you MUST code DOMAINS statement(s) in the PROFILE.

9. Do not use span of control initially. BE VERY CAREFUL about attempting to use span of control along with RRD statements in a multidomain environment. If you are planning to install NOSP in a single domain first then go to multiple domains DO NOT USE SPECIFIC profiles and RRD statements at all. You must CLEARLY understand the NOSP tables before undertaking such an environment.

SPECIAL NOSP INSTALLATION CONSIDERATIONS

Five things must be done in order to implement SPECIFIC profiles and span of control.

1. You must code MAXSPAN in the DSIDMN member otherwise NOSP will not read the DSISPN member. This number should be a multiple of 8 and MUST be greater than or equal to the number of unique span names. If you don't do this NOSP will not initialize.

2. You must code ISPAN and/or SPAN statements in the PROFILE.

3. You must code AUTH CTL=SPECIFIC or let it default.

4. You must place SPANLIST statements in member DSISPN which point to the VTAM major node name. Failure to find a major node in VTAMLST will terminate NOSP initialization.

5. You must code SPAN= on EVERY resource in EVERY node which you want to be placed under control of an operator using a specific profile. NOTE: These five steps will cause the ART to be built in memory. It is sorted alphabetically after the names are read from VTAMLST. Duplicate names are merged into a single entry. If you leave off SPAN= from any node name (LINE, PU, or LU) then NOSP will not place the name in the ART. If a name is not in the ART then an operator using a specific profile can NEVER reference the resource.

NOSP INSTALLATION EXAMPLES

```
***********************************************************************
** These examples define a single domain environment with two NOSP
** operators, both with global authority, and a hardcopy log.
***********************************************************************

***********************************************************************
1. DSIOPF Example
***********************************************************************
 ./ ADD NAME=DSIOPF
  OPER1     OPERATOR PASSWORD=AAA
            PROFILEN PROF1
  OPER2     OPERATOR PASSWORD=BBB
            PROFILEN PROF1
            END


***********************************************************************
2. PROF1- Example of profile pointed to by PROFILEN of DSIOPF
***********************************************************************
 ./ ADD NAME=PROF1
  PROF1     PROFILE HCL=LU3270V0
            AUTH CTL=GLOBAL,MSGRECVR=YES
            END


***********************************************************************
3. DSIDMN Example
***********************************************************************
 ./ ADD NAME=DSIDMN
  D1        NOSPID DOMAINID=NOSP1
            POS    LU4C3,SDLCPA01,LU3270V3,LHAPA03,LU4D7
            HARDCOPY LU3270V0
  NOSPD     RRD    DUMMY    (Defines NOSPD to NOSP1 for global Operators)
            MAXABEND 3
            MAXLOGON 3   .
            END
```

4. DSICMD Example:
   This member includes all standard NOSP and VTAM commands.
   It also has four user defined command lists. A clist definition
   must have MOD=DSICCP coded. Whenever a clist name is found the
   module DSICCP is invoked. This module processes all clists.

   NOTE: Be sure to code ALL immediate commands as shown.

```
 ./ ADD NAME=DSICMD
***********************************************************************
*          IMMEDIATE COMMANDS                                         *
```

```
*************************************************************
AUTO      CMDMDL MOD=DSIAWP,TYPE=I
AUTOWRAP  CMDMDL MOD=DSIAWP,TYPE=I
CANCEL    CMDMDL MOD=DSICAP,TYPE=I
CLOSE     CMDMDL MOD=DSICLP,TYPE=I
GO        CMDMDL MOD=DSIGOP,TYPE=I
RESET     CMDMDL MOD=DSIRSP,TYPE=I
CLEAR     CMDMDL MOD=DSICKP,TYPE=B
*    The above command name allows the word "CLEAR" to appear in
*    command lists to force a clear screen when desired.
*************************************************************
*    These three special symbols must be defined or the
*    associated key will not work at all!!!
'         CMDMDL MOD=DSINDP,TYPE=I,CTL=S  ENTER KEY W/ODATA (X'7D') QUOTE
_         CMDMDL MOD=DSICKP,TYPE=I,CTL=S  CLEAR KEY (X'6D') UNDERSCORE
>         CMDMDL MOD=DSINDP,TYPE=I,CTL=S  PA2   KEY W/ODATA (X'7D') QUOTE
*************************************************************
*         REGULAR COMMANDS                                 *
*************************************************************
AGAIN     CMDMDL MOD=DSIAGAIN
* SHORT FORM OF LIST COMMAND
L         CMDMDL MOD=DSISHP
          PARMSYN CLIST,CL
          PARMSYN PROFILE,PR
          PARMSYN SPAN,SP
          PARMSYN STATUS,ST
          PARMSYN TASKS,TAS
          PARMSYN SPANS,SPA
          PARMSYN PROFILES,PRO
LIST      CMDMDL MOD=DSISHP
          PARMSYN CLIST,CL
          PARMSYN PROFILE,PR
          PARMSYN SPAN,SP
          PARMSYN STATUS,ST
          PARMSYN TASKS,TAS
          PARMSYN SPANS,SPA
          PARMSYN PROFILES,PRO
LOG       CMDMDL MOD=DSIENP
LOGOFF    CMDMDL MOD=DSIENP
MOVE      CMDMDL MOD=DSISWP
MSG       CMDMDL MOD=DSIMGP
PAUSE     CMDMDL MOD=DSIPSP
ROUTE     CMDMDL MOD=DSIRTP
RO        CMDMDL MOD=DSIRTP
START     CMDMDL MOD=DSISRP
          PARMSYN HCL,HC
          PARMSYN DOMAIN,DO
          PARMSYN TERM,TE
```

```
            PARMSYN SPAN,SP
            PARMSYN RESOURCE,RE
* SHORT FORM OF START COMMAND
S           CMDMDL MOD=DSISRP
            PARMSYN HCL,HC
            PARMSYN DOMAIN,DO
            PARMSYN TERM,TE
            PARMSYN SPAN,SP
            PARMSYN RESOURCE,RE
STOP        CMDMDL MOD=DSISTP
            PARMSYN HCL,HC
            PARMSYN DOMAIN,DO
            PARMSYN TERM,TE
            PARMSYN SPAN,SP
            PARMSYN RESOURCE,RE
* SHORT FORM OF STOP COMMAND
P           CMDMDL MOD=DSISTP
            PARMSYN HCL,HC
            PARMSYN DOMAIN,DO
            PARMSYN TERM,TE
            PARMSYN SPAN,SP
            PARMSYN RESOURCE,RE
************************************************************
*         VTAM COMMANDS                                   *
************************************************************
D           CMDMDL MOD=DSIVTP
DISPLAY     CMDMDL MOD=DSIVTP
F           CMDMDL MOD=DSIVTP
MODIFY      CMDMDL MOD=DSIVTP
R           CMDMDL MOD=DSIREP
REPLY       CMDMDL MOD=DSIREP
V           CMDMDL MOD=DSIVTP
VARY        CMDMDL MOD=DSIVTP
************************************************************
*   YOUR COMMAND LIST NAMES GO HERE
*   THE MODULE NAME MUST BE DSICCP
* NAME     CMDMDL MOD=DSICCP
************************************************************
ACT         CMDMDL MOD=DSICCP
INACT       CMDMDL MOD=DSICCP
TRACE       CMDMDL MOD=DSICCP
NOTRACE     CMDMDL MOD=DSICCP
            END
```

5. Command Lists

  ***CLIST to vary active: ACT

```
        ./ ADD NAME=ACT
        VARY NET,ACT,ID=&1
        ****************************************************************

        ***CLIST to vary inactive: INACT

        ./ ADD NAME=INACT
        VARY NET,INACT,ID=&1,&2

        ****************************************************************

        ***CLIST to start io and buffer trace: TRACE

        ./ ADD NAME=TRACE
        F NET,TRACE,ID=&1,TYPE=IO
        F NET,TRACE,ID=&1,TYPE=BUF

        ****************************************************************

        ***CLIST to stop io and buffer trace: NOTRACE

        ./ ADD NAME=NOTRACE
        F NET,NOTRACE,ID=&1,TYPE=IO
        F NET,NOTRACE,ID=&1,TYPE=BUF

        ****************************************************************

        6. NOSP start procedure

        ****************************************************************
           ***The first step of the procedure is to delete the NOSP disk log
           ***since it will be used again.  The NOSP program is linked under
           ***the name DSIMNT.  All the NOSP definition members are filed in
           ***a PDS named NOSP.CMND.LIST.
        ****************************************************************
        //NOSP JOB
        //ACFNOS1 EXEC PGM=IEFBR14,REGION=512K
        //DD1 DD DSN=NOSPLOG,DISP=(OLD,DELETE,DELETE),VOL=SER=nnnnnn,
        // UNIT=3340
        //STEP2 EXEC PGM=DSIMNT,TIME=1440,REGION=1024K
        //SYSPRINT DD   SYSOUT=A
        //SYSUDUMP DD   SYSOUT=A
        //DSICLD   DD DSN=NOSP.CMND.LIST,DISP=SHR
        //DSIPARM  DD DSN=NOSP.CMND.LIST,DISP=SHR
        //DSIVTAM  DD DSN=SYS1.VTAMLST,DISP=SHR
        //DSIPRF   DD DSN=NOSP.CMND.LIST,DISP=SHR
        //DSILOG   DD DSN=NOSPLOG,VOL=SER=nnnnnn,SPACE=(CYL,(2,1)),
```

```
// DCB=(LRECL=344,BLKSIZE=900,RECFM=VB,DSORG=PS),UNIT=3340,
// DISP=(NEW,KEEP)
```

The PRINTLOG should be a step that prints the log or dumps it to
tape. COND=EVEN should be coded, else if you forget to run the
printlog then you will lose the data.

7. NOSP APPL statements

```
*********************************************************************
    NOSP1 and NOSP1PPT are activated when NOSP is started.  In addition,
    a subtask will be activated at startup for each hardcopy log
    specified in the HCL parameter of the PROFILE statement.  The other
    subtasks will become active as operators sign on.  This definition
    allows five operators and/or hardcopy logs to be active concurrently.
*********************************************************************
H1APPLS  VBUILD TYPE=APPL
NOSP1    APPL AUTH=(ACQ,PASS,NVPACE),PRTCT=NOSP1,EAS=1
NOSP1PPT APPL AUTH=(PPO),EAS=1
NOSP1000 APPL AUTH=(SPO,ACQ,NVPACE),EAS=2
NOSP1001 APPL AUTH=(SPO,ACQ,NVPACE),EAS=2
NOSP1002 APPL AUTH=(SPO,ACQ,NVPACE),EAS=2
NOSP1003 APPL AUTH=(SPO,ACQ,NVPACE),EAS=2
NOSP1004 APPL AUTH=(SPO,ACQ,NVPACE),EAS=2
```

Note: EAS should be greater than or equal to the number of domains.

8. Logon Mode Table entry

```
*********************************************************************
* MODE TABLE FOR 3277 LOCAL OR REMOTE MOD 1/2 AND 11/12 FOR NOSP
*********************************************************************
NOSPTAB  MODETAB
         MODEENT LOGMODE=DSILGMOD,                                 X
                 FMPROF=X'02',TSPROF=X'02',PRIPROT=X'71',          X
                 SECPROT=X'40',COMPROT=X'2000',RUSIZES=X'0000',    X
                 PSERVIC=X'000000000000000000000200'
         MODEEND
         END
```

9. USS Table

```
*********************************************************************
    *** This USS table entry allows the operator to sign on to NOSP by
        keying in NOSP.  NOSP1 is the name on the first APPL statement.
*********************************************************************
NOSP     USSCMD CMD=NOSP,REP=LOGON,FORMAT=BAL
```

```
      USSPARM PARM=APPLID,REP=APPLID,DEFAULT=NOSP1
      USSPARM PARM=LOGMODE,REP=LOGMODE,DEFAULT=DSILGMOD
      USSPARM PARM=P1,REP=DATA
```

10. Logon Intrepet Table

```
*****************************************************************
  *** Make sure to put in both upper and lower case entry since NETSOL
      does not translate.
*****************************************************************
LOGTAB    INTAB
          *
          *
          LOGCHAR APPLID=(APPLICID,NOSP1),SEQNCE='NOSP'
          LOGCHAR APPLID=(APPLICID,NOSP1),SEQNCE='nosp'
          *
          *
          ENDINTAB
          END
```

11. Procedure for printing disk log

```
*****************************************************************
//NOSPRT EXEC PGM=DSIPRT
//DSILOG DD DSN=NOSPLOG,VOL=SER=nnnnnn,UNIT=3340,
// DCB=(LRECL=344,BLKSIZE=900,RECFM=VB,DSORG=PS),DISP=(OLD,KEEP)
//DSIINP DD DUMMY,DCB=(BLKSIZE=80)
//DSILST DD SYSOUT=A,DCB=(BLKSIZE=133)
//SYSPRINT DD  SYSOUT=A
```

NOSP FLOW

        This is a very brief overview of some NOSP processing logic.
        It is related to the above examples of a single domain system.
        This logic flow does not include all exit processing, does not
        include much of the communication with the system operator, does
        not include the handling of unsolicited messages from VTAM, nor
        does it include error processing. It is intended to help show how
        the various dataset members, CLISTS, user exits, and command
        processors are used during NOSP execution.
        AN * beside a member or dataset name means they may be user defined.

    ****
                        INPUT USED   ACTIVITY

1. Start-up   Start-up proc   NOSP is started.

                                    The member DSICMD is read
                                    into main storage at init. time.
                                    All exits must be placed
                                    in the LINKLIB in the form
                                    DSIEXnn (nn=01 thru 14).
                                    These are loaded at init. time.
                (See example 6)

                APPL statements   Activate NOSP1.
                (See example 7)
                                    Activate NOSP1PPT.

                Profile statement   Activate 1 subtask for each hardcopy
                (See example 2)   log (HCL) specified.

                                    Leave outstanding message for system
                                    operator to enter valid NOSP system
                                    operator command.

                                    Wait for logons (assuming no automatic
                                    logons).

2. Logon   USSTAB, MODETAB,   Operator enters logon for NOSP.
                LOG. INTREP. TABLE
                (See ex. 8-9-10)
                                    Nosp displays logon screen.

                                    Operator keys id and password.

                DSIOPF member of   NOSP validates id and password.

	NOSP.CMND.LIST* (See example 1)	
	APPL statements (See example 6)	NOSP opens ACB for this operator subtask (need APPL statement which will be activated).
	PROF1* member of NOSP.CMND.LIST*	Acquire hardcopy log (HCL) for this operator if specified, or if already acquired on behalf of another operator, then begin sending traffic to the Hardcopy Task. Display message to operator, send message to hardcopy log and disk log.
3. Command Execution		Operator enters command.
	DSIEX01 member of LINKLIB*	Execute user exit if present. Validate command syntax.
	DSICMD member of NOSP.CMND.LIST*	Search for entry with label = the verb (eg. VARY). Send message to operator that command was accepted, log request and NOSP response on hardcopy log and disk log. (Execute DSIEX02 and DSIEX04, if they exist). If NOSP cannot find the command name in the System Command Table or if the name points to MOD=DSICCP and the CLIST is NOT on disk the same error message is produced.
	DSIVTP, DSISRP, DSICCP, etc. members of LINKLIB*	Execute code in member that is specified in MOD parameter of DSICMD entry. This may be a NOSP supplied member or a user written command processor.
4. Command Lists		This logic is used only when the MOD specified was DSICCP, which

		must be the MOD for all command lists.
	ACT*, TRACE*, etc. members of NOSP.CMND.LIST*	DSICCP searches for 'member' with same name as this user-defined command verb (eg. ACT, TRACE).
		Command list is executed in sequence.
5. VTAM COMMANDS		This logic is used only when the command is a standard VTAM command. When a VTAM command is entered then DSIVTP is the command processor which is invoked. If an operator is using a SPECIFIC profile than the SPAN is checked by this module.
	DSIEX05 member of LINKLIB*	Execute user written exit, if there.
		Send command to VTAM for execution and wait for response (SENDCMD and RECVCMD of VTAM'S programmed operator facility-POF).
	DSIEX06 member of LINKLIB*	Execute user written exit, if there.
6. Command Output	DSIEX02 member of LINKLIB*	Execute user written exit, if there.
		If you delete a message in DSIEX02 then it will not be logged on the disk or HARDCOPY.
		Send response to command to operator.
	DSIEX04 member of LINKLIB*	Execute user written exit if there.
		Log response on hardcopy log.
		Log response on disk log.
		Return to Command Execution (#3).
7. Logoff		Operator enters LOGOFF.

	DSIEX14 member of LINKLIB*	Execute user written exit, if there.
		Close ACB, subtask becomes inactive, terminate session with hardcopy log and deactivate its subtask if no other operators are using it.
		Send message to operator, log on hardcopy and disk.
8. Terminating NOSP		NOSP or System operator enters CLOSE.
		If CLOSE IMMED was entered, all subtasks will be deactivated without messages and NOSP will be ABENDED.
		If just CLOSE was entered, a message is sent to each active operator and the system console. No more logons are accepted.
		When the last operator has logged off, all ACB's will be closed and NOSP will be ended normally.

CHAPTER 12 : SNA APPLICATION INTERFACES

This section contains sample generation or system definitions for
some of the common SNA application programs.

CICS/VS R1.4 TERMINAL CONTROL TABLE (DFHTCT)

```
*************************************************************
****                                                     ****
***       TCT FOR MVS A ISC SYSTEM                        ***
****                                                     ****
*************************************************************
        DFHTCT TYPE=INITIAL,ACCMETH=(NONVTAM,VTAM),APPLID=CICSMA,     X
               RAMAX=256,RAMIN=0,RATIMES=8,RAPOOL=2,RESP=FME,SUFFIX=MA,X
               GMTEXT='YOU ARE CONNECTED TO MVS CICS A'


        * * * * * * * * * * * * * * * * * * * * *
        * * * * ENTRIES FOR BSC3770 (AS 2770) * * * *
        * * * * * * * * * * * * * * * * * * * * *
        DFHTCT TYPE=SDSCI,DEVICE=2770,DSCNAME=P2770,BSCODE=EBCDIC
PLST770 DFTRMLST AUTOWLST,(C1C1F02D,37373737)
OLST770 DFTRMLST OPENLST,(8181112D)
        DFHTCT TYPE=LINE,ACCMETH=BTAM,TRMTYPE=2770,DSCNAME=P2770,      *
               BTAMRLN=1,TCTUAL=20,INAREAL=517,                       *
               FEATURE=(AUTOPOLL),LISTADR=(PLST770,WRAP),GENPOLL=YES,  *
               CLASS=(HARDCOPY,BISYNC,CONV)
PC74    DFHTCT TYPE=TERMINAL,TRMPRTY=100,TRMTYPE=2770,TRMIDNT=PC74,    *
               TIOAL=517,TRMSTAT=TRANSCEIVE,TCTUAL=20,LASTTRM=LINE,    *
               BUFFER=256,TRMADDR=OLST770


*************************************************************
*****    THE FOLLOWING ENTRIES ARE FOR VTAM TERMINALS ONLY    *****
*************************************************************
*
***************************************
*           ISC LINKS                 *
***************************************
*
MVSB    DFHTCT TYPE=ISLINK,ACCMETH=VTAM,SYSIDNT=MVSB,NETNAME=CICSMB,  X
               TRMIDNT=MVSB,SESTYPE=SEND,CHNASSY=YES,                 X
               RUSIZE=512,BUFFER=512,TIOAL=512,TRMSTAT=TRANSCEIVE
*
DOSB    DFHTCT TYPE=ISLINK,ACCMETH=VTAM,SYSIDNT=DOSB,NETNAME=CICSDB,  X
               TRMIDNT=DOSB,SESTYPE=SEND,CHNASSY=YES,                 X
               RUSIZE=512,BUFFER=512,TIOAL=512,TRMSTAT=TRANSCEIVE
```

CICS LOCAL 3272

```
*****************************************
*              LOCAL 3272               *
*****************************************

LOCO      DFHTCT TYPE=TERMINAL,TRMIDNT=LOCO,TRMTYPE=3277,TRMMODL=2,      X
                 ACCMETH=VTAM,TIOAL=1500,TRMSTAT=TRANSCEIVE,            X
                 NETNAME=LU4CO,RELREQ=(YES,YES),TCTUAL=20,             X
                 BMSFEAT=NOROUTEALL,FEATURE=(DCKYBD),GMMSG=YES
```

CICS REMOTE 3271

```
*****************************************
*              REMOTE 3271              *
*****************************************

LUVO      DFHTCT TYPE=TERMINAL,TRMIDNT=LUVO,TRMTYPE=3277,TRMMODL=2,      X
                 ACCMETH=VTAM,TIOAL=1500,NETNAME=LU3270VO,GMMSG=YES,     X
                 TRMSTAT=TRANSCEIVE,RELREQ=(YES,YES),TCTUAL=20,         X
                 FEATURE=(DCKYBD,SELCTPEN)
```

CICS LOCAL 3274

```
********************************************
*              LOCAL 3274-1A               *
********************************************

LA01      DFHTCT TYPE=TERMINAL,TRMIDNT=LA01,TRMTYPE=LUTYPE2,TRMMODL=1,  X
                 ACCMETH=VTAM,TIOAL=(1024,4096),NETNAME=LHAPA01,        X
                 TRMSTAT=TRANSCEIVE,RELREQ=(YES,YES),CONNECT=NO,        X
                 FEATURE=(DCKYBD,SELCTPEN,AUDALARM,UCTRAN),GMMSG=YES,   X
                 RUSIZE=1024,BRACKET=YES,PGESIZE=(12,40),BUFFER=1536,   X
                 PRINTTO=LA07,ALTPRT=LA08,PGESTAT=PAGE,CHNASSY=YES,     X
                 ALTPGE=(12,80),DEFSCRN=(12,40),ALTSCRN=(12,80)
LA02      DFHTCT TYPE=TERMINAL,TRMIDNT=LA02,TRMTYPE=LUTYPE2,TRMMODL=2,  X
                 ACCMETH=VTAM,TIOAL=(1024,4096),NETNAME=LHAPA02,        X
                 TRMSTAT=TRANSCEIVE,RELREQ=(YES,YES),CONNECT=NO,        X
                 FEATURE=(DCKYBD,SELCTPEN,AUDALARM,UCTRAN),GMMSG=YES,   X
                 RUSIZE=1024,BRACKET=YES,PGESIZE=(24,80),BUFFER=1536,   X
                 PRINTTO=LA07,ALTPRT=LA08,PGESTAT=PAGE,CHNASSY=YES,     X
                 ALTPGE=(43,80),DEFSCRN=(24,80),ALTSCRN=(43,80)
LA07      DFHTCT TYPE=TERMINAL,TRMIDNT=LA07,TRMTYPE=LUTYPE3,TRMMODL=2,  X
                 ACCMETH=VTAM,NETNAME=LHAPA07,BUFFER=1536,              X
                 TRMSTAT=TRANSCEIVE
LA08      DFHTCT TYPE=TERMINAL,TRMIDNT=LA08,TRMTYPE=SCSPRT,TRMMODL=2,   X
                 ACCMETH=VTAM,NETNAME=LHAPA08,BUFFER=1536,              X
                 TRMSTAT=TRANSCEIVE,HF=YES,VF=YES
LB01      DFHTCT TYPE=TERMINAL,TRMIDNT=LB01,TRMTYPE=LUTYPE2,TRMMODL=2,  X
                 ACCMETH=VTAM,TIOAL=(1024,4096),NETNAME=LHAPB01,        X
                 TRMSTAT=TRANSCEIVE,RELREQ=(YES,YES),CONNECT=NO,        X
                 FEATURE=(DCKYBD,SELCTPEN,AUDALARM,UCTRAN),GMMSG=YES,   X
                 RUSIZE=1024,BRACKET=YES,PGESIZE=(24,80),BUFFER=1536,   X
                 PGESTAT=PAGE,CHNASSY=YES
```

CICS REMOTE 3274

```
********************************************
*               REMOTE 3274-1C               *
********************************************

PA01      DFHTCT TYPE=TERMINAL,TRMIDNT=PA01,TRMTYPE=LUTYPE2,TRMMODL=2,   X
                 ACCMETH=VTAM,TIOAL=(1024,4096),NETNAME=SDLCPA01,        X
                 TRMSTAT=TRANSCEIVE,RELREQ=(YES,YES),CONNECT=NO,         X
                 FEATURE=(DCKYBD,SELCTPEN,AUDALARM,UCTRAN,PTRADAPT),     X
                 BUFFER=0,RUSIZE=1024,BRACKET=YES,PGESIZE=(24,80),       X
                 ALTPGE=(43,80),DEFSCRN=(24,80),ALTSCRN=(43,80),        X
                 PGESTAT=PAGE,CHNASSY=YES,GMMSG=YES
PA07      DFHTCT TYPE=TERMINAL,TRMIDNT=PA07,TRMTYPE=LUTYPE3,TRMMODL=2,   X
                 ACCMETH=VTAM,NETNAME=SDLCPA07,BUFFER=0,                 X
                 TRMSTAT=TRANSCEIVE
PA08      DFHTCT TYPE=TERMINAL,TRMIDNT=PA08,TRMTYPE=SCSPRT,TRMMODL=2,    X
                 ACCMETH=VTAM,NETNAME=SDLCPA08,BUFFER=1024,             X
                 TRMSTAT=TRANSCEIVE,HF=YES,VF=YES
PB01      DFHTCT TYPE=TERMINAL,TRMIDNT=PB01,TRMTYPE=LUTYPE2,TRMMODL=2,   X
                 ACCMETH=VTAM,TIOAL=(1024,4096),NETNAME=SDLCPB01,        X
                 TRMSTAT=TRANSCEIVE,RELREQ=(YES,YES),CONNECT=NO,         X
                 FEATURE=(DCKYBD,SELCTPEN,AUDALARM,UCTRAN).GMMSG=YES,    X
                 BUFFER=0,RUSIZE=1024,BRACKET=YES,PGESIZE=(24,80),       X
                 PGESTAT=PAGE,CHNASSY=YES
********************************************
*           REMOTE 3276                       *
********************************************
*
P761      DFHTCT TYPE=TERMINAL,TRMIDNT=P761,TRMTYPE=LUTYPE2,TRMMODL=2,   X
                 ACCMETH=VTAM,TIOAL=(2048,4096),NETNAME=SDLC76P1,        X
                 TRMSTAT=TRANSCEIVE,RELREQ=(YES,YES),CONNECT=NO,         X
                 FEATURE=(DCKYBD,SELCTPEN,AUDALARM,UCTRAN,PTRADAPT),     X
                 BUFFER=0,RUSIZE=2048,BRACKET=YES,PGESIZE=(24,80),       X
                 ALTPGE=(24,80),DEFSCRN=(24,80),ALTSCRN=(24,80),        X
                 PGESTAT=PAGE,CHNASSY=YES,GMMSG=YES
P767      DFHTCT TYPE=TERMINAL,TRMIDNT=P767,TRMTYPE=LUTYPE3,TRMMODL=2,   X
                 ACCMETH=VTAM,NETNAME=SDLC76P7,BUFFER=0,                 X
                 TRMSTAT=TRANSCEIVE
P768      DFHTCT TYPE=TERMINAL,TRMIDNT=P768,TRMTYPE=SCSPRT,TRMMODL=2,    X
                 ACCMETH=VTAM,NETNAME=SDLC76P8,BUFFER=1024,             X
                 TRMSTAT=TRANSCEIVE,HF=YES,VF=YES
```

CICS REMOTE 3767

```
*****************************************************************
*                         REMOTE 3767                          *
*****************************************************************

LU67V     DFHTCT TYPE=TERMINAL,TRMIDNT=LU67V,TRMTYPE=3767,            X
                 ACCMETH=VTAM,TIOAL=(256,768),NETNAME=TR3767V,        X
                 TRMSTAT=TRANSCEIVE,RELREQ=(YES,YES),PGESTAT=PAGE,     X
                 PGESIZE=(12,80),BUFFER=256,BRACKET=YES,CHNASSY=YES
```

CICS REMOTE 3774

```
************************************************************
*                       REMOTE 3774                       *
************************************************************

LU71      DFHTCT TYPE=TERMINAL,TRMIDNT=LU71,TRMTYPE=BCHLU,            X
                 ACCMETH=VTAM,TIOAL=(256,1024),RUSIZE=256,           X
                 TRMSTAT=TRANSCEIVE,RELREQ=(YES,YES),PGESTAT=PAGE,   X
                 PGESIZE=(12,80),BUFFER=256,BRACKET=YES,CHNASSY=YES, X
                 NETNAME=P70LU1
LU72      DFHTCT TYPE=TERMINAL,TRMIDNT=LU72,TRMTYPE=LUTYPE2,         X
                 ACCMETH=VTAM,TIOAL=(256,2048),RUSIZE=256,           X
                 TRMSTAT=TRANSCEIVE,RELREQ=(YES,YES),PGESTAT=PAGE,   X
                 PGESIZE=(12,80),BUFFER=256,BRACKET=YES,CHNASSY=YES, X
                 NETNAME=P70LU2,GMMSG=YES
LU73      DFHTCT TYPE=TERMINAL,TRMIDNT=LU73,TRMTYPE=3790,            X
                 ACCMETH=VTAM,TIOAL=(256,1024),RUSIZE=256,           X
                 TRMSTAT=TRANSCEIVE,RELREQ=(YES,YES),PGESTAT=PAGE,   X
                 PGESIZE=(12,80),BUFFER=256,BRACKET=YES,CHNASSY=YES, X
                 LASTTRM=VTAM,SESTYPE=USERPROG,NETNAME=P70LU3
          DFHTCT TYPE=FINAL
          END    DFHTCTBA
```

IMS/VS NUCLEUS GENERATION

```
        TITLE 'IMS/VS 1.1.5 FIELD TEST LEVEL ** IMS5 **'

    IMSCTRL SYSTEM=(VS/2,ALL,3.7),                              *
            MAXIO=(50,20),                                      *
            MAXREGN=(5,256K),                                   *
            MAXCLAS=10,                                         *
            IMSID=IMS5,

****************************************************************

        COMM  RECANY=(6,3842),                                 *
              APPLID=IMS,                                       *
              SECCNT=3,                                         *
              OPTIONS=(NOPSWD,                                  *
              TERMINAL,                                         *
              PAGING,                                           *
              TIMESTAMP,                                        *
              4096,                                             *
              FMTMAST,                                          *
              NOUSEMSG,                                         *
              NOMSTEX,                                          *
              NOMSPEX,                                          *
              NOCIPH,                                           *
              VTAMAUTH,                                         *
              BLKREQD)

****************************************************************

        IMSCTF SVCNO=(236,237,238),                            *
               APNDG=(Z5),                                     *
               CPLOG=9000,                                     *
               CORE=(16,200,4,2),                              *
               LOG=(SNGL,MONITOR),                             *
               DYLOG=(3330,2043,4)


****************************************************************

        SPAREA CORE=(3,4096),DASD=(15,6144)

****************************************************************

        BUFPOOLS PSB=12000,                                    *
                 PSBW=12000,                                   *
                 DMB=12000,                                    *
```

```
                    DBASE=20000,                                            *
                    GENERAL=20000,                                          *
                    FORMAT=10000,                                           *
                    COMM=30000,                                             *
                    FRE=50


*********************************************************************

          MSGQUEUE DSETS=(3330,3330,3330),                                 *
                   RECLNG=(192,2304),                                      *
                   BUFFERS=(50,2304),                                      *
                   SHUTDWN=10

          TITLE 'DATABASE DEFINITIONS'

**********************************************************************
*****     DATABASES FOR DATA DICTIONARY                         *****
**********************************************************************

          DATABASE DBD=DDSPDTE
          DATABASE DBD=DDSPSEG
          DATABASE DBD=DDSPDBS
          DATABASE DBD=DDSPPCB
          DATABASE DBD=DDSPSYS

**********************************************************************
*****     DATABASES FOR IMS SAMPLE PROGRAM                      *****
**********************************************************************

          DATABASE DBD=DI21PART
          TITLE 'TRANSACTION DEFINITIONS'

**********************************************************************
*****     DATABASES FOR IMS ADF AND HOTLINE SYSTEM              *****
**********************************************************************

          DATABASE DBD=MFDPAR01
          DATABASE DBD=MFDPSP01
          DATABASE DBD=MFDPMS01
          DATABASE DBD=HOTLDATA
          DATABASE INDEX,DBD=HOTLINDX

**********************************************************************
*****     PSB'S AND TRANSACTIONS FOR DATA DICTIONARY            *****
**********************************************************************

          APPLCTN  PSB=DBDIMSOV,PGMTYPE=(TP,OVLY)
             TRANSACT CODE=DBDIMSOV,SPA=(2816,CORE,FIXED),MODE=SNGL
```

```
        APPLCTN  PSB=DBDIMSD,PGMTYPE=(TP,OVLY)
           TRANSACT CODE=DBDIMSD,SPA=(2816,CORE,FIXED),MODE=SNGL
        APPLCTN  PSB=DBDIMSP,PGMTYPE=(TP,OVLY)
           TRANSACT CODE=DBDIMSP,SPA=(712,CORE,FIXED),MODE=SNGL
        APPLCTN  PSB=DBDIMSR,PGMTYPE=(TP,OVLY)
           TRANSACT CODE=DBDIMSR,SPA=(432,CORE,FIXED),MODE=SNGL
        APPLCTN  PSB=DBDIMSU,PGMTYPE=(TP,OVLY)
           TRANSACT CODE=DBDIMSU,SPA=(432,CORE,FIXED),MODE=SNGL
        APPLCTN PSB=DBDIMSB,PGMTYPE=BATCH


    ********************************************************************
    *****    PSB'S AND TRANSACTIONS FOR IMS/VS SAMPLE PROBLEM     *****
    ********************************************************************

        APPLCTN  RESIDENT,PSB=DFSSAM02,                               *
             PGMTYPE=(TP,,1)
        TRANSACT CODE=PART,                                           *
             PRTY=(7,10,2),                                           *
             INQUIRY=YES,                                             *
             MODE=SNGL

        APPLCTN  RESIDENT,PSB=DMSPART,  FOR DMS/3770                  *
             PGMTYPE=(TP,,1)              COPY OF DFSSAM02
        TRANSACT CODE=PARTDMS,              MODIFIED FOR USE WITH     *
             PRTY=(7,10,2),                     A DMS/3770 FP         *
             SPA=(300,CORE)

        APPLCTN  RESIDENT,PSB=DFSSAM03,                               *
             PGMTYPE=(TP,,1)
        TRANSACT CODE=DSPINV,                                         *
             PRTY=(7,10,2),                                           *
             INQUIRY=YES,                                             *
             MODE=SNGL

        APPLCTN  RESIDENT,PSB=DFSSAM04,                               *
             PGMTYPE=(TP,,1)
        TRANSACT CODE=ADDPART,                                        *
             PRTY=(7,10,2),                                           *
             INQUIRY=NO,                                              *
             MODE=SNGL
        TRANSACT CODE=ADDINV,                                         *
             PRTY=(7,10,2),                                           *
             INQUIRY=NO,                                              *
             MODE=SNGL
        TRANSACT CODE=DLETPART,                                       *
             PRTY=(7,10,2),                                           *
             INQUIRY=NO,                                              *
             MODE=SNGL
```

```
          TRANSACT CODE=DLETINV,                                    *
               PRTY=(7,10,2),                                       *
               INQUIRY=NO,                                          *
               MODE=SNGL

          APPLCTN  RESIDENT,PSB=DFSSAM05,                           *
               PGMTYPE=(TP,,1)
          TRANSACT CODE=CLOSE,                                      *
               PRTY=(7,10,2),                                       *
               INQUIRY=NO,                                          *
               MODE=SNGL

          APPLCTN  RESIDENT,PSB=DFSSAM06,                           *
               PGMTYPE=(TP,,1)
          TRANSACT CODE=DISBURSE,                                   *
               PRTY=(7,10,2),                                       *
               INQUIRY=NO,                                          *
               MODE=SNGL
          SPACE 3
          APPLCTN  RESIDENT,PSB=DFSSAM07,                           *
               PGMTYPE=(TP,,1)
          TRANSACT CODE=DSPALLI,                                    *
               PRTY=(7,10,2),                                       *
               INQUIRY=YES,                                         *
               MODE=SNGL

     ***********************************************************************
          TRANSACTIONS FOR NDS PRINTER SUPPORT
     ***********************************************************************
          APPLCTN  PSB=FORMSET,PGMTYPE=TP
          TRANSACT CODE=FORMSET,MODE=SNGL
          APPLCTN  PSB=APAK,PGMTYPE=TP
          TRANSACT CODE=APAK,MODE=SNGL
     ***********************************************************************
          SPACE 3
          TITLE 'TERMINAL DEFINITIONS'
     ***********************************************************************
     ****     TERMINAL DEFINITIONS                                    *****
     ****                                                             *****
     ****     LOCAL READER, PUNCH, PRINTER, SPOOL                     *****
     ***********************************************************************

     PRINTER LINEGRP  DDNAME=PRINTER,                                 *
                   UNITYPE=PRINTER
              LINE  ADDR=00F
              TERMINAL
              NAME  PRINTER
```

```
READER    LINEGRP  DDNAME=READER,                                      *
                   UNITYPE=READER
          LINE  ADDR=01C
          TERMINAL LTERM=PRINTER

PUNCH     LINEGRP  DDNAME=PUNCH,                                        *
                   UNITYPE=PUNCH
          LINE  ADDR=01D
          TERMINAL
          NAME  SPOOL2            -FOR DATA DICTIONARY

SPOOL     LINEGRP  DDNAME=(SPL1,SPL2,SPL3),                            *
                   UNITYPE=SPOOL
          LINE  BUFSIZE=1420
          TERMINAL FEAT=AUTOSCH
          NAME  SPOOL1            -FOR DATA DICTIONARY


*****************************************************************
** BTAM 3770/2770 TERMINAL DEFINITION                       ****
*****************************************************************

          LINEGRP  DDNAME=BSC3770P,UNITYPE=2770,CODE=EBCDIC

          LINE  ADDR=074,FEAT=BUFEXP

          TERMINAL  ADDR=C1,COMPT=(PTR,CARD,PTR),FEAT=(1,BUFEXP)

          NAME  PTR3770,COMPT=1
          NAME  PCH3770,COMPT=2
          NAME  DSK3770,COMPT=3
```

IMS REMOTE 3770

      TYPE UNITYPE=SLUTYPE1

```
***************************************************************
** 3770 PROGRAMMABLE DEFINITIONS FOR BATCH LU (1)         *****
***************************************************************

P70LU1   TERMINAL NAME=P70LU1,           NAME CHANGE FOR ABOVE LU   *
                  COMPT1=CONSOLE,                                   *
                  COMPT2=(TRANSDS1,MFS-SCS2),                       *
                  COMPT3=(PRINTDS1,MFS-SCS1),                       *
                  COMPT4=USERDS1
         NAME   P70CON
         NAME   P70TRAN,ICOMPT=2
         NAME   P70INTR,COMPT=3
         NAME   P70USER,ICOMPT=4
         NAME   P70USER1,COMPT=4
         NAME   P70USER2,COMPT=4

C70LU1   TERMINAL NAME=C70LU1,           SAME LU AS P70LU1 BUT      *
                  COMPT1=CONSOLE,         BECAUSE OF 4 COMP LIMIT IN *
                  COMPT2=(READER1,MFS-SCS2),  IMS, NEED THIS FOR CARD *
                  COMPT3=(PUNCH1,MFS-SCS2),      SUPPORT             *
                  COMPT4=USERDS1
         NAME   C70CON
         NAME   C70RDR,ICOMPT=2
         NAME   C70PUN,COMPT=3
         NAME   C70USER,ICOMPT=4
         NAME   C70USER1,COMPT=4
         NAME   C70USER2,COMPT=4
```

SNA APPLICATION INTERFACE (IMS)

IMS LOCAL 3274

```
*************************************************************
**           3274-1A SNA CHANNEL ATTACHED PRINTERS      *****
*************************************************************

LHAPA07 TERMINAL NAME=LHAPA07,                                  *
                COMPT1=(CONSOLE,BASIC-SCS1),                    *
                MODETBL=SCS,                                    *
                OUTBUF=768
          NAME  LHAPA07

LHAPA08 TERMINAL NAME=LHAPA08,                                  *
                COMPT1=(CONSOLE,MFS-SCS1),                      *
                OUTBUF=768
          NAME  LHAPA08
```

IMS REMOTE 3274 PRINTERS

```
*************************************************************
**           3274-1C SDLC ATTACHED PRINTERS             *****
*************************************************************

SDLCPA07 TERMINAL NAME=SDLCPA07,                                *
                COMPT1=(CONSOLE,BASIC-SCS1),                    *
                MODETBL=SCS,                                    *
                OUTBUF=768
          NAME  SDLCPA07

SDLCPA08 TERMINAL NAME=SDLCPA08,                                *
                COMPT1=(CONSOLE,MFS-SCS1),                      *
                OUTBUF=768
          NAME  SDLCPA08
```

IMS REMOTE 3276 PRINTER

```
***********************************************************************
**              3276 SDLC ATTACHED PRINTERS                      ****
***********************************************************************
         SPACE 4
SDLC76P7 TERMINAL NAME=SDLC76P7,                                       *
              COMPT1=(CONSOLE,BASIC-SCS1),                             *
              MODETBL=SCS,                                             *
              OUTBUF=768
         NAME  SDLC76P7

SDLC76P8 TERMINAL NAME=SDLC76P8,                                       *
              COMPT1=(CONSOLE,MFS-SCS1),                               *
              OUTBUF=768
         NAME  SDLC76P8
```

IMS REMOTE 3790 PRINTERS

```
***********************************************************************
** NODE=BP379011  LTERM=BP11         3790 BULK PRINT 1           ****
***********************************************************************

BP379011 TERMINAL NAME=BP379011,                                      *
              COMPT1=(PRINTER1,MFS-SCS1),                             *
              MODETBL=BLK3790
         NAME  BP11
***********************************************************************
** NODE=BP379012  LTERM=BP12         3790 BULK PRINT 2           ****
***********************************************************************

BP379012 TERMINAL NAME=BP379012,                                      *
              COMPT1=(PRINTER1,BASIC-SCS1),                           *
              MODETBL=BLK3790
         NAME  BP12
```

IMS REMOTE 3790 TYPE 2 BATCH

```
***********************************************************************
****                         3790 TYPE 2 BATCH                  ****
***********************************************************************
```

```
     BT379011 TERMINAL NAME=BT379011,                                    *
                     COMPT1=(PRINTER1,MFS-SCS1),                          *
                     COMPT2=(PRINTDS1,MFS-SCS1),                          *
                     COMPT3=(TRANSDS1,MFS-SCS2),                          *
                     SEGSIZE=256,                                         *
                     OUTBUF=256,                                          *
                     MODETBL=BAT23790,                                    *
                     OPTIONS=(NORESP,OPNDST,NBSELM,NODISCON)
               NAME  BT11MSG,COMPT=1
               NAME  BT11PDS,COMPT=2
               NAME  BT11TDS,ICOMPT=3

     BT379012 TERMINAL NAME=BT379012,                                    *
                     COMPT1=(PRINTER1,MFS-SCS1),                          *
                     COMPT2=(PRINTDS1,MFS-SCS1),                          *
                     COMPT3=(TRANSDS1,MFS-SCS2),                          *
                     SEGSIZE=256,                                         *
                     OUTBUF=256,                                          *
                     MODETBL=BAT23790,                                    *
                     OPTIONS=(NORESP,OPNDST,NBSELM,DISCON)
               NAME  BT12MSG,COMPT=1
               NAME  BT12PDS,COMPT=2
               NAME  BT12TDS,ICOMPT=3
```

IMS SLUTYPE2 DISPLAYS

```
          TYPE UNITYPE=SLUTYPE2

     ********************************************************************
     *****             3274-1A SNA CHANNEL ATTACHED DISPLAYS      *****
     ********************************************************************

     LHAPA01 TERMINAL NAME=LHAPA01,                   3278-1             *
                     TYPE=3270-A1,SIZE=(12,80),                          *
                     FEAT=IGNORE,                                        *
                     OPTIONS=(TRANRESP,COPY,PAGDEL,OPNDST),              *
                     OUTBUF=1536
               NAME  LHAPA01

     LHAPA02 TERMINAL NAME=LHAPA02,                   3278-4             *
                     TYPE=3270-A4,SIZE=(43,80),                          *
                     FEAT=IGNORE,                                        *
                     OPTIONS=(TRANRESP,COPY,PAGDEL,OPNDST),              *
                     OUTBUF=1536
```

```
         NAME  LHAPA02
         SPACE 4
LHAPA03 TERMINAL NAME=LHAPA03,            3278-3              *
         TYPE=3270-A3,SIZE=(32,80),                           *
         FEAT=IGNORE,                                         *
         OPTIONS=(TRANRESP,COPY,PAGDEL,OPNDST),               *
         OUTBUF=1536
         NAME  LHAPA03

LHAPB01 TERMINAL NAME=LHAPB01,            3277-2              *
         TYPE=3270-A2,SIZE=(24,80),                           *
         FEAT=IGNORE,                                         *
         OPTIONS=(TRANRESP,COPY,PAGDEL,OPNDST),               *
         OUTBUF=1536
         NAME  LHAPB01


************************************************************************
*****          3274-1C SDLC ATTACHED DISPLAYS              *****
************************************************************************
SDLCPA01 TERMINAL NAME=SDLCPA01,          3278-4              *
         TYPE=3270-A4,SIZE=(43,80),                           *
         FEAT=IGNORE,                                         *
         OPTIONS=(TRANRESP,COPY,PAGDEL,OPNDST),               *
         OUTBUF=3600
         NAME  SDLCPA01

SDLCPA02 TERMINAL NAME=SDLCPA02,          3278-4              *
         TYPE=3270-A4,SIZE=(43,80),                           *
         FEAT=IGNORE,                                         *
         OPTIONS=(TRANRESP,COPY,PAGDEL,OPNDST),               *
         OUTBUF=3600
         NAME  SDLCPA02

SDLCPA03 TERMINAL NAME=SDLCPA03,          3278-3              *
         TYPE=3270-A3,SIZE=(32,80),                           *
         FEAT=IGNORE,                                         *
         OPTIONS=(TRANRESP,COPY,PAGDEL,OPNDST),               *
         OUTBUF=3600
         NAME  SDLCPA03

SDLCPA04 TERMINAL NAME=SDLCPA04,          3278-3              *
         TYPE=3270-A3,SIZE=(32,80),                           *
         FEAT=IGNORE,                                         *
         OPTIONS=(TRANRESP,COPY,PAGDEL,OPNDST),               *
         OUTBUF=3600
         NAME  SDLCPA04

SDLCPB01 TERMINAL NAME=SDLCPB01,          3277-2              *
```

```
                    TYPE=3270-A2,SIZE=(24,80),                          *
                    FEAT=IGNORE,                                        *
                    OPTIONS=(TRANRESP,COPY,PAGDEL,OPNDST),              *
                    OUTBUF=3600
           NAME   SDLCPB01


     ***********************************************************************
     *****              3276 SDLC ATTACHED DISPLAYS                    *****
     ***********************************************************************
     SDLC76P1 TERMINAL NAME=SDLC76P1,            3276-12                *
                    TYPE=3270-A2,SIZE=(24,80),                          *
                    FEAT=IGNORE,                                        *
                    OPTIONS=(TRANRESP,COPY,PAGDEL,OPNDST),              *
                    OUTBUF=3600
           NAME   SDLC76P1

     SDLC76P2 TERMINAL NAME=SDLC76P2,            3278-2                 *
                    TYPE=3270-A2,SIZE=(24,80),                          *
                    FEAT=IGNORE,                                        *
                    OPTIONS=(TRANRESP,COPY,PAGDEL,OPNDST),              *
                    OUTBUF=3600
           NAME   SDLC76P2
```

IMS REMOTE 3790

```
**************************************************************
****              3790/3270 COMPATIBILITY MODE - 3790     ****
**************************************************************

CM379011 TERMINAL NAME=CM379011,                              *
                 MODEL=2,                                      *
                 FEAT=(PFK,NOCD,PEN),                          *
                 OPTIONS=(TRANRESP,COPY,PAGDEL,OPNDST),        *
                 OUTBUF=1536
          NAME   CM11
```

IMS REMOTE 3770 PROGRAMMABLE

```
          TYPE  UNITYPE=SLUTYPEP

*****************************************************************
****      SLUTYPEP - 3770 SNA PROGRAMMABLE COMMUNICATIONS    ****
*****************************************************************

BA3770PV TERMINAL NAME=BA3770PV,      OLD NAME FOR PC SESSION    *
                 MSGDEL=SYSINFO,       DELETE THIS TERMINAL AFTER *
                 COMPT1=(PROGRAM1,BASIC),    NCP HAS P70LU2 DEFINED *
                 OPTIONS=(FORCRESP,PAGDEL,OPNDST,OPTACK,BID),  *
                 OUTBUF=256,                                    *
                 SEGSIZE=256
          NAME   I.SNAPC70

P70LU2   TERMINAL NAME=P70LU2,                                 *
                 MSGDEL=SYSINFO,                               *
                 COMPT1=(PROGRAM1,BASIC),                      *
                 OPTIONS=(FORCRESP,PAGDEL,OPNDST,OPTACK,BID),  *
                 OUTBUF=256,                                    *
                 SEGSIZE=256
          NAME   P70PC2

P70LU3   TERMINAL NAME=P70LU3,                                 *
                 MSGDEL=SYSINFO,                               *
                 COMPT1=(PROGRAM1,BASIC),                      *
                 OPTIONS=(FORCRESP,PAGDEL,OPNDST,OPTACK,BID),  *
                 OUTBUF=256,                                    *
                 SEGSIZE=256
          NAME   P70PC3
```

```
****************************************************************
****                                                        ****
****     SLUTYPEP - 3790 USER PROGRAMS - 3790               ****
****                                                        ****
****************************************************************

UP379011 TERMINAL NAME=UP379011,                                    *
             MSGDEL=SYSINFO,                                        *
             COMPT1=(PROGRAM1,BASIC),                               *
             OPTIONS=(FORCRESP,PAGDEL,OPNDST,OPTACK,BID),           *
             OUTBUF=256,                                            *
             SEGSIZE=256
         NAME  UP11P1

         TITLE 'TERMINAL DEFINITIONS - 3790 INQUIRY'
         TYPE  UNITYPE=3790


****************************************************************
****                      3790 INQUIRY                      ****
****                                                        ****
****     NODE=INQ02       LTERM=INQ02                       ****
****                                                        ****
****************************************************************

INQ02    TERMINAL NAME=INQ02,                                       *
             OUTBUF=256,                                            *
             OPTIONS=(NOPNDST)
         NAME  INQ02
```

IMS REMOTE 3270

```
        TYPE  UNITYPE=3270                                          *****


*****************************************************************************
*****              VTAM 3270 TERMINAL DEFINITIONS                      *****
*****                                                                  *****
*****     SDLC 3271 CONTROLLER                                         *****
*****                                                                  *****
*****     NODE=LU3270V0    LTERM=LU3270V0    3277                      *****
*****     NODE=LU3270V7    LTERM=LU3270V7    3286                      *****
*****                                                                  *****
*****                                                                  *****
*****     LOCAL 3270 CONTROLLER                                        *****
*****                                                                  *****
*****     NODE=LU4C0       LTERM=LU4C0       3277                      *****
*****                                                                  *****
*****************************************************************************

LU4C0 TERMINAL NAME=LU4C0,                                               *
               UNIT=3277,                                                *
               MODEL=2,                                                  *
               FEAT=(PFK,NOCD,PEN),                                      *
               OPTIONS=(TRANRESP,PAGDEL,OPNDST)
          NAME  LU4C0

LU3270V0 TERMINAL NAME=LU3270V0,                                         *
               UNIT=3277,                                                *
               MODEL=2,                                                  *
               FEAT=(PFK,NOCD,PEN),                                      *
               OPTIONS=(TRANRESP,COPY,PAGDEL,OPNDST)
          NAME  LU3270V0

LU3270V7 TERMINAL NAME=LU3270V7,                                         *
               UNIT=3286,                                                *
               MODEL=2,                                                  *
               PTRSIZE=120
          NAME  LU3270V7
          TITLE ' '
*****************************************************************************
        IMSGEN  SUFFIX=0,                                                *
               NODE=(IMS115,IMS115,IMS115),                              *
```

```
            OBJDSET=IMS115.OBJSUF0,                              *
            USERLIB=IMS115.RESLIB,                               *
            MACLIB=UTILITY,                                      *
            PROCLIB=NO,                                          *
            ASM=H,                                               *
            ASMPRT=ON,                                           *
            LKPRT=(XREF,LIST),LKSIZE=(300K,60K),LKRGN=400K,      *
            JCL=(YGH1,(3MD3665L00065Y),IMS,A,(REGION=2048K,MSGLEVEL=*
            1,CLASS=N)),                                         *
            SCL=(1)


    ****************************************************************
    *****    END OF SYSTEM DEFINITION FOR IMS5                *****
    ****************************************************************
            END
```

INDEX

READER'S COMMENT FORM

SNA Product Install Guide   G320-6028

Please comment on the usefulness and readability of the
publication, suggest additions and deletions, and list
specific errors and omissions (give page numbers). IBM
may use or distribute any of the information you supply
in any way it believes appropriate without incurring any
obligation whatever.

COMMENTS

Thank you for your cooperation. Fold form on two lines,
    tape, and mail to the address on the reverse side.

Your comments, please...

Your comments on the other side'of this form will help us improve
future editions of this publication. Each reply will be carefully
reviewed by the person(s) responsible for writing and publishing
this material.

fold   fold

_____

                    Send to: IBM Corporation (73G/036)
                             1501 California Avenue
                             Palo Alto, CA 94304

_____

fold   fold

International Business Machines Corporation
1501 California Avenue
Palo Alto, CA 94304
(USA only)

                                    READER'S COMMENT FORM