KERNFORSCHUNGSZENTRUM

KARLSRUHE

September 1973 KFK 1747

Datenverarbeitungszentrale

A Solution to TSO Data Base Problems.

D. Schriefer, S. Wirtz

GESELLSCHAFT
FÜR
KERNFORSCHUNG M.B.H.

KARLSRUHE

GESELLSCHAFT FÜR KERNFORSCHUNG M.B.H.
KARLSRUHE

KERNFORSCHUNGSZENTRUM KARLSRUHE

KFK - Bericht 1747

Datenverarbeitungszentrale

A Solution to TSO Data Base Problems.

D. Schriefer, S. Wirtz.

Gesellschaft fuer Kernforschung m.b.H., Karlsruhe

A Solution to TSO Data Base Problems.

Abstract

The recently (at the beginning of 1972) introduced Time Sharing Option (TSO) to the IBM Operating System (OS) /360 on a model 65 has brought up the whole complex of managing an on-line data base.

The difficulties were increased by the fact that the IBM supplied TSO does not provide for any means of control for TSO user disc storage or its usage by the system management.

Observing the restriction to change as little TSO- and OS- modules as possible we found a way to automatically control the on-line space in the time sharing environment, and change the degree of access to the system for a particular user according to his quantity of occupied disc storage.

Eine Loesungsmethode fuer die Verwaltungsprobleme bei TSO-Hintergrundspeichern.

Zusammenfassung.

Die zu Beginn 1972 eingefuehrte Time Sharing Option (TSO) fuer das IBM Betriebssystem OS/360 auf einem Modell 65 konfrontierte uns mit dem Problem der Verwaltung von direkt zugreifbarem ('on-line') Hintergrundspeicher.

Die Schwierigkeiten wurden dadurch vergroessert,dass die von IBM gelieferte Version von TSO keine Methode fuer die Kontrolle der Benutzung von Hintergrundspeicher bereitstellt.

Mit der Beschraenkung so wenig TSO- und OS-Systemprogramme wie moeglich zu aendern, haben wir ein Verfahren entwickelt, das den dem Time Sharing zugeteilten Speicherplatz automatisch ueberwacht und in Abhaengigkeit von der individuellen Platzbelegung den Freiheitsgrad der Benutzung des gesamten Time Sharing Systems fuer jeden einzelnen Benutzer veraendert.

A Solution To TSO Data Base Problems.

1. TSO and the GfK system.

2. Usage of on-line space.

3. Some criteria for an on-line space control system.

4. An approach to an on-line space control system.

   -Possibilities of control.
   -Installation conventions.

5. New command processors.

   -Command processors conventions.
   -The command processors ADDSPACE, CTRSPACE, and SPACE.
   -Other command processors.

6. The LOGON procedure KILL.

7. Appendix.

1. TSO and the GfK-TSO-System.

The Time Sharing Option (TSO) is an additional feature to IBM's Operating System OS/360 or /370. It provides for general purpose time sharing facilities which allow a terminal user to

-enter programmes and data, and store them for later use,

-test programmes written in FORTRAN, PL/1, ALGOL, COBOL, and Assembler Language - with special debugging aids in some of these language processors -, and

-run application programmes interactively.

Since OS/360 does not perform any automatic removal ('paging') of data from primary (memory) to secondary storage (direct access devices) TSO itself makes use of a swapping mechanism which can be controlled by the system management by changing the TSO-driver-parameters.

For keeping user data collections (programmes as well as actual user data) permanently or temporarily TSO needs more secondary storage capacity. This kind of storage must be controlled in a way that ensures acceptable response time in the time sharing environment.

Because of TSO being an additional facility to OS/360, it offers all OS data management access methods although the TSO command language supports only the sequential and partitioned ones. The data management routines include allocation, extension, transmission scheduling, and deletion of parts of or whole data sets. The data management routines are called from TSO via the Direct Access Interface Routine (DAIR). DAIR normally handles catalogued data sets, i.e. data sets whose names and storage volumes are kept in a central list, the catalogue.

Our TSO system runs on an IBM/360 model 65JK together with TCAM (Telecommunication Access Method), APLPLUS (an extension of APL/360) and an installation written file handling system with graphic support TCP (Terminal Control Programme).

An IBM LCS is attached to the one megabyte fast core, but up to now neither TSO nor TCAM makes any use

of it at all. In the near future it might be used for the TCAM Message Control Programme, servicing the terminal network on behalf of TSO.

There exists an ASP (Attached Support Processor) link between the model 65 and an IBM/370 model 165 with a 3 megabyte memory. In order to run jobs in the 'background', we use the IBM ASP group's TSO interface. All jobs submitted from TSO to the background are normally sent to the model 165 via a channel-to-channel connection, however, a user may insist on running a background job on the model 65 by specifying his request for ASP. The background jobs on the model 165 send results and messages to a small ASP communication task on the model 65, which catalogues background generated data sets on the model 65's own catalogues, and thus makes background results available to the TSO terminal user.

2. Usage of On-line Space.

OS/360 and TSO make use of four different types of on-line space:

-the system residence devices;
-the swapping devices;
-the scratch devices for temporary data storage;
-the user library devices for permanent data storage.

The System Residence Devices.

The system residence devices contain data sets for system use only. All data sets are protected and the time sharing user cannot change or delete these data sets - unless, of course, careless mistakes are made by the computer operating staff.

Among the system residence data sets is the system or main catalogue, which is used to find existing user data sets. It contains names and locations of data sets or pointers to subcatalogues. Besides the main catalogue, the system residence volumes contain operating system parameter libraries, language and command processor modules.

The Swapping Devices.

The swapping devices contain images of deactivated programmes which have been swapped out of memory.

Since memory is a very limited resource, not more than a few (usually 1 or 2, very seldom 3) TSO user programmes can be in memory at the same time (number of time sharing foreground regions). All other TSO user programmes - which have been interrupted for one or the other reason, e.g. waiting for terminal I/O or access to a data set, - are swapped out.

The Scratch Devices.

The scratch devices contain temporary data, where temporary means that these data must not be kept for longer than the current terminal session. Typical temporary data sets are compiler workfiles or the workfiles for the EDIT command processor.

The User Library Devices.

The user library devices contain data collections which usually remain in the system after a terminal session. They essentially contain user programmes and user data.

3. Some Criteria About an On-line System.

In a complex environment, like a mixed batch - time sharing one, there ought to be adequate schemes

-that ensure users and the installation that their data sets are kept safe - even confidential, if it is that which a particular user requires, and

-that ensures the users that sufficient secondary space is available - even though some users might try to 'grab' more than they are entitled to.

These control schemes ought to include all data set access initiated by batch as well as by time sharing activities.

OS/360 provides for some simple methods of protecting data by

-expiration date, against accidental destruction and

-password, against unauthorised access,

the latter only since recently - that is since TSO has been born into the world of OS/360 - /370 installations (Release 20). These means can be applied only to the basic units of logical data collections in OS/360 - the 'data sets'. Using 'password' protection increases system operating and maintenance difficulties enormously, but to some extents it protects data sets against unauthorised access.

But there are still no tools provided for adequate space control, despite the fact that TSO has increased the need tremendously. Time sharing users tend to 'forget' about their work data sets - data, they do not need to keep for more than a couple of seconds, minutes or hours. They create new data sets and leave it to the installation administration to find out which are the ones to be got rid of and which are the ones to be kept safe.

In principle, there is no difference between what batch and TSO users can do. But a batch user must have all his resources completely described before he gets any service; a time sharing user should have, but he does not have to. And this is the great advantage of time sharing as far as the user is concerned. If a batch job cannot be supplied with all his resources, the system will print a message and finish off without trying to run the job at all. In particular, the system knows in advance about all temporary space required, it can release space no longer needed after termination of a job or job step in order to assign it to another job.

In the time sharing environment the system still has control over all its resources. But the terminal user can, for instance, dynamically allocate new data sets during a session without having told the system so at the beginning of his session. This is quite a powerful tool, but it can also lead to difficulties for the installation when used by an unexperienced user, e.g. he can create many large data sets in a very short space of time without being aware of it.

The system, which actually does the allocation for the user, can either accept the request or refuse it. The user would not accept a refusal without knowing about the reason. And telling him, that the entire on-line space has been used up by others, would certainly not satisfy him, because he wants his own piece of the cake. So, the space administration must be a user specific one. He must be told that he has used up his quantity of on-line space and, consequently, cannot have any more. On the other hand, his quantity must be guaranteed, so that he can rely on his share of space and can efficiently work with the whole system.

4. An Approach To An On-line Space Control System

Possibilities of Space Control.

There are different ways to introduce an on-line space control scheme depending on the level of efficiency. One can think of three different levels:

- -control all available on-line space system-wide;
- -control all available on-line space within TSO;
- -control all on-line space that remains occupied for a certain amount of time (permanently occupied).

Some installations might feel a need to administrate all on-line space system-wide. For our installation the difficulties arising with this type of space control (significant changes in operating system modules, performance degradation for all users - including batch) were out of proportion to what we wanted. There is no need to control our batch users because of the system of usage of our on-line storage volumes: the system residence volumes contain protected system libraries und thus are not available for user creation of data sets. All other libraries (except for TSO and scratch) are shared among groups of users, and these libraries are assigned to the user groups and preallocated on dedicated volumes by the installation. The scratch volumes are regularly cleaned. With these rules we did not have any problems before TSO was introduced, and therefore we had no reason to change the conditions for the batch users (which is the majority of our users, anyway) - who never use TSO and who do not care about TSO.

Controlling all available TSO on-line space was the actual aim. Theoretically, this includes permanent as well as temporary data sets on volumes dedicated to TSO. In order to understand at which times actions for space control become necessary, look at a list of TSO data set allocations:

Allocation Stage 1 (not user-specific).

non-temporary (permanent)	temporary
- TSO driver parameter lib., - user attribute data set, - TSO message data set, - LOGON procedure libraries, - swap data sets;	- TSO dump data set, - system dump data set (both may require 'new' on-line space);

Allocation takes place whenever TSO is brought up. At this stage no space control is necessary.

Allocation Stage 2 (user-specific).

non-temporary (permanent)	temporary
- HELP - libraries, - command procedure lib., - libraries for automatic lib. call during LINK and LOADGO, - default I/O data sets (which might require 'new' space if data sets are allocated rather than terminal files);	- primary EDIT workfile (requires 'new' space);

Allocation takes place whenever a user logs on. By specifying a procedure name in the LOGON command he selects a special set of allocations. The primary EDIT workfile will be deleted after the end of a session or after some operations of EDIT during which a secondary EDIT workfile will be created. But in order to guarantee each user an amount of space he can work with, we allocate the workfiles on dedicated 'workfile' (scratch) volumes.

Allocation Stage 3 (user-specific).

non-temporary (permanent)	temporary
- object code for language processors: FORT, ASM, PLI, and PLIC, - load code after LINK, - resulting data sets after MERGE, COPY, FORMAT, - 'permanent' copy of EDIT workfile after SAVE, - arbitrary data set after ALLOCATE, with name specified;	- secondary EDIT workfile, created by EDIT subcommands MERGE, RENUM, and FORMAT, - workfiles for language processors, - object code after RUN, - arbitrary data sets after ALLOCATE, without a data set name specified;

These are the dynamic allocations. The terminal user issues a command or subcommand to request action of the allocation service routines. All allocations in Stage 3 normally require 'new' space, unless an operand (where applicable) OLD or SHR is specified or an existing data sets is to be overwritten. In the latter case new data set extents might become necessary, so even then the amount of used space will be extended.

Allocations for temporary space are routed to scratch volumes, since they do not remain in the system after the user's LOGOFF.

In order to achieve registration of all 'new' space allocated at the above mentioned occasions (stage 3), it would be necessary to modify not only the Dynamic Allocation Interface Routine (DAIR) but also some Direct Access Data Set Management (DADSM) modules.

There are two ways of keeping track of the amount of user-allocated space:

> After notification of a user's request for space, we can compute all his space previously allocated. This would obviously take a lot of time during each allocation and therefore it would decrease allocation performance enormously.
>
> The other way is to look up his previously allocated space in a 'keep-list'. This amount plus what he requires now, must then be compared with a limit of allowed space. Then - if the user may have what he wants - we had to hand his request to the OS allocation routines and see whether the OS supplies what he has asked for or not. If his request was successful, we must eventually update the look-up table.

Both ways, computing all of a user's allocated space, or consulting and updating a look-up table at each allocation, would add an unbearable amount of overhead to the allocation management. Both solutions require a tremendous amount of changes to OS and TSO modules, which exceeds the capacity of our implementation and maintenance staff. Thus, we decided to count the user's permanent space only once a session, which - in order to make him respond - takes place at the beginning of each session.

In achieving our aim and observing objective and constraints, we had to introduce some conventions for our TSO users.

Installation Conventions.

In the time before TSO was introduced to the users of our installation, no user was allowed to allocate his own permanent data sets. Groups of users shared preallocated libraries - if they had to. There was a very limited number of users who knew how to maintain a library. This situation had to be changed with TSO, unless the installation did not intend to take advantage of useful features like, for example, the TSO data set type qualifiers.

Since we did not want to change this situation for the normal batch user (who had never heard of TSO) but on the other hand wanted to keep track of the data sets allocated by a specific user (for example with the help of the first qualifier of the data set name), we introduced some restrictions to TSO user's permanent data sets:

-the data sets must reside on TSO dedicated volumes. This can be achieved by using the unit field in the user attribute data set (UADS). At the end of 1972 we used four IBM 2316 disc packs as user library volumes for some 170 users.

-the data sets must follow the TSO naming conventions. This means that the first index of the data set name must be the owner's (by definition: the creator's) user identification.

In order to separate catalogue entries for system data sets from TSO user data sets, we established a special TSO subcatalogue, the main catalogue having only index pointers for each authorised user. People with no pointer in the main catalogue must not allocate space, because their allocation will imply a full data set entry instead of an index entry in the main catalogue, which - together with the data set - will be scratched.

In order to keep the user library volumes clean, we established a special scratch programme: all the data sets which reside on library volumes but do not have all the above properties, will be deleted. This scratch programme can be run once a week, every day or more or less frequently. We are quite satisfied with running it once a week but we might begin running it more often with the increasing number of users, some of whom either flaunt, or through ignorance, break our conventions.

Temporary data sets, on the other hand, are kept strictly separated from the perment data sets. They are kept on dedicated scratch volumes. This includes all

compiler workfiles, which initially were intended (by IBM) to reside as well on volumes pointed to by the unit field in the user attribute data set, but we decided to have them on the scratch volumes. The scratch volumes are cleaned off after each Initial Programme Load (IPL). At the moment we use two IBM 2316 disc packs as scratch volumes.

With these rules it is possible to control automatically the space allocated by a user. As already mentioned we compute the allocated and used space right after LOGON without the user noticing it, making use of the fact that the first index of each data set name is the owner's identification. The calculated space is compared with a predefined limit. The limit is user specific, too (and can be different to the standard value). When a user exceeds his limit, he is immediately logged off, otherwise processing continues normally. In the first case, however, we give him the possibility to log on again with a special LOGON procedure which allows him to reorganise his data sets.

With this form of control the user can work freely during a session, even allocate large permanent data sets. We believe it is more advantageous than inconvenient, especially, when a user tests a programme. So,the only thing, which the user must keep in mind, is to make sure that he is within his limits by the end of the session, in order to avoid wasting time during the following LOGON.

To realise this type of control and to enable the user to check the amount of space he has already allocated, a few new command processors had to be written. But concerning changes to OS and TSO modules: there are no changes to OS modules at all, and changes to TSO modules were kept to an absolute minimum.

5. New Command Processors.

Command Processor Conventions.

TSO command processors are assembler/360 written programmes which perform computing functions requested by the user at the terminal. They get control from the Terminal Monitor Programme (TMP) through ATTACH. The TMP itself is attached by the LOGON/LOGOFF scheduler at logon-time, and provides the interface between the user, command processors, and the time sharing control programme.

Most of the command processor's are reentrant which is not required unless the installation wants to make them resident in either the OS- or the time sharing link pack area. When not resident they run in the user's foreground region and participate in the swapping; this, of course, decreases the performance.

The interface between the TMP and the command processors is standardised, it does not depend on which command is to be attached. The inferface is achieved by a control block, the command processor parameter list (CPPL), located in subpool 1 (read-only storage for the command processor), and pointed to by register 1 on entry to the command processor. This well defined interface makes it possible for an installation to write its own command processors without any changes to the (IBM supplied) TMP, thus avoiding difficulties when introducing new releases or operating systems.

The Command Processors ADDSPACE, CTRSPACE, and SPACE.

The two command processors ADDSPACE and CTRSPACE are the basic ones of our concept. They set up the user limits and accumulate all allocated space quantities for a user. The third processor is for user convenience only.

ADDSPACE.

Syntax:

ADDSPACE 'user-identification' <C('int')/A('int')>

where 'user-identification' must be a valid TSO user identification, and
'int' is an integer number notgreater than 15.

This command can be used only by users who are authorised for the ACCOUNT command. It is used to set the space limit for one particular user. Since all user characteristics are contained in the user attribute data set, ADDSPACE resets the given space limit value to a valid user entry in the UADS, using the installation field in each entry.

With ADDSPACE one adds (A) or changes (C) the maximum quantity of direct access space the user is allowed to allocate. The limit is defined as a multiple of a basic quantity (at the moment: 100 tracks on an IBM 2316 disc pack), the factor being the 'integer' specified in the ADDSPACE command (as the factor cannot be greater than 15, the absolute maximum for the limits is 1500 tracks for a user). If not specified the command processor ADDSPACE uses a default value of 2, which is a standard value for each user in our installation. That is, the average user can allocate up to 200 tracks on a 2316 pack. The limit can be adjusted to a larger requirement.

CTRSPACE.

This command is placed in the parameter field of all except one LOGON-procedures. It is called by the TMP right after the LOGON/LOGOFF scheduler has finished the logon processing successfully. It is executed before the user gets control at the terminal.

Syntax:

CTRSPACE

After some housekeeping the processor links to the central routine (module DSSPACE) of the space control system. This routine computes the allocated and used space for every catalogued data set 'belonging to the

user', i.e. with the user's user-identification at the beginning of the data set name, and sums it up. Upon return to CTRSPACE, the total amount of allocated space is compared with the limit value in the UADS.

Whenever the user exceeds the previously set limit (by the installation, using ADDSPACE) the command processor CTRSPACE posts the TMP for LOGOFF after sending a message to the terminal. The message tells the user what he can do now: 'ENTER LOGON WITH THE PROCEDURE 'proc-name'.'. 'proc-name' is the name of the only one logon procedure not having CTRSPACE in the parameter field, thus not checking the amount of allocated space. The name of this logon procedure is currently KILL.

In order to prevent a user from dodging CTRSPACE, for example, by pressing the attention key, we established our own STAX EXIT routine. This routine gets control first if an attention interrupt occurs, and - after sending a message to the terminal - it posts the TMP for LOGOFF.

SPACE.

This command may be used by the terminal user in order to check how much space he has allocated and how much he has used.

Syntax:

SPACE <'dsname'/ALL>

Typing the operand ALL the user gets a list of his data sets, showing the allocated and used space in tracks for each data set, and the names of the volumes on which the data set resides. Using the operand 'dsname' the user can request this information for a specific data set. Entering the command without a parameter, it displays the total amount of allocated and used space for this user.

SPACE also links to the central routine DSSPACE which performs the actual space control functions; after return from DSSPACE it routes all information to the terminal. We strongly recommend to use SPACE at least at the end of each session in order to avoid trouble while attempting to log on with too much space allocated.

The Command Processors COMPRESS and RELEASE.

These two command processors were implemented in order to supply the terminal user with some tools to get within his space limit after having exceeded it.

COMPRESS.

With the COMPRESS command a user can compress partitioned data sets. He can pack a partitioned data set, because space of a deleted member usually is not used again, unless the deleted member is the physically last one in the data set.

Syntax:

COMPRESS 'dsname' LIST/NOLIST

'dsname' is the name of the partitioned data set which is to be compressed. The operand LIST implies a listing of the names of the members of the partitioned data set to be printed on the terminal. If the NOLIST operand is supplied, no printed output, except the system return code, appears on the terminal. LIST is the default operand.

After some formal checks the processor allocates dynamically the files required by the IBM system support utility IEBCOPY which then gets control through link, in order to achieve a copy inplace. It is particularly useful for libraries when members have been replaced or deleted quite often; the data set after compression does not require as much space as before.

RELEASE.

The RELEASE command is useful in releasing unused but allocated space for a data set.

Syntax:

RELEASE 'list-of-dsnames'

'list-of-dsnames' is a list of names of existing data sets, whose unused space is to be released. The list may consist of only one data set name.

The data sets may be sequential or partitioned.

6. The LOGON Procedure KILL.

Any user who has exceeded his limit of allocatable space cannot log on with any of the normal LOGON procedures. If he tries, he will receive the message, that he has exceeded his space limit and that he can log on only with a special procedure, whose name is 'KILL'. Then the system will automatically log him off. This will happen as long as his amount of allocated space exceeds his limit.

So, in order to reorganise his data sets the user has to log on with the procedure KILL. This procedure does not check the amount of allocated space after LOGON. This procedure does not permit all TSO commands, but only a very limited subset of them. This subset consists only of data management commands, which provide the necessary tools for the terminal user to get back to the rules, i.e. to decrease the amount of allocated space until it is under the user's limit. The subset consists of the following commands:

LIST, LISTDS, LISTCAT, SPACE, DELETE, LISTALC, HELP, RELEASE, COMPRESS, LOGON, and LOGOFF.

In order to prevent a user from using commands other than these listed above, the command name scanner used with the procedure KILL had to be changed slightly. The modification consists of an exit in control section IKJEFP30 of module IKJSCAN. This exit gives control to a new routine IKJEFP3W which either validates the command name or flags it as invalid. In the latter case IKJSCAN tells the terminal user that he used an incorrect command. In order to call the modified IKJSCAN module instead of the original one (which must be used with all other LOGON procedures), we use a STEPLIB-library in the procedure KILL which contains the modified module together with IKJEFP3W.

7. APPENDIX

The following pages contain assembly listings of the TSO on-line space control system modules as of the running version of August 8th, 1973.

SYMBOL	TYPE	ID	ADDR	LENGTH	LD ID
CTRSPACE	SD	01	000000	000834	

```
  LOC  OBJECT CODE    ADDR1 ADDR2  STMT   SOURCE STATEMENT                                          F01MAY72   8/10/73

000000                                1 CTRSPACE  CSECT                                                       00000010
                                      2 * THIS COMMAND PROCESSOR IS THE FIRST ONE TO BE EXECUTED RIGHT AFTER   00000020
                                      3 * LOGON; ITS NAME IS PLACED IN THE PARM FIELD OF THE LOGON PROCEDURES  00000030
                                      4 * (WITH THE EXCEPTION OF THE PROCEDURE KILL). IT LINKS TO THE MODULE   00000040
                                      5 * DSSPACE WITH PARM=X'01'. DSSPACE RETURNS THE ALLOCATED AND USED SPACE 00000050
                                      6 * IN THE ALLOC AND USED FIELDS. THE UADS ARE READ AND THE ALLOCATED    00000060
                                      7 * SPACE IS COMPARED WITH THE USER SPECIFIC UPPER LIMIT; WHENEVER THE   00000070
                                      8 * USER IS ABOVE HIS LIMIT, THE CP SENDS A MESSAGE AND POSTS THE TMP    00000080
                                      9 * FOR LOGOFF.                                                         00000090
                                     10          PRINT NOGEN                                                  00000100
                                     11           SAVE  (14,12),,CTRSPACE                                     00000110
                                     16 ** R13 BASIS REG. AND SAVE AREA POINTER                               00000120
                                     17 ** R2  BASIS REG. FOR  CPPL DSECT  AND FOR ECT DSECT                  00000130
                                     18 ** R11 BASIS REG. FUER STAX EXIT ROUTINE                              00000140
                                     19 ** ON ENTRY R1 POINT TO THE CPPL                                      00000150
000012 183D                          20           LR    3,13                                                  00000160
000014 41DF 001C            0001C    21           LA    13,SAVE-CTRSPACE(15)                                  00000170
00001C                               22           USING SAVE,13                                               00000180
000018 47F0 D048            00064    23           B     START                                                 00000190
                                     24 *****                                                                 00000200
00001C 0000000000000000              25 SAVE      DC    18F'0'                                                00000210
                                     26 ****                                                                  00000220
000064                               27 START     EQU   *                                                     00000230
000064 50D3 0008            00008    28           ST    13,8(3)                                               00000240
000068 503D 0004            00004    29           ST    3,4(13)                                               00000250
00006C 1821                          30           LR    2,1         POINTER TO CPPL                           00000260
000000                               31           USING CPPL,2    ESTABLISH ADRESSABILITY FUER CPPL           00000270
00006E 5020 D7E8            00804    32          ST    2,ACPPL                                                00000280
000072 5830 200C            0000C    33           L     3,CPPLECT                                             00000290
000076 5030 D7F8            00814    34           ST    3,ECTPTR      SAVE  POINTER  TO ECT                   00000300
00007A 41B0 D2C0            002DC    35          LA    11,AEXIT                                               00000310
0002DC                               36          USING AEXIT,11           ESTABLISH ADDRESSIBILITY FOR STAX EXIT 00000320
                                     37 *                                 ROUTINE                             00000330
                                     38 **  SET UP ATTENTION HANDLING EXIT                                    00000340
                                     39           STAX  AEXIT,OBUF=(OUTBUF,33),REPLACE=NO,MF=(E,STAXLIST)     00000350
0000A4 9200 B0D0      003AC          50          MVI   POINTER,X'00'                                          00000360
0000A8 5860 2008            00008    51           L     6,CPPLPSCB     R6: POINT  TO PSCB                     00000370
0000AC 9601 B534      00810          52           OI    PARM,X'01'     SET PARM BIT FUER PLSPACE              00000380
0000B0 1B77                          53          SR    7,7                                                    00000390
0000B2 4376 0007            00007    54           IC    7,7(6)   GET  LENGTH OF USER ID                       00000400
0000B6 0670                          55           BCTR  7,0           DECREASE OF 1 VOR PLSPACE               00000410
0000B8 4470 B06C            00348    56           EX    7,MOVEL  MOVE  USER ID IN DSN FUER FIND               00000420
0000BC 4470 B072            0034E    57           EX    7,MOVEL1 MOVE  USER ID IN USER FUER PLSPACE           00000430
0000C0 4177 0001            00001    58          LA    7,1(7)         RESET LENGTH OF USER ID                 00000440
                                     59 ******** LINK TO DSSPACE TO COMPUTE ALLOCATED SPACE **********         00000450
                                     60          LINK  EP=DSSPACE,PARAM=(USER,ALLOC,USED,PARM,ACPPL),VL=1     00000460
                                     77 ** ENQ ON UADS  SHARE                                                 00000470
                                     78           ENQ   (QNAME,RNAME,S,8,SYSTEM),RET=HAVE                     00000480
000106 12FF                          89          LTR   15,15          ALREADY ENQ FOR THIS TASK?              00000490
000108 4770 D0F4            00110    90          BNZ   ENQ            YES BRANCH                              00000500
00010C 9640 B0D0      003AC          91           OI    POINTER,X'40' SET POINTER FOR ENQ                     00000510
000110                               92 ENQ       EQU   *                                                     00000520
000110 4180 B0A4            00380    93           LA    8,DSN                                                 00000530
000114 4187 8000            00000    94           LA    8,0(7,8)      GET POINTER TO FIRST BLK. IN DSANME     00000540
000118 92F0 8000      00000          95           MVI   0(8),X'F0'     MOVE  EXTEND NUMBER IN DSN             00000550
                                     96 ** OPEN UADS,FIND HEADER BLOCK FOR USERID AND READ IT                 00000560
                                     97 ** ALLOCATED SPACE > USER LIMIT        ?                              00000570
                                     98 ** YES BRANCH TO DELETE                                               00000580
                                     99 ** NO MOVE ALLOCATED SPACE INTO BUFFER   REWRITE HEADER BLOCK         00000590
                                    100 **                                                                    00000600
```

```
  LOC  OBJECT CODE    ADDR1 ADDR2  STMT   SOURCE STATEMENT                                                 F01MAY72  8/10/73

                                    101           PRINT OFF                                                          00000610
                                    190 **                                                                           00000930
00021A                              191 NOWRI     EQU   *                                                            00000940
00021A 45A0 B020            002FC   192           BAL   10,CLEAR                                                     00000950
00021E 47F0 D2B0            002CC   193           B     RETURN                                                       00000960
000222                              194 DELETE    EQU   *                                                            00000970
                                    195 ** USER IST NICHT PRIVILIGIERT SEND MESSAGE SET POINTER                      00000980
                                    196 ** FOR LOGOFF                                                                00000990
000222 D222 B488 B0D1 00764 003AD   197           MVC   TEXT+4(35),MESS1                                             00001000
000228 4170 0027            00027   198           LA    7,39                                                         00001010
00022C 4070 B484            00760   199           STH   7,TEXT                                                       00001020
000230 45A0 D220            0023C   200           BAL   10,PUTL                                                      00001030
000234 9608 B0D0      003AC         201           OI    POINTER,X'08'                                                00001040
000238 47F0 D180            0019C   202           B     OK                                                           00001050
00023C                              203 PUTL      EQU   *                                                            00001060
00023C 1B66                         204           SR    6,6                                                          00001070
00023E 5060 B12C            00408   205           ST    6,ECBADS                                                     00001080
000242 4060 B486            00762   206           STH   6,TEXT+2                                                     00001090
000246 5830 2004            00004   207           L     3,CPPLUPT                                                    00001100
00024A 5840 200C            0000C   208           L     4,CPPLECT                                                    00001110
                                    209           PUTLINE PARM=PUTBLOCK,UPT=(3),ECT=(4),ECB=ECBADS,                 *00001120
                                                        OUTPUT=(TEXT,TERM,SINGLE,DATA),MF=(E,IOPLADS)                00001130
000292 07FA                         227           BR    10                                                           00001140
                                    228           DROP  2                                                            00001150
000294                              229 OPENER    EQU   *                                                            00001160
000294 D203 B100 B10C 003DC 003E8   230           MVC   MESS2+12(4),ER1                                              00001170
00029A 47F0 D292            002AE   231           B     ERROR                                                        00001180
00029E                              232 DIRER     EQU   *                                                            00001190
00029E D203 B100 B110 003DC 003EC   233           MVC   MESS2+12(4),ER2                                              00001200
0002A4 47F0 D292            002AE   234           B     ERROR                                                        00001210
0002A8                              235 EXIT      EQU   *                                                            00001220
0002A8 D204 B100 B114 003DC 003F0   236           MVC   MESS2+12(5),ER3                                              00001230
0002AE                              237 ERROR     EQU   *                                                            00001240
0002AE D217 B488 B0F4 00764 003D0   238           MVC   TEXT+4(24),MESS2                                             00001250
0002B4 4170 001C            0001C   239           LA    7,28                                                         00001260
0002B8 4070 B484            00760   240           STH   7,TEXT                                                       00001270
0002BC 9608 B0D0      003AC         241           OI    POINTER,X'08'  SET POINTER TO POST TMP                       00001280
0002C0 45A0 B020            002FC   242           BAL   10,CLEAR                                                     00001290
0002C4 45A0 D220            0023C   243           BAL   10,PUTL                                                      00001300
0002C8 47F0 D2B0            002CC   244           B     RETURN                                                       00001310
0002CC                              245 RETURN    EQU   *                                                            00001320
                                    246           STAX                                                               00001330
0002D0                              250 NOSTAX1   EQU   *                                                            00001340
0002D0 58D0 D004            00020   251           L     13,SAVE+4                                                    00001350
0002D4 98EC D00C            0000C   252           LM    14,12,12(13)                                                 00001360
0002D8 1BFF                         253           SR    15,15                                                        00001370
0002DA 07FE                         254           BR    14                                                           00001380
                                    255 ********************************                                             00001390
                                    256 AEXIT     SAVE  (14,12),,AEXIT                                               00001400
0002EA 18BF                         261           LR    11,15                                                        00001410
0002DC                              262           USING AEXIT,11                                                     00001420
0002EC 9608 B0D0      003AC         263           OI    POINTER,X'08' SET POINTER FOR LOGOFF                         00001430
0002F0 45A0 B020            002FC   264           BAL   10,CLEAR                                                     00001440
0002F4 98EC D00C            0000C   265           LM    14,12,12(13)                                                 00001450
0002F8 1BFF                         266           SR    15,15                                                        00001460
0002FA 07FE                         267           BR    14                                                           00001470
                                    268 ********************************                                             00001480
0002FC                              269 CLEAR     EQU   *                                                            00001490
0002FC 9140 B0D0      003AC         270           TM    POINTER,X'40'                                                00001500
000300 4780 B03E            0031A   271           BZ    NODEQ                                                        00001510
```

```
  LOC  OBJECT CODE    ADDR1 ADDR2  STMT   SOURCE STATEMENT                                              F01MAY72   8/10/73

                                    272            DEQ   (QNAME,RNAME,8,SYSTEM),RET=HAVE                                00001520
000316 948F B0D0       003AC        283           NI    POINTER,X'BF'                                                   00001530
00031A 9110 B0D0       003AC        284 NODEQ      TM    POINTER,X'10'                                                  00001540
00031E 4780 B056             00332  285            BZ    NOCLOSE                                                        00001550
                                    286            CLOSE UADDCB                                                         00001560
00032E 94EF B0D0       003AC        292           NI    POINTER,X'EF'                                                   00001570
000332                              293 NOCLOSE    EQU   *                                                              00001580
000332 5820 B538             00814  294            L     2,ECTPTR       GET POINTER TO ECT                              00001590
000000                              295            USING ECT,2                                                          00001600
000336 1BFF                         296            SR    15,15                                                          00001610
000338 50F0 2000             00000  297            ST    15,ECTRCDF                                                     00001620
00033C 9108 B0D0       003AC        298            TM    POINTER,X'08'  IS POINTER FOR LOGOFF SET                       00001630
000340 078A                         299            BCR   8,10           IF NO RETURN                                    00001640
000342 9610 201C       0001C        300            OI    ECTSWS,X'10'   SET LOGOFF SWITCH                               00001650
000346 07FA                         301            BR    10                                                             00001660
                                    302 *******************************************************************             00001670
000348 D200 B0A4 6000 00380 00000   303 MOVEL      MVC   DSN(0),0(6)   MOVE  USERID IN DSN FUER FIND                    00001680
00034E D200 B078 6000 00354 00000   304 MOVEL1     MVC   USER(0),0(6)  MOVE USERID FUER DSSPACE                         00001690
000354 4040404040404040             305 USER      DC    CL44' '                                                         00001700
000380                              306           DS    0D                                                              00001710
000380 4040404040404040             307 DSN       DC    CL44' '                                                         00001720
0003AC 00                           308 POINTER   DC    X'00'                                                           00001730
0003AD C5D5E3C5D940D3D6             309 MESS1      DC    CL35'ENTER LOGON WITH THE PROCEDURE KILL'                      00001740
0003D0 D9C5E3D9E840D3D6             310 MESS2     DC    CL24'RETRY LOGON       ERROR'                                   00001750
0003E8 D6D7C5D5                     311 ER1       DC    CL4'OPEN'                                                       00001760
0003EC C6C9D5C4                     312 ER2       DC    CL4'FIND'                                                       00001770
0003F0 E2E8D5C1C4                   313 ER3       DC    CL5'SYNAD'                                                      00001780
0003F5 000000
0003F8 0000000000000000             314 IOPLADS    DC    4F'0'                                                          00001790
000408 00000000                     315 ECBADS    DC    F'0'                                                            00001800
00040C D2C5C9D540C1E3E3             316 OUTBUF    DC    C'KEIN ATTN BEI LOGON   ENTER LOGON '                           00001810
00042E 0000
000430 0000000000000000             317 UADBUF     DC    200F'0'                                                        00001820
000750 E2E8E2C9D2D1E4C1             318 QNAME      DC    C'SYSIKJUA'                                                    00001830
000758 D6D7C5D5E4C1C4E2             319 RNAME      DC    C'OPENUADS'                                                    00001840
000760 00000000                     320 TEXT       DC    F'0'                                                           00001850
000764 0000000000000000             321            DC    10F'0'                                                         00001860
                                    322 STAXLIST STAX  AEXIT,MF=L                                                       00001870
                                    331 PUTBLOCK  PUTLINE MF=L                                                          00001880
                                    336 UADDCB     DCB   DDNAME=SYSUADS,MACRF=(R,W),DSORG=PO,SYNAD=EXIT                 00001890
000804 00000000                     387 ACPPL      DC    F'0'                                                           00001900
000808 00000000                     388 ALLOC      DC    F'0'                                                           00001910
00080C 00000000                     389 USED       DC    F'0'                                                           00001920
000810 00                           390 PARM       DC    X'00'                                                          00001930
000811 000000
000814 00000000                     391 ECTPTR    DC    F'0'                                                            00001940
000818 0064                         392 MIN        DC    H'100'                                                         00001950
                                    393 UADREAD    READ  UADDECB,SF,,,,'S',,MF=L                                        00001960
000830                              402 IDLEN      DS    F                                                              00001970
                                    403           IKJCPPL                                                               00001980
                                    414           IKJECT                                                                00001990
                                    442           END                                                                   00002000
```

POS.ID	REL.ID	FLAGS	ADDRESS
01	01	0C	0000C8
01	01	0C	0000CC
01	01	0C	0000D0
01	01	0C	0000D4
01	01	08	0000D9
01	01	0C	0000E0
01	01	0C	0000FC
01	01	0C	000100
01	01	08	000121
01	01	0C	000280
01	01	0C	00030C
01	01	0C	000310
01	01	08	000329
01	01	0C	00078C
01	01	0C	0007E4

SYMBOL	LEN	VALUE	DEFN	REFERENCES				
ACPPL	00004	000804	00387	0032	0069			
AEXIT	00004	0002DC	00257	0035	0036	0041	0262	0324
ALLOC	00004	000808	00388	0065	0143	0146		
CLEAR	00001	0002FC	00269	0192	0242	0264		
CPPL	00001	000000	00408	0031				
CPPLCBUF	00004	000000	00409					
CPPLECT	00004	00000C	00412	0033	0208			
CPPLPSCB	00004	000008	00411	0051				
CPPLUPT	00004	000004	00410	0207				
CTRSPACE	00001	000000	00001	0021				
DELETE	00001	000222	00194	0145				
DIRER	00001	00029E	00232	0117				
DSN	00044	000380	00307	0093	0113	0303		
ECBADS	00004	000408	00315	0205	0213			
ECT	00001	000000	00415	0295				
ECTATRM	00001	000020	00433					
ECTDDNUM	00003	00001D	00438					
ECTIOWA	00004	000004	00425					
ECTLOGF	00001	000010	00435					
ECTMSGF	00001	000008	00426					
ECTNMAL	00001	000008	00436					
ECTNNOT	00001	000004	00437					
ECTNOPD	00001	000080	00432					
ECTPCMD	00008	00000C	00429					
ECTPTR	00004	000814	00391	0034	0294			
ECTRCDF	00001	000000	00422	0297				
ECTRTCD	00003	000001	00423					
ECTSCMD	00008	000014	00430					
ECTSMSG	00003	000009	00428					
ECTSWS	00001	00001C	00431	0300				
ECTUSER	00004	000020	00439					
ENQ	00001	000110	00092	0090				
ERROR	00001	0002AE	00237	0231	0234			
ER1	00004	0003E8	00311	0230				
ER2	00004	0003EC	00312	0233				
ER3	00005	0003F0	00313	0236				
EXIT	00001	0002A8	00235	0373				
IDLEN	00004	000830	00402					
IHB0002A	00002	000096	00046	0047				
IHB0002B	00006	000098	00047	0045				
IHB0004	00001	0000C8	00063					
IHB0004A	00001	0000DC	00070	0062				
IHB0006	00002	000104	00087	0080				
IHB0014	00004	000184	00153	0151				
IHB0019	00004	000204	00180	0178				
IHB0026	00002	000314	00281	0274				
IOPLADS	00004	0003F8	00314	0210				
MESS1	00035	0003AD	00309	0197				
MESS2	00024	0003D0	00310	0230	0233	0236	0238	
MIN	00002	000818	00392	0140				
MOVEL	00006	000348	00303	0056				
MOVEL1	00006	00034E	00304	0057				
NOCLOSE	00001	000332	00293	0285				
NODEQ	00004	00031A	00284	0271				
NOSTAX1	00001	0002D0	00250					
NOWRI	00001	00021A	00191					
OK	00004	00019C	00146	0142	0144	0202		
OPENER	00001	000294	00229	0109				
OUTBUF	00034	00040C	00316	0043				
PARM	00001	000810	00390	0052	0067			

8/10/73

SYMBOL	LEN	VALUE	DEFN	REFERENCES										
POINTER	00001	0003AC	00308	0050	0091	0110	0201	0241	0263	0270	0283	0284	0292	0298
PUTBLOCK	00004	0007A0	00333	0215										
PUTL	00001	00023C	00203	0200	0243									
QNAME	00008	000750	00318	0085	0279									
RETURN	00001	0002CC	00245	0193	0244									
RNAME	00008	000758	00319	0086	0280									
SAVE	00004	00001C	00025	0021	0022	0251								
START	00001	000064	00027	0023										
STAXLIST	00004	00078C	00323	0040										
TEXT	00004	000760	00320	0197	0199	0206	0219	0238	0240					
UADBUF	00004	000430	00317	0123	0133	0149	0167							
UADDCB	00004	0007AC	00340	0106	0108	0112	0121	0165	0290					
UADDECB	00004	00081C	00395	0119	0129	0163	0173							
UADREAD	00004	00081C	00394											
USED	00004	00080C	00389	0066										
USER	00044	000354	00305	0064	0304									

NO STATEMENTS FLAGGED IN THIS ASSEMBLY
STATISTICS SOURCE RECORDS (SYSIN) = 200 SOURCE RECORDS (SYSLIB) = 5491
OPTIONS IN EFFECT LIST, NODECK, LOAD, NORENT, XREF, NOTEST, ALGN, OS, NOTERM, LINECNT = 60
283 PRINTED LINES

SYMBOL	TYPE	ID	ADDR	LENGTH	LD ID
DSSPACE	SD	01	000000	000EF^	

```
  LOC  OBJECT CODE    ADDR1 ADDR2  STMT   SOURCE STATEMENT                                F01MAY72  8/10/73

000000                             1 DSSPACE  CSECT                                                  00000010
                                   2 * EXCEPT IN THE CASE WHERE INFORMATIONS ARE NEEDED FOR A SINGLE DATA    00000020
                                   3 * SET ALL THE CATALOG ENTRIES ARE READ FOR THE SPECIFIED USER. FOR      00000030
                                   4 * EACH DATA SET NAME THE ALLOCATED AND USED SPACE ARE COMPUTED FROM     00000040
                                   5 * THE INFORMATIONS CONTAINED IN THE VTOC AND FINALLY ADDED.            00000050
                                   6 * DEPENDING UPON THE VALUE OF THE PARM ARGUMENT THE FOLLOWING INFOR-   00000060
                                   7 * MATIONS ARE PRINTED                                                  00000070
                                   8 *   X'04' ALLOCATED AND USED SPACE FOR EVERY DATA SET AND THE SUM       00000080
                                   9 *   X'02' SUM OF THE ALLOCATED AND USED SPACE                          00000090
                                  10 *   X'0C' ALLOCATED AND USED SPACE FOR THE SPECIFIED DATA SET          00000100
                                  11 *   X'01' NO INFORMATIONS. CALL FROM CTRSPACE   ALLOCATED AND USED     00000110
                                  12 *         SPACE ARE RETURNED IN THE ALLOC AND USED ARGUMENTS           00000120
                                  13 **  5 ARGUMENTS:                                                     00000130
                                  14 **    1. DSNAME OR INDEX                                             00000140
                                  15 **    2. ALLOCATED TRACKS                                            00000150
                                  16 **    3. USED TRACKS                                                 00000160
                                  17 **    4. PARM,CONTROL OUTPUT                                         00000170
                                  18 **    5.CPPL ADDRESS                                                 00000180
                                  19 * FIVE BUFFERS ARE CHAINED FOR THE INDEX LEVELS.                      00000190
                                  20 * EACH BUFFER IS 280 BYTES LONG. THE FIRST WORD OF THE BUFFER POINTS  00000200
                                  21 * TO THE NEXT BUFFER, THE SECOND WORD POINTS TO THE NEXT INDEX ENTRY  00000210
                                  22 * IN THE BLOCK TO BE WORKED OUT. REGISTER 5 POINT TO THE CURRENT       00000220
                                  23 * BUFFER, REGISTER 3 TO THE CURRENT INDEX ENTRY IN THIS BLOCK.        00000230
                                  24 * IF THERE ARE MORE LEVEL THE "RESERVE" BLOCK SHALL BE USED.          00000240
                                  25 ** REG 11 BASIS REGISTER FUER CSECT                                   00000250
                                  26 ** REG 2 BASIS REGISTER FUER CPPL                                     00000260
                                  27 **** HOUSE KEEPING                                                    00000270
                                  28          PRINT NOGEN                                                  00000280
                                  29          SAVE  (14,12),,DSSPACE                                       00000290
000010 188F                       34          LR    11,15                                                  00000300
000000                            35          USING DSSPACE,11                                             00000310
000012 50D0 BEA8          00EA8   36          ST    13,SAVEA+4                                             00000320
000016 18CD                       37          LR    12,13                                                  00000330
000018 41D0 BEA4          00EA4   38          LA    13,SAVEA                                               00000340
00001C 50DC 0008          00008   39          ST    13,8(12)                                               00000350
000020 5010 B58C          005BC   40          ST    1,PASSLIST    SAVE POINTER TO ARG.LISTE                00000360
000024 5821 000C          0000C   41          L     2,12(1)       GET PARM ADR.                            00000370
000028 D200 B6CD 2000 006CD 00000 42          MVC   PARM(1),0(2)  MOVE PARM                                00000380
00002E 5821 0000          00000   43          L     2,0(1)        GET DSNAME ADR.                          00000390
000032 D22B BE70 2000 00E70 00000 44          MVC   DSNAME(44),0(2)  MOVE DSNAME OR INDEX                  00000400
000038 5821 0010          00010   45          L     2,16(1)       GET POINTER TO CPPL ADR.                 00000410
00003C 5822 0000          00000   46          L     2,0(2)   GET CPPL ADR                                  00000420
000000                            47          USING CPPL,2                                                 00000430
000040 D203 B7C8 2004 007C8 00004 48          MVC   AUPT(4),CPPLUPT                                        00000440
000046 D203 B7C4 200C 007C4 0000C 49          MVC   AECT(4),CPPLECT                                        00000450
                                  50          DROP  2                                                      00000460
00004C 9101 B6CD       006CD      51          TM    PARM,X'01'    PRINT ?                                  00000470
000050 4710 B062          00062   52          BO    NOHEAD        WHEN NOT NO OVERHEAD                     00000480
000054 D219 B6D2 B5E7 006D2 005E7 53          MVC   BLK(26),HEAD                                           00000490
00005A 4170 001E          0001E   54          LA    7,30                                                   00000500
00005E 4530 B4EC          004EC   55          BAL   3,PRINT       PUTLINE                                  00000510
000062                            56 NOHEAD   EQU   *                                                      00000520
000062 4140 BE70          00E70   57          LA    4,DSNAME                                               00000530
000066 4150 002C          0002C   58          LA    5,44                                                   00000540
00006A 9540 4000       00000      59 SUCHBL   CLI   0(4),X'40'    FIND END OF INDEX                        00000550
00006E 4780 B07A          0007A   60          BE    BL                                                     00000560
000072 4144 0001          00001   61          LA    4,1(4)                                                 00000570
000076 4650 B06A          0006A   62          BCT   5,SUCHBL                                               00000580
00007A 5040 B74C          0074C   63 BL       ST    4,DSNP                                                 00000590
00007E 5040 B778          00778   64          ST    4,DSNP1       STORE ADR. OF FIRST BLK.                 00000600
```

```
 LOC  OBJECT CODE    ADDR1 ADDR2  STMT   SOURCE STATEMENT                                F01MAY72   8/10/73

000082 5040 B77C            0077C    65          ST    4,DSNP3                                          00000610
                                     66 **** DSNP POINT TO THE FIRST BYTE AFTER  DSNAME OR AFTER THE FIRST  00000620
                                     67 ***   INDEX                                                      00000630
000086 41C0 B5AC            005AC    68          LA    12,RETURN     GET RETURN ADR. FUER ERROR IN LOCATE  00000640
00008A 9108 B6CD      006CD         69          TM    PARM,X'08'    ONLY ONE DSNAME ?                     00000650
00008E 4780 B0B6            000B6    70          BZ    SPACE         IF NO BR.                             00000660
                                     71 ************************************************************     00000670
000092 4150 B900            00900    72          LA    5,FIRST+8     GET ADR. OF BUFFER FUER LOCATE        00000680
000096 5050 B760            00760    73          ST    5,LIST1+12    STORE IN LOCATE LIST FORM             00000690
                                     74          LOCATE LIST1        GET DSNAME ENTRY                      00000700
0000A0 12FF                          77          LTR   15,15         LOCATE SUCCESSFUL ?                   00000710
0000A2 4770 B4E4            004E4    78          BNZ   ER3           NO GO TO PRINT MESSAGE                00000720
0000A6 D205 BE9C 5006 00E9C 00006    79          MVC   VOL(6),6(5)   MOVE VOLUME FUER OBTAIN               00000730
0000AC 45C0 B336            00336    80          BAL   12,OBTAIN     GO TO READ DSCB                       00000740
0000B0 1BAA                          81          SR    10,10                                               00000750
0000B2 47F0 B5AC            005AC    82          B     RETURN                                              00000760
                                     83 ************************************************************     00000770
0000B6                               84 SPACE    EQU   *   SPACE, SPACE ALL OR CALL FROM CTRSPACE         00000780
                                     85 ** CHAINING INITIALIATION                                         00000790
0000B6 4110 B8F8            008F8    86          LA    1,FIRST                                             00000800
0000BA 5010 B750            00750    87          ST    1,AFIRST                                            00000810
0000BE 5010 B748            00748    88          ST    1,CURRENT                                           00000820
0000C2 4130 0004            00004    89          LA    3,4                                                 00000830
0000C6 4121 0118            00118    90          LA    2,LENGTH(1)                                         00000840
0000CA 5021 0000            00000    91 LOOP1    ST    2,0(1)                                              00000850
0000CE 1812                          92          LR    1,2                                                 00000860
0000D0 4122 0118            00118    93          LA    2,LENGTH(2)                                         00000870
0000D4 4630 B0CA            000CA    94          BCT   3,LOOP1                                             00000880
                                     95 ** GET FIRST BLOCK OF INDEX                                       00000890
0000D8 4150 B8F8            008F8    96          LA    5,FIRST       GET BUFFER ADR.FUER 1. LOCATE         00000900
0000DC 41A0 B754            00754    97          LA    10,LIST1      GET ADR. OF LIST FORM(DSNAME)         00000910
0000E0 4165 0008            00008    98          LA    6,8(5)     ADR OF BUFFER FOR LOCATE                 00000920
0000E4 506A 000C            0000C    99          ST    6,12(10)   STORE IN LIST FORM                       00000930
                                    100          LOCATE (10)       GET FIRST BLOCK                       00000940
0000EC 4110 000C            0000C   103          LA    1,12                                                00000950
0000F0 191F                         104          CR    1,15        LOCATE SUCCESSFULL FOR INDEX ?          00000960
0000F2 4770 B4E0            004E0   105          BNE   ER4         NO RETURN                               00000970
0000F6 4530 B1CE            001CE   106          BAL   3,GET1      YES PROCESS THE BLOCK                   00000980
                                    107 ************************************************************     00000990
0000FA                              108 SUCHO    EQU   *     WHAT TYPE OF ENTRY  ?                       00001000
0000FA                              109 SUCH1    EQU   *                                                 00001010
0000FA 5835 0004            00004   110          L    3,4(5)   GET CURRENT POINTER                       00001020
0000FE D507 3000 B7AC 00000 007AC   111          CLC   0(8,3),LINK   LINK ENTRY                          00001030
000104 4780 B20C            0020C   112          BC    8,NEXT    YES.GET NEXT BLOCK OR NEXT INDEX        00001040
000108 9500 300B      0000B         113          CLI   11(3),INDEX   INDEX ENTRY ?                        00001050
00010C 4780 B120            00120   114          BE    INDEX1                                            00001060
000110 9507 300B      0000B         115          CLI   11(3),DSN     DSN ENTRY ?                         00001070
000114 4780 B120            00120   116          BE    INDEX1                                            00001080
                                    117 *****SKIP TO ANOTHER ENTRY                                       00001090
000118 45E0 B2B6            002B6   118          BAL   14,SKIP                                           00001100
00011C 47F0 B0FA            000FA   119          B     SUCH1                                             00001110
000120                              120 INDEX1   EQU   *                                                 00001120
000120 1843                         121          LR    4,3           GET DISPLACEMENT FROM BEGINNING OF BLOCK 00001130
000122 1845                         122          SR    4,5                                               00001140
000124 4940 B7B4            007B4   123          CH    4,D28         FIRST ENTRY IN INDEX BLOCK          00001150
000128 4780 B130            00130   124          BE    INDEX2        WHEN YES OK                         00001160
00012C 45E0 B28A            0028A   125          BAL  14,RESET       NO CLEAR OTHER INDEX IN DSNAME      00001170
000130 9507 300B      0000B         126 INDEX2   CLI   11(3),DSN                                         00001180
000134 4780 B302            00302   127          BE    DSN1                                              00001190
000138 D202 B774 3008 00774 00008   128          MVC   TTR(3),8(3)   MOVE TTR OF NEXT LOWER LEVEL INDEX BLOCK 00001200
```

```
 LOC  OBJECT CODE    ADDR1 ADDR2  STMT   SOURCE STATEMENT                                  F01MAY72  8/10/73

00013E 45E0 B2CE            002CE   129          BAL   14,MOVE       MOVE INDEX NAME IN DSNAME          00001210
                                    130 ****  SET POINTER TO NEXT INDEX                                  00001220
000142 4177 0001            00001   131          LA    7,1(7)        COMPUTE                            00001230
000146 5A70 B778            00778   132          A     7,DSNP1       ADDRESS OF FIRST BLK.              00001240
00014A 5070 B778            00778   133          ST    7,DSNP1       IN DSNAME AND STORE                00001250
00014E 4133 000C            0000C   134          LA    3,INDEXL(3)                                      00001260
000152 5035 0004            00004   135          ST    3,4(5)   SET CURRENT POINTER                     00001270
                                    136 ***    GET FREE BLOCK                                           00001280
000156                              137 GETBLOCK EQU   *                                                00001290
000156 4150 B8F8            008F8   138          LA    5,FIRST                                          00001300
00015A 4130 0005            00005   139          LA    3,5                                              00001310
00015E D503 5004 B7A4 00004 007A4   140 LOOP2    CLC   4(4,5),NULL   IS THE BLOCK FREE                00001320
000164 4780 B192            00192   141          BE    FOUND         YES BRANCH                         00001330
000168 1845                         142          LR    4,5           NO TRY NEXT ONE                    00001340
00016A 5855 0000            00000   143          L     5,0(5)                                           00001350
00016E 4630 B15E            0015E   144          BCT   3,LOOP2                                          00001360
000172 9101 B79C      0079C         145          TM    POINTER,X'01' NO FREE BLOCK IS RESERV BLOCK IN USE? 00001370
000176 4710 B186            00186   146          BO    RESERV        YES BR                             00001380
00017A 5040 B744            00744   147          ST    4,SAVEB       SAVE ADR OF LAST BLOCK USED        00001390
00017E 1854                         148          LR    5,4                                              00001400
000180 D203 B788 B778 00788 00778   149          MVC   DSNP2(4),DSNP1 SAVE FIRST BLK ADR. IN DSNAME     00001410
000186 4150 B7E0            007E0   150 RESERV   LA    5,RESERVE     GET ADR OF RESERV BLOCK            00001420
00018A 9601 B79C      0079C         151          OI    POINTER,X'01' SET RESERV BLOCK IN USE            00001430
00018E 47F0 B196            00196   152          B     READ          GET NEXT INDEX BLOCK               00001440
000192 9400 B79C      0079C         153 FOUND    NI    POINTER,X'00' RESET RESERV BLOCK FREE            00001450
000196 5050 B748            00748   154 READ     ST    5,CURRENT     SAVE ADR. OF FREE BLOCK            00001460
00019A 41A0 B764            00764   155          LA    10,LIST2      GET ADR OF LIST FORM FOR LOCATE    00001470
00019E 4530 B1A6            001A6   156          BAL   3,GET         GET BLOCK FROM CATALOG             00001480
0001A2 47F0 B0FA            000FA   157          B     SUCHO                                            00001490
                                    158 ********************************************************      00001500
0001A6                              159 GET      EQU   *                                              00001510
0001A6 4165 0008            00008   160          LA    6,8(5)        GET ADR OF BUFFER FOR LOCATE       00001520
0001AA 506A 000C            0000C   161          ST    6,12(10)      STORE IN LISTFORM                  00001530
                                    162          LOCATE (10)                                            00001540
0001B2 12FF                         165          LTR   15,15         LOCATE SUCCESSFULL FUER DSNAME     00001550
0001B4 4780 B1CE            001CE   166          BC    8,GET1       YES CONTINUE                        00001560
0001B8 4110 000C            0000C   167          LA    1,12          RETURN CODE FUER INDEX             00001570
0001BC 191F                         168          CR    1,15          LOCATE SUCCESSFULL FUER INDEX      00001580
0001BE 4780 B1CE            001CE   169          BC    8,GET1       YES CONTINUE                        00001590
0001C2 45C0 B4E4            004E4   170          BAL   12,ER3        NO PRINT MESSAGE                   00001600
0001C6 41A0 0008            00008   171          LA    10,8                                             00001610
0001CA 47F0 B324            00324   172          B     LEER          GO TO GET NEXT INDEX               00001620
0001CE                              173 GET1     EQU   *                                              00001630
0001CE D507 6002 B7A4 00002 007A4   174          CLC   2(8,6),NULL  INDEX CONTROL ENTRY ?             00001640
0001D4 4780 B1EE            001EE   175          BE    G1            YES BR                             00001650
0001D8 D502 B774 B7A4 00774 007A4   176          CLC   TTR(3),NULL   NEXT BLOCK OF THE INDEX ?         00001660
0001DE 4780 B324            00324   177          BE    LEER         NEIN ERROR,SKIP                     00001670
0001E2 4145 000A            0000A   178          LA    4,10(5)       GET POINTER TO FIRST ENTRY         00001680
0001E6 4170 000E            0000E   179          LA    7,14          GET MINIMAL LENGTH = COUNT + LINK ENTRY 00001690
0001EA 47F0 B1FC            001FC   180          B     G2                                               00001700
0001EE                              181 G1       EQU   *                                              00001710
0001EE 4145 001C            0001C   182          LA    4,28(5)       GET POINTER TO FIRST ENTRY         00001720
0001F2 4170 0020            00020   183          LA    7,32          GET MINIMAL LENGTH = COUNT + CONTROL + 00001730
                                    184 **                          LINK ENTRY                         00001740
0001F6 D205 B780 6103 00780 00103   185          MVC   CVOL(6),259(6) MOVE CVOL                         00001750
0001FC                              186 G2       EQU   *                                              00001760
0001FC 5045 0004            00004   187          ST    4,4(5)        SAVE POINTER TO FIRST ENTRY        00001770
000200 4865 0008            00008   188          LH    6,8(5)        GET COUNT                          00001780
000204 1967                         189          CR    6,7           COUNT > MINIMAL LENGTH             00001790
000206 47D0 B324            00324   190          BNH   LEER          NEIN PRINT MESSAGE                 00001800
```

```
  LOC  OBJECT CODE    ADDR1 ADDR2  STMT   SOURCE STATEMENT                                              F01MAY72   8/10/73

00020A 07F3                         191            BR    3                                                          00001810
                                    192 ************************************************************                00001820
00020C                              193 NEXT       EQU   *                                                          00001830
00020C D202 B774 3008 00774 00008   194            MVC   TTR(3),8(3)    MOVE TTR OF CONTINUATION BLOCK              00001840
000212 1B33                         195            SR    3,3                                                        00001850
000214 5035 0004            00004   196            ST    3,4(5)    RESET POINTER TO NULL = FREE BUFFER              00001860
000218 D502 B774 B7A4 00774 007A4   197            CLC   TTR(3),NULL    ANY CONTINUATION BLOCK FOR THE INDEX ?      00001870
00021E 4780 B226            00226   198            BE    LAST           NO BR                                       00001880
000222 47F0 B156            00156   199            B     GETBLOCK       YES GET A FREE BUFFER                       00001890
000226 9101 B79C      0079C         200 LAST       TM    POINTER,X'01' WAS THE RESERV BUFFER IN USE                 00001900
00022A 4780 B254            00254   201            BZ    NORES          NO BR                                       00001910
00022E 5850 B744            00744   202            L     5,SAVEB        YES RESTORE ADR OF LAST BUFFER IN USE       00001920
000232 5050 B748            00748   203            ST    5,CURRENT                                                  00001930
000236 9200 B79C      0079C         204            MVI   POINTER,X'00' RESET RESERV BUFFER FREE                     00001940
00023A 5870 B788            00788   205            L    7,DSNP2         RESTORE ADR OF FIRST BLK IN DSNAME          00001950
00023E 4160 BE9C            00E9C   206            LA    6,DSNAME+44                                                00001960
000242 1B67                         207            SR    6,7                                                        00001970
000244 9240 7000      00000         208 LOOP5      MVI   0(7),X'40'     RESET THE FOLLOWING BYTES TO BLK            00001980
000248 4177 0001            00001   209            LA    7,1(7)                                                     00001990
00024C 4660 B244            00244   210            BCT   6,LOOP5                                                    00002000
000250 47F0 B0FA            000FA   211            B     SUCHO          GET NEXT INDEX                              00002010
000254 5950 B750            00750   212 NORES      C     5,AFIRST       IS THE CURRENT BLOCK THE FIRST ONE?         00002020
000258 4780 B54E            0054E   213            BE    ENDE           YES - NO MORE DATA SETS                     00002030
00025C 5850 B750            00750   214            L     5,AFIRST       NO - GET THE BUFFER ADR. OF                 00002040
000260 4130 0005            00005   215            LA    3,5            THE UPPER LEVEL INDEX                       00002050
000264 D503 5004 B7A4 00004 007A4   216 LOOP4      CLC   4(4,5),NULL    IS THE BUFFER FREE ?                        00002060
00026A 4780 B27A            0027A   217            BE    PRE            YES                                         00002070
00026E 5050 B78C            0078C   218            ST    5,PREVIOUS                                                 00002080
000272 5855 0000            00000   219            L     5,0(5)         NO GET NEXT ONE                             00002090
000276 4630 B264            00264   220            BCT   3,LOOP4                                                    00002100
00027A 5850 B78C            0078C   221 PRE        L     5,PREVIOUS     THE PREVIOUS BUFFER IS THE BUFFER  OF       00002110
00027E 5050 B748            00748   222            ST    5,CURRENT      THE UPPER LEVEL INDEX                       00002120
000282 45E0 B28A            0028A   223            BAL   14,RESET                                                   00002130
000286 47F0 B0FA            000FA   224            B     SUCHO                                                      00002140
                                    225 *************RESET POINTER  FOR  NEXT INDEX IN DSNAME,BLK UP TO          00002150
00028A                              226 RESET      EQU   *              THIS ADR.                                   00002160
00028A 4160 BE9C            00E9C   227            LA    6,DSNAME+44                                                00002170
00028E 4180 0027            00027   228            LA    8,39                                                       00002180
000292 0660                         229            BCTR  6,0                                                        00002190
000294 9240 6000      00000         230            MVI   0(6),X'40'                                                 00002200
000298 0660                         231 B1         BCTR  6,0                                                        00002210
00029A 954B 6000      00000         232            CLI   0(6),X'4B'                                                 00002220
00029E 4780 B2AC            002AC   233            BE    B2                                                         00002230
0002A2 9240 6000      00000         234            MVI   0(6),X'40'                                                 00002240
0002A6 4680 B298            00298   235            BCT   8,B1                                                       00002250
0002AA 07FE                         236            BR    14                                                         00002260
0002AC                              237 B2         EQU   *                                                          00002270
0002AC 9240 6000      00000         238            MVI   0(6),X'40'                                                 00002280
0002B0 5060 B778            00778   239            ST    6,DSNP1        SAVE ADDR. OF FIRST BLK                     00002290
0002B4 07FE                         240            BR    14                                                         00002300
                                    241 ************************************************************                00002310
0002B6                              242 SKIP       EQU   *                                                          00002320
0002B6 1B11                         243            SR    1,1  CLEAR                                                 00002330
0002B8 5835 0004            00004   244            L     3,4(5)                                                     00002340
0002BC 4313 000B            0000B   245            IC    1,11(3)    GET NBER OF HW THAT FOLLOW THE ENTRY            00002350
0002C0 8910 0001            00001   246            SLL   1,1            GET NBER OF BYTES                           00002360
0002C4 4131 300C            0000C   247            LA    3,12(1,3)                                                  00002370
0002C8 5035 0004            00004   248            ST    3,4(5)         SET POINTER TO NEXT ENTRY                   00002380
0002CC 07FE                         249            BR    14                                                         00002390
                                    250 ************************************************************                00002400
```

```
 LOC  OBJECT CODE     ADDR1 ADDR2  STMT   SOURCE STATEMENT                                F01MAY72   8/10/73

0002CE                              251 MOVE     EQU   *              MOVE . AND INDEX NAME IN DSNAME          00002410
0002CE 5860 B778            00778   252          L     6,DSNP1        GET ADDR OF FIRST BLK                    00002420
0002D2 9248 6000      00000         253          MVI   0(6),X'4B'     MOVE '.'                                 00002430
0002D6 4166 0001            00001   254          LA    6,1(6)                                                  00002440
0002DA 5060 B778            00778   255          ST    6,DSNP1        SAVE ADDR OF FIRST BLK                   00002450
0002DE 1843                         256          LR    4,3            GET POINTER TO INDEX                     00002460
0002E0 1B77                         257          SR    7,7            SET LENGTH OF INDEX = 0                  00002470
0002E2 4180 0008            00008   258          LA    8,8                                                     00002480
0002E6 9540 4000      00000         259 M1       CLI   0(4),X'40'     CHARACTER = BLK                          00002490
0002EA 4780 B2FA            002FA   260          BE    M2             YES BRANCH                               00002500
0002EE 4177 0001            00001   261          LA    7,1(7)         NO INCREASE LENGTH OF INDEX BY ONE       00002510
0002F2 4144 0001            00001   262          LA    4,1(4)         POINT TO NEXT CHARACTER                  00002520
0002F6 4680 B2E6            002E6   263          BCT   8,M1                                                    00002530
0002FA 0670                         264 M2       BCTR  7,0            DECREASE LENGTH BY 1 FOR MOVE            00002540
0002FC 4470 B790            00790   265          EX    7,MOVEL        MOVE INDEX INTO DSNAME                   00002550
000300 07FE                         266          BR    14                                                      00002560
                                    267 ********************************************************            00002570
000302 45E0 B2CE            002CE   268 DSN1     BAL   14,MOVE        MOVE LAST QUALIFIER                      00002580
000306 4167 6001            00001   269          LA    6,1(7,6)  POINT TO FIRST BYTE AFTER DSNAME               00002590
00030A 5060 B77C            0077C   270          ST    6,DSNP3        SAVE ADDR OF FIRST BYTE AFTER DSNAME     00002600
00030E D205 BE9C 3012 00E9C 00012   271          MVC   VOL(6),18(3)   MOVE VOLUME FOR OBTAIN                  00002610
000314 4133 001A            001A    272          LA    3,26(3)        SET CURRENT POINTER                      00002620
000318 5035 0004            00004   273          ST    3,4(5)         TO NEXT ENTRY                            00002630
00031C 45C0 B336            00336   274          BAL   12,OBTAIN      GET DSCB                                 00002640
000320 47F0 B0FA            000FA   275          B     SUCHO                                                   00002650
                                    276 ********************************************************            00002660
000324                              277 LEER     EQU   *                                                       00002670
000324 1B33                         278          SR    3,3                                                     00002680
000326 5035 0004            00004   279          ST    3,4(5)         FREE CURRENT BUFFER                      00002690
00032A 5860 B778            00778   280          L     6,DSNP1                                                 00002700
00032E 9248 6000      00000         281          MVI   0(6),X'4B'     MOVE .                                   00002710
000332 47F0 B226            00226   282          B     LAST           GET NEXT INDEX                           00002720
                                    283 ********************************************************            00002730
000336                              284 OBTAIN   EQU   *                                                       00002740
000336 1B99                         285          SR    9,9                                                     00002750
000338 5090 B730            00730   286          ST    9,ALLOC                                                 00002760
00033C 5090 B734            00734   287          ST    9,USED                                                  00002770
                                    288          OBTAIN DSCB1         GET DSCB FORMAT 1                        00002780
000346 12FF                         291          LTR   15,15          SUCCESSFULL?                             00002790
000348 4770 B4A4            004A4   292          BNZ   ER2            NO PRINT MESSAGE                         00002800
00034C 9142 B636      00636         293          TM    LOCAREA+38,X'42'    PS OR PO DATASET?                  00002810
000350 4740 B358            00358   294          BM    GETUSED        YES GET USED TRKS                        00002820
000354 47F0 B364            00364   295          B     GETALC                                                  00002830
000358                              296 GETUSED  EQU   *                                                       00002840
000358 4830 B646            00646   297          LH    3,LOCAREA+54   GET REL.ADR OF LAST USED TRKS             00002850
00035C 4133 0001            00001   298          LA    3,1(3)                                                  00002860
000360 5030 B734            00734   299          ST    3,USED                                                  00002870
000364                              300 GETALC   EQU   *                                                       00002880
000364 41A0 B64D            0064D   301          LA    10,LOCAREA+61  GET ADR. OF FIRST EXT.DESCRIPTION        00002890
000368 4160 0003            00003   302          LA    6,3            SET COUNT                                00002900
00036C 45E0 B468            00468   303          BAL   14,FORM        GET INFORMATION OF FIRST THREE EXTENDS   00002910
000370 D504 B66B B7A4 00668 007A4   304          CLC   LOCAREA+91(5),NULL   MORE EXTENDS ?                    00002920
000376 4780 B3C4            003C4   305          BE    OBEND          NO BR                                    00002930
00037A D204 B6C8 B66B 006C8 0066B   306          MVC   CCHHR(5),LOCAREA+91 MOVE ADR OF NEXT DSCB              00002940
                                    307 OBT3     OBTAIN DSCB3         GET NEXT DSCB                            00002950
000386 12FF                         310          LTR   15,15          SUCCESSFUL?                              00002960
000388 4770 B4A4            004A4   311          BNZ   ER2            NO PRINT MESSAGE                         00002970
00038C 9503 B610      00610         312          CLI   LOCAREA,X'03'  IS IT FORMAT 3 ?                         00002980
000390 4770 B398            00398   313          BNE   ISAM           NO - ISAM DATEI                          00002990
000394 47F0 B3AC            003AC   314          B     OBT4                                                    00003000
```

```
  LOC  OBJECT CODE    ADDR1 ADDR2  STMT   SOURCE STATEMENT                                            F01MAY72   8/10/73

000398                               315 ISAM     EQU   *                                                           00003010
000398 D504 B697 B7A4 00697 007A4    316          CLC   LOCAREA+135(5),NULL MORE EXTEND                             00003020
00039E 4780 B3C4            003C4    317          BE    OBEND          NO BR                                        00003030
0003A2 D204 B6C8 B697 006C8 00697    318          MVC   CCHHR(5),LOCAREA+135 GET ADR OF FORMAT 3                    00003040
0003A8 47F0 B380            00380    319          B     OBT3           GO TO GET NEXT DSCB                          00003050
0003AC                               320 OBT4     EQU   *              INVESTIGATE FORMAT 3 DSCB                    00003060
0003AC 41A0 B614            00614    321          LA    10,LOCAREA+4   GET ADR OF FIRST EXT DESCRITION              00003070
0003B0 4160 0004            00004    322          LA    6,4            GET COUNT                                    00003080
0003B4 45E0 B468            00468    323          BAL   14,FORM                                                     00003090
0003B8 4160 0009            00009    324          LA    6,9            GET COUNT                                    00003100
0003BC 41AA 0001            00001    325          LA    10,1(10)       GET ADR OF FIFTH EXT DESCRIPTION             00003110
0003C0 45E0 B468            00468    326          BAL   14,FORM                                                     00003120
                                     327 ***********************************************************                00003130
0003C4                               328 OBEND    EQU   *                                                           00003140
0003C4 5890 B5C0            005C0    329          L     9,TOTAL        GET TOTAL ALLOC.TRKS                         00003150
0003C8 5A90 B730            00730    330          A     9,ALLOC        ADD ALLOC.TRKS FOR THIS DATASET              00003160
0003CC 5090 B5C0            005C0    331          ST     9,TOTAL       SAVE                                         00003170
0003D0 5890 B5C4            005C4    332          L     9,TOTUS        GET TOTAL USED TRKS                          00003180
0003D4 D503 B734 B7A4 00734 007A4    333          CLC   USED(4),NULL   PS OR PO DATA SET? I.E. USED ALREADY         00003190
                                     334 *                                                     COMPUTED             00003200
0003DA 4770 B3E4            003E4    335          BNE   POPS      YES BR                                            00003210
0003DE D203 B734 B730 00734 00730    336          MVC   USED(4),ALLOC NO USED=ALLOC FOR ISAM OR DA                  00003220
0003E4                               337 POPS     EQU   *                                                           00003230
0003E4 5A90 B734            00734    338          A     9,USED         ADD USED TRKS FOR THIS DATA SET              00003240
0003E8 5090 B5C4            005C4    339          ST    9,TOTUS        SAVE                                         00003250
0003EC 9104 B6CD      006CD          340          TM    PARM,X'04'     IS IT PRINT ? FOR EVERY DATASET              00003260
0003F0 4780 B426            00426    341          BZ    NOPR1          NO BR                                        00003270
0003F4 4540 B428            00428    342          BAL   4,DSPART                                                    00003280
0003F8 5830 B730            00730    343          L     3,ALLOC                                                     00003290
0003FC 4E30 B720            00720    344          CVD   3,PACK         CONVERT TO DECIMAL                           00003300
000400 4530 B456            00456    345          BAL   3,EDIT         UNPACK - ED                                  00003310
000404 D203 B6D8 B72C 006D8 0072C    346          MVC   AL(4),UNPK+4   MOVE IN OUTPUT BUFFER                        00003320
00040A 5830 B734            00734    347          L     3,USED                                                      00003330
00040E 4E30 B720            00720    348          CVD   3,PACK                                                      00003340
000412 4530 B456            00456    349          BAL   3,EDIT                                                      00003350
000416 D203 B6E4 B72C 006E4 0072C    350          MVC   US(4),UNPK+4                                                00003360
00041C D205 B6EA BE9C 006EA 00E9C    351          MVC   US+6(6),VOL                                                 00003370
000422 4530 B4EC            004EC    352          BAL   3,PRINT        PRINT                                        00003380
000426 07FC                          353 NOPR1    BR    12                                                          00003390
                                     354 *******************************************************                    00003400
000428                               355 DSPART   EQU   *                                                           00003410
000428 9108 B6CD      006CD          356          TM    PARM,X'08'     IS IT PRINT FOR 1 DSNAME?                    00003420
00042C 4780 B438            00438    357          BZ    TOT            NO BR                                        00003430
000430 4130 BE70            00E70    358          LA    3,DSNAME   MOVE THE WHOLE DSNAME                            00003440
000434 47F0 B440            00440    359          B     PR2                                                         00003450
000438                               360 TOT      EQU   *                                                           00003460
000438 5830 B74C            0074C    361          L     3,DSNP   DONT 'T MOVE FIRST INDEX                           00003470
00043C 4133 0001            00001    362          LA    3,1(3)  POINT TO SECOND INDEX                               00003480
000440                               363 PR2      EQU   *                                                           00003490
000440 5870 B77C            0077C    364          L     7,DSNP3        POINT TO FIRST BYTE AFTER DSNAME             00003500
000444 1B73                          365          SR    7,3  LENGTH OF DSNAME TO BE PRINTED                         00003510
000446 0670                          366          BCTR  7,0   DECREASE BY ONE FOR MOVE                              00003520
000448 4160 B6F2            006F2    367          LA    6,T1                                                        00003530
00044C 4470 B790            00790    368          EX    7,MOVEL                                                     00003540
000450 4177 0025            00025    369          LA    7,T1-BLK+4+1(7)                                             00003550
                                     370 **** LENGTH OF LINE=(T1-BLK)+L(DSNAME)+4 BYTES CONTROL                     00003560
000454 07F4                          371          BR    4                                                           00003570
                                     372 ***********************************************************                00003580
000456                               373 EDIT     EQU   *                                                           00003590
000456 9220 B729      00729          374          MVI   UNPK+1,X'20'  MASK 0                                        00003600
```

```
 LOC  OBJECT CODE     ADDR1 ADDR2  STMT   SOURCE STATEMENT                                                F01MAY72   8/10/73

00045A D205 B72A B729 0072A 00729   375          MVC   UNPK+2(6),UNPK+1                                                00003610
000460 DE07 B728 B724 00728 00724   376          ED    UNPK(8),PACK+4                                                   00003620
000466 07F3                         377          BR    3                                                                00003630
                                    378 ************************************                                           00003640
                                    379 * ALLOC SPACE = (HICYL*TRKNO + HITRK)   (LOCYL*TRKNO + LOTRK) + 1           00003650
000468                              380 FORM     EQU   *                                                            00003660
000468 D209 B738 A000 00738 00000   381          MVC   EXT(10),0(10)                                                00003670
00046E 9500 B738      00738         382          CLI   EXT,X'00'      ANY EXTEND                                    00003680
000472 078E                         383          BCR   8,14           NO BR                                         00003690
000474 4830 B73E            0073E   384          LH    3,HICYL                                                      00003700
000478 4C30 B742            00742   385          MH    3,TRKNO                                                      00003710
00047C 4A30 B740            00740   386          AH    3,HITRK                                                      00003720
000480 4840 B73A            0073A   387          LH    4,LOCYL                                                      00003730
000484 4C40 B742            00742   388          MH    4,TRKNO                                                      00003740
000488 4A40 B73C            0073C   389          AH    4,LOTRK                                                      00003750
00048C 1B34                         390          SR    3,4                                                          00003760
00048E 4133 0001            00001   391          LA    3,1(3)                                                       00003770
000492 5A30 B730            00730   392          A     3,ALLOC                                                      00003780
000496 5030 B730            00730   393          ST    3,ALLOC                                                      00003790
00049A 41AA 000A            0000A   394          LA    10,10(10)                                                    00003800
00049E 4660 B468            00468   395          BCT   6,FORM                                                       00003810
0004A2 07FE                         396          BR    14                                                           00003820
                                    397 ************************************                                           00003830
0004A4                              398 ER2      EQU   *   ERROR FOR OBTAIN UNSUCCESSFUL                            00003840
0004A4 4170 B5CD            005CD   399          LA    7,MESS2                                                      00003850
0004A8                              400 ER20     EQU   *                                                            00003860
0004A8 9101 B6CD      006CD         401          TM    PARM,X'01'     CALL FROM CTRSPACE                            00003870
0004AC 4710 B4D0            004D0   402          BO    ER22           YES NO PRINT                                  00003880
0004B0 183F                         403          LR    3,15           GET CODE                                      00003890
0004B2 4E30 B720            00720   404          CVD   3,PACK                                                       00003900
0004B6 4530 B456            00456   405          BAL   3,EDIT                                                       00003910
0004BA D203 B6E5 B72C 006E5 0072C   406          MVC   AL+13(4),UNPK+4 MOVE CODE INTO TEXT                        00003920
0004C0 D20C B6D8 7000 006D8 00000   407          MVC   AL(13),0(7)    MOVE MESSAGE                                  00003930
0004C6 4540 B428            00428   408          BAL   4,DSPART       MOVE DSNAME INTO MESSAGE                      00003940
0004CA 4530 B4EC            004EC   409          BAL   3,PRINT                                                      00003950
0004CE 07FC                         410          BR    12                                                           00003960
0004D0 4130 0008            00008   411 ER22     LA    3,8                                                          00003970
0004D4 193F                         412          CR    3,15                                                         00003980
0004D6 078C                         413          BCR   8,12                                                         00003990
0004D8 41A0 0008            00008   414          LA    10,8                                                         00004000
0004DC 47F0 B5AC            005AC   415          B     RETURN                                                       00004010
0004E0 9608 B6CD      006CD         416 ER4      OI    PARM,X'08'                                                   00004020
0004E4 4170 B5DA            005DA   417 ER3      LA    7,MESS1        ERROR FOR LOCATE INDEX OR DSN UNSUCCESSFULL   00004030
0004E8 47F0 B4A8            004A8   418          B     ER20                                                         00004040
                                    419 ************************************************************           00004050
0004EC                              420 PRINT    EQU   *                                                            00004060
0004EC 4070 B6CE            006CE   421          STH   7,TEXT                                                       00004070
0004F0 D201 B6D0 B7A4 006D0 007A4   422          MVC   TEXT+2(2),NULL                                             00004080
0004F6 D203 B7CC B7A4 007CC 007A4   423          MVC   ECBADS(4),NULL                                             00004090
0004FC 5870 B7C8            007C8   424          L     7,AUPT                                                       00004100
000500 5880 B7C4            007C4   425          L     8,AECT                                                       00004110
                                    426          PUTLINE PARM=PUTL,UPT=(7),ECT=(8),ECB=ECBADS,                   *00004120
                                                       OUTPUT=(TEXT,TERM,SINGLE,DATA),MF=(E,IOPLADS)               00004130
000546 D24A B6D3 B6D2 006D3 006D2   444          MVC   BLK+1(75),BLK                                              00004140
00054C 07F3                         445          BR    3                                                          00004150
                                    446 ************************************************************           00004160
00054E                              447 ENDE     EQU   *                                                            00004170
00054E 9101 B6CD      006CD         448          TM    PARM,X'01'     CALL FROM CTRSPACE?                           00004180
000552 4780 B574            00574   449          BZ    PR3            NO PRINT                                      00004190
000556 5810 B58C            0058C   450          L     1,PASSLIST     YES                                           00004200
```

```
 LOC  OBJECT CODE     ADDR1 ADDR2  STMT   SOURCE STATEMENT                                                F01MAY72   8/10/73

00055A 9823 1004             00004   451          LM    2,3,4(1)       GET ADDR OF 2. 3. ARG.                      00004210
00055E 5810 B5C0             005C0   452          L     1,TOTAL                                                    00004220
000562 5012 0000             00000   453          ST    1,0(2)         MOVE ALLOC, SPACE                           00004230
000566 5810 B5C4             005C4   454          L     1,TOTUS                                                    00004240
00056A 5013 0000             00000   455          ST    1,0(3)         MOVE USED SPACE                             00004250
00056E 1BAA                          456          SR    10,10                                                      00004260
000570 47F0 B5AC             005AC   457          B     RETURN                                                     00004270
000574                               458 PR3      EQU   *                                                          00004280
000574 D204 B6D2 B5C8 006D2 005C8    459          MVC   BLK(5),TTOTAL                                            00004290
00057A 5830 B5C0             005C0   460          L     3,TOTAL                                                    00004300
00057E 4E30 B720             00720   461          CVD   3,PACK                                                     00004310
000582 4530 B456             00456   462          BAL   3,EDIT                                                     00004320
000586 D203 B6D8 B72C 006D8 0072C    463          MVC   AL(4),UNPK+4                                             00004330
00058C 5830 B5C4             005C4   464          L     3,TOTUS                                                    00004340
000590 4E30 B720             00720   465          CVD   3,PACK                                                     00004350
000594 4530 B456             00456   466          BAL   3,EDIT                                                     00004360
000598 D203 B6E4 B72C 006E4 0072C    467          MVC   US(4),UNPK+4                                             00004370
00059E 4170 0029             00029   468          LA    7,T1-BLK+5+4                                             00004380
                                     469 **** LENGTH OF LINE=(T1-BLK)+L(TOTAL)+4 BYTES CONTROL                    00004390
0005A2 4530 B4EC             004EC   470          BAL   3,PRINT                                                    00004400
0005A6 1BAA                          471          SR    10,10                                                      00004410
0005A8 47F0 B5AC             005AC   472          B     RETURN                                                     00004420
                                     473 ************************************************************           00004430
0005AC                               474 RETURN   EQU   *                                                          00004440
0005AC 58DD 0004             00004   475          L     13,4(13)                                                   00004450
0005B0 18FA                          476          LR    15,10                                                      00004460
                                     477          RETURN (14,12),RC=(15)                                         00004470
                                     481 ************************************************************           00004480
0005BC 00000000                      482 PASSLIST DC    F'0'                                                      00004490
0005C0 00000000                      483 TOTAL    DC    F'0'                                                      00004500
0005C4 00000000                      484 TOTUS    DC    F'0'                                                      00004510
0005C8 E3D6E3C1D3                    485 TTOTAL   DC    C'TOTAL'                                                  00004520
0005CD D6C2E3C1C9D540C5              486 MESS2    DC    CL13'OBTAIN ERROR'                                        00004530
0005DA D3D6C3C1E3C540C5              487 MESS1    DC    CL13'LOCATE ERROR'                                        00004540
0005E7 404040                        488 HEAD     DC    CL3' '                                                    00004550
0005EA C1D3D3D6C34BE3D9              489          DC    CL12'ALLOC.TRKS  '                                        00004560
0005F6 E4E2C5C440E3D9D2              490          DC    CL11'USED TRKS '                                          00004570
000601 4040404040404040              491          DC    CL12' '                                                   00004580
000610                               492 LOCAREA  DS    0D                                                        00004590
000610 4040404040404040              493          DC    CL150' '                                                  00004600
                                     494 DSCB1    CAMLST SEARCH,DSNAME,VOL,LOCAREA                               00004610
                                     503 DSCB3    CAMLST SEEK,CCHHR,VOL,LOCAREA                                  00004620
0006C8 C140404040                    512 CCHHR    DC    CL5'A'                                                    00004630
0006CD 00                            513 PARM     DC    X'00'                                                     00004640
0006CE 0000                          514 TEXT     DC    H'0'                                                      00004650
0006D0 0000                          515          DC    H'0'                                                      00004660
0006D2 404040404040                  516 BLK      DC    CL6' '                                                    00004670
0006D8 40404040                      517 AL       DC    CL4' '                                                    00004680
0006DC 4040404040404040              518          DC    CL8' '                                                    00004690
0006E4 40404040                      519 US       DC    CL4' '                                                    00004700
0006E8 4040404040404040              520          DC    CL10' '                                                   00004710
0006F2 4040404040404040              521 T1       DC    CL44' '                                                   00004720
000720                               522 PACK     DS    D                                                         00004730
000728 4040404040404040              523 UNPK     DC    CL8' '                                                    00004740
000730 00000000                      524 ALLOC    DC    F'0'                                                      00004750
000734 00000000                      525 USED     DC    F'0'                                                      00004760
000738 0000                          526 EXT      DC    X'0000'                                                   00004770
00073A 0000                          527 LOCYL    DC    X'0000'                                                   00004780
00073C 0000                          528 LOTRK    DC    X'0000'                                                   00004790
00073E 0000                          529 HICYL    DC    X'0000'                                                   00004800
```

```
  LOC  OBJECT CODE    ADDR1 ADDR2  STMT   SOURCE STATEMENT                                          F01MAY72  8/10/73

000740 0000                         530 HITRK    DC    X'0000'                                                  00004810
000742 0014                         531 TRKNO    DC    H'20'                                                    00004820
000744 00000000                     532 SAVEB    DC    F'0'                                                     00004830
000748 00000000                     533 CURRENT  DC    F'0'                                                     00004840
00074C 00000000                     534 DSNP     DC    F'0'                                                     00004850
000750 00000000                     535 AFIRST   DC    F'0'                                                     00004860
                                    536 LIST1    CAMLST NAME,DSNAME,,(6)                                        00004870
                                    545 LIST2    CAMLST BLOCK,TTR,CVOL,(6)                                      00004880
000774 000000                       554 TTR      DC    X'000000'                                                00004890
000777 00
000778 00000000                     555 DSNP1    DC    F'0'                                                     00004900
00077C 00000000                     556 DSNP3    DC    F'0'                                                     00004910
000780 404040404040                 557 CVOL     DC    CL6' '                                                   00004920
000786 0000
000788 00000000                     558 DSNP2    DC    F'0'                                                     00004930
00078C 00000000                     559 PREVIOUS DC    F'0'                                                     00004940
000790 D200 6000 3000 00000 00000   560 MOVEL    MVC   0(0,6),0(3)                                              00004950
000796 0000
000798 00000000                     561 MOVELEN        DC    F'0'                                               00004960
00079C 00                           562 POINTER  DC    X'00'                                                    00004970
000003                              563 GDG      EQU   X'03'                                                    00004980
000001                              564 VCB      EQU   X'01'                                                    00004990
000118                              565 LENGTH   EQU   280                                                      00005000
000000                              566 INDEX    EQU   X'00'                                                    00005010
000007                              567 DSN      EQU   X'07'                                                    00005020
00079D 000000
0007A0 00000021                     568 MIN      DC    F'33'                                                    00005030
00000C                              569 INDEXL   EQU   12                                                       00005040
0007A4 00000000                     570 NULL     DC    X'00000000'                                              00005050
0007A8 00000001                     571 DOUBLE   DC    F'1'                                                     00005060
0007AC FFFFFFFFFFFFFFFF             572 LINK     DC    X'FFFFFFFFFFFFFFFF'                                      00005070
0007B4 001C                         573 D28      DC    H'28'                                                    00005080
                                    574 PUTL     PUTLINE MF=L                                                   00005090
0007C4 00000000                     579 AECT     DC    F'0'                                                     00005100
0007C8 00000000                     580 AUPT     DC    F'0'                                                     00005110
0007CC 00000000                     581 ECBADS   DC    F'0'                                                     00005120
0007D0 0000000000000000             582 IOPLADS  DC    4F'0'                                                    00005130
0007E0                              583          DS    0D                                                       00005140
0007E0 00000000                     584 RESERVE  DC    F'0'                                                     00005150
0007E4 00000000                     585          DC    F'0'                                                     00005160
0007E8 4040404040404040             586          DC    CL200' '                                                 00005170
0008B0 4040404040404040             587          DC    CL72' '                                                  00005180
                                    588 ******** GANZE AREA 5*280 BYTES + 280 BYTES RESERVE                     00005190
0008F8 00000000                     589 FIRST    DC    F'0'                                                     00005200
0008FC 00000000                     590          DC    F'0'                                                     00005210
000900 4040404040404040             591          DC    CL200' '                                                 00005220
0009C8 4040404040404040             592          DC    CL72' '                                                  00005230
000A10 00000000                     593          DC    F'0'                                                     00005240
000A14 00000000                     594          DC    F'0'                                                     00005250
000A18 4040404040404040             595          DC    CL200' '                                                 00005260
000AE0 4040404040404040             596          DC    CL72' '                                                  00005270
000B28 00000000                     597          DC    F'0'                                                     00005280
000B2C 00000000                     598          DC    F'0'                                                     00005290
000B30 4040404040404040             599          DC    CL200' '                                                 00005300
000BF8 4040404040404040             600          DC    CL72' '                                                  00005310
000C40 00000000                     601          DC    F'0'                                                     00005320
000C44 00000000                     602          DC    F'0'                                                     00005330
000C48 4040404040404040             603          DC    CL200' '                                                 00005340
000D10 4040404040404040             604          DC    CL72' '                                                  00005350
000D58 00000000                     605          DC    F'0'                                                     00005360
```

```
  LOC  OBJECT CODE    ADDR1 ADDR2  STMT   SOURCE STATEMENT                                        F01MAY72   8/10/73

000D5C 00000000                     606            DC     F'0'                                           00005370
000D60 4040404040404040             607            DC     CL200' '                                       00005380
000E28 4040404040404040             608            DC     CL72' '                                        00005390
000E70 E3E2D6F7F4F94040             609 DSNAME     DC     CL44'TS0749'                                   00005400
000E9C 404040404040                 610 VOL        DC     CL6'      '                                    00005410
000EA2 0000
000EA4 0000000000000000             611 SAVEA      DC     18F'0'                                         00005420
000EEC 00000000                     612 ENDEN      DC     F'0'                                           00005430
                                    613            IKJCPPL                                               00005440
                                    624            END                                                   00005450
```

POS.ID	REL.ID	FLAGS	ADDRESS
01	01	0C	000534
01	01	0C	0006AC
01	01	0C	0006B0
01	01	0C	0006B4
01	01	0C	0006BC
01	01	0C	0006C0
01	01	0C	0006C4
01	01	0C	000758
01	01	0C	000768
01	01	0C	00076C

SYMBOL	LEN	VALUE	DEFN	REFERENCES							
AECT	00004	0007C4	00579	0049	0425						
AFIRST	00004	000750	00535	0087	0212	0214					
AL	00004	0006D8	00517	0346	0406	0407	0463				
ALLOC	00004	000730	00524	0286	0330	0336	0343	0392	0393		
AUPT	00004	0007C8	00580	0048	0424						
BL	00004	00007A	00063	0060							
BLK	00006	0006D2	00516	0053	0369	0444	0444	0459	0468		
B1	00002	000298	00231	0235							
B2	00001	0002AC	00237	0233							
CCHHR	00005	0006C8	00512	0306	0318	0509					
CPPL	00001	000000	00618	0047							
CPPLCBUF	00004	000000	00619								
CPPLECT	00004	00000C	00622	0049							
CPPLPSCB	00004	000008	00621								
CPPLUPT	00004	000004	00620	0048							
CURRENT	00004	000748	00533	0088	0154	0203	0222				
CVOL	00006	000780	00557	0185	0552						
DOUBLE	00004	0007A8	00571								
DSCB1	00004	0006A8	00495	0289							
DSCB3	00004	000688	00504	0308							
DSN	00001	000007	00567	0115	0126						
DSNAME	00044	000E70	00609	0044	0057	0206	0227	0358	0500	0542	
DSNP	00004	00074C	00534	0063	0361						
DSNP1	00004	000778	00555	0064	0132	0133	0149	0239	0252	0255	0280
DSNP2	00004	000788	00558	0149	0205						
DSNP3	00004	00077C	00556	0065	0270	0364					
DSN1	00004	000302	00268	0127							
DSPART	00001	000428	00355	0342	0408						
DSSPACE	00001	000000	00001	0035							
D28	00002	0007B4	00573	0123							
ECBADS	00004	0007CC	00581	0423	0430						
EDIT	00001	000456	00373	0345	0349	0405	0462	0466			
ENDE	00001	00054E	00447	0213							
ENDEN	00004	000EEC	00612								
ER2	00001	0004A4	00398	0292	0311						
ER20	00001	0004A8	00400	0418							
ER22	00004	0004D0	00411	0402							
ER3	00004	0004E4	00417	0078	0170						
ER4	00004	0004E0	00416	0105							
EXT	00002	000738	00526	0381	0382						
FIRST	00004	0008F8	00589	0072	0086	0096	0138				
FORM	00001	000468	00380	0303	0323	0326	0395				
FOUND	00004	000192	00153	0141							
GDG	00001	000003	00563								
GET	00001	0001A6	00159	0156							
GETALC	00001	000364	00300	0295							
GETBLOCK	00001	000156	00137	0199							
GETUSED	00001	000358	00296	0294							
GET1	00001	0001CE	00173	0106	0166	0169					
G1	00001	0001EE	00181	0175							
G2	00001	0001FC	00186	0180							
HEAD	00003	0005E7	00488	0053							
HICYL	00002	00073E	00529	0384							
HITRK	00002	000740	00530	0386							
INDEX	00001	000000	00566	0113							
INDEXL	00001	00000C	00569	0134							
INDEX1	00001	000120	00120	0114	0116						
INDEX2	00004	000130	00126	0124							
IOPLADS	00004	0007D0	00582	0427							
ISAM	00001	000398	00315	0313							

SYMBOL	LEN	VALUE	DEFN	REFERENCES										
LAST	00004	000226	00200	0198	0282									
LEER	00001	000324	00277	0172	0177	0190								
LENGTH	00001	000118	00565	0090	0093									
LINK	00008	0007AC	00572	0111										
LIST1	00004	000754	00537	0073	0075	0097								
LIST2	00004	000764	00546	0155										
LOCAREA	00008	000610	00492	0293	0297	0301	0304	0306	0312	0316	0318	0321	0502	0511
LOCYL	00002	00073A	00527	0387										
LOOP1	00004	0000CA	00091	0094										
LOOP2	00006	00015E	00140	0144										
LOOP4	00006	000264	00216	0220										
LOOP5	00004	000244	00208	0210										
LOTRK	00002	00073C	00528	0389										
MESS1	00013	0005DA	00487	0417										
MESS2	00013	0005CD	00486	0399										
MIN	00004	0007A0	00568											
MOVE	00001	0002CE	00251	0129	0268									
MOVEL	00006	000790	00560	0265	0368									
MOVELEN	00004	000798	00561											
M1	00004	0002E6	00259	0263										
M2	00002	0002FA	00264	0260										
NEXT	00001	00020C	00193	0112										
NOHEAD	00001	000062	00056	0052										
NOPR1	00002	000426	00353	0341										
NORES	00004	000254	00212	0201										
NULL	00004	0007A4	00570	0140	0174	0176	0197	0216	0304	0316	0333	0422	0423	
OBEND	00001	0003C4	00328	0305	0317									
OBTAIN	00001	000336	00284	0080	0274									
OBT3	00004	000380	00308	0319										
OBT4	00001	0003AC	00320	0314										
PACK	00008	000720	00522	0344	0348	0376	0404	0461	0465					
PARM	00001	0006CD	00513	0042	0051	0069	0340	0356	0401	0416	0448			
PASSLIST	00004	0005BC	00482	0040	0450									
POINTER	00001	00079C	00562	0145	0151	0153	0200	0204						
POPS	00001	0003E4	00337	0335										
PRE	00004	00027A	00221	0217										
PREVIOUS	00004	00078C	00559	0218	0221									
PRINT	00001	0004EC	00420	0055	0352	0409	0470							
PR2	00001	000440	00363	0359										
PR3	00001	000574	00458	0449										
PUTL	00004	0007B8	00576	0432										
READ	00004	000196	00154	0152										
RESERV	00004	000186	00150	0146										
RESERVE	00004	0007E0	00584	0150										
RESET	00001	00028A	00226	0125	0223									
RETURN	00001	0005AC	00474	0068	0082	0415	0457	0472						
SAVEA	00004	000EA4	00611	0036	0038									
SAVEB	00004	000744	00532	0147	0202									
SKIP	00001	0002B6	00242	0118										
SPACE	00001	0000B6	00084	0070										
SUCHBL	00004	00006A	00059	0062										
SUCH0	00001	0000FA	00108	0157	0211	0224	0275							
SUCH1	00001	0000FA	00109	0119										
TEXT	00002	0006CE	00514	0421	0422	0436								
TOT	00001	000438	00360	0357										
TOTAL	00004	0005C0	00483	0329	0331	0452	0460							
TOTUS	00004	0005C4	00484	0332	0339	0454	0464							
TRKNO	00002	000742	00531	0385	0388									
TTOTAL	00005	0005C8	00485	0459										
TTR	00003	000774	00554	0128	0176	0194	0197	0551						

SYMBOL	LEN	VALUE	DEFN	REFERENCES								
T1	00044	0006F2	00521	0367	0369	0468						
UNPK	00008	000728	00523	0346	0350	0374	0375	0375	0376	0406	0463	0467
US	00004	0006E4	00519	0350	0351	0467						
USED	00004	000734	00525	0287	0299	0333	0336	0338	0347			
VCB	00001	000001	00564									
VOL	00006	000E9C	00610	0079	0271	0351	0501	0510				

NO STATEMENTS FLAGGED IN THIS ASSEMBLY
STATISTICS SOURCE RECORDS (SYSIN) = 545 SOURCE RECORDS (SYSLIB) = 1570
OPTIONS IN EFFECT LIST, NODECK, LOAD, NORENT, XREF, NOTEST, ALGN, OS, NOTERM, LINECNT = 60
722 PRINTED LINES

SYMBOL	TYPE	ID	ADDR	LENGTH	LD ID
ADDSPACE	SD	01	000000	0009BB	
PARMTAB	SD	02	0009C0	000045	
PARMTAB	ER	03			

```
  LOC  OBJECT CODE    ADDR1 ADDR2  STMT   SOURCE STATEMENT                                             F01MAY72   8/10/73

000000                                1 ADDSPACE  CSECT                                                          00000010
                                      2 * THIS COMMAND IS RESERVED FOR THE USERS WHO HAVE THE ACCOUNT            00000020
                                      3 * ATTRIBUTE. IT ADDS OF CHANGES IN THE UADS THE FACTOR WHICH DEFINES     00000030
                                      4 * THE SPACE THE USER IS ALLOWED TO ALLOCATE                              00000040
                                      5          PRINT NOGEN                                                     00000050
                                      6           SAVE  (14,12),,ADDSPACE                                        00000060
                                     11 ** R13  BASIS REG  AND SAVE AREA ADDR.                                   00000070
                                     12 ** R2   POINT TO CPPL                                                    00000080
000012 183D                          13          LR     3,13                                                     00000090
000014 41DF 001C            0001C    14          LA     13,SAVE-ADDSPACE(15)                                     00000100
00001C                               15          USING SAVE,13                                                   00000110
000018 47F0 D048            00064    16          B      START                                                    00000120
00001C 000000000000000               17 SAVE      DC     18F'0'                                                  00000130
000064                               18 START     EQU    *                                                       00000140
000064 50D3 0008            00008    19          ST     13,8(3)                                                  00000150
000068 503D 0004            00004    20          ST     3,4(13)                                                  00000160
00006C 1821                          21           LR     2,1            SAVE  POINTER TO CPPL                    00000170
000000                               22           USING CPPL,2                                                   00000180
00006E 41C0 D3F0            0040C    23          LA     12,AEXIT                                                 00000190
00040C                               24          USING AEXIT,12                                                  00000200
000072 9400 C41F      0082B          25          NI     POINTER,X'00'                                            00000210
000076 9240 C3FA      00806          26          MVI    TEXT+4,X'40'                                             00000220
00007A D210 C3FB C3FA 00807 00806    27          MVC    TEXT+5(17),TEXT+4                                        00000230
000080 5860 2008            00008    28          L      6,CPPLPSCB    GET PSCB ADDR                              00000240
000084 9140 6010      00010          29          TM     16(6),X'40'   IS USER AUTHORIZED FOR ACCOUNT             00000250
000088 4780 D376            00392    30          BZ     NOTAL         NO - PRINT MESSAGE - RETURN                00000260
                                     31 **** COMMAND SYNTAX ****X                                                00000270
                                     32 ****  ADDSPACE USERID A(FACTOR)                                          00000280
                                     33 ****  ADDSPACE USERID C(FACTOR)                                          00000290
                                     34 ****  ADDSPACE USERID                                                    00000300
                                     35 ********   DEFAULT A(2)                                                  00000310
                                     36 **** CHECK SYNTAX                                                        00000320
                                     37 PARMTAB  IKJPARM                                                         00000330
                                     46 USER     IKJPOSIT USERID,PROMPT='USERID'                                 00000340
                                     59 KEW1     IKJKEYWD DEFAULT='A'                                            00000350
                                     72          IKJNAME 'A',SUBFLD=VALUE                                        00000360
                                     82          IKJNAME 'C',SUBFLD=VALUE                                        00000370
                                     92 VALUE    IKJSUBF                                                         00000380
                                     97 VALUE1   IKJIDENT 'NUMBER',FIRST=NUMERIC,OTHER=NUMERIC,DEFAULT='2'       00000390
                                    117          IKJENDP                                                         00000400
                                    127          GETMAIN R,LV=32   GET CORE FOR PPL                              00000410
000096 5010 C594            009A0   131          ST     1,APPL   SAVE ADR OF CORE                                00000420
00009A 9640 C41F      0082B         132          OI     POINTER,X'40'    SET BIT GETCORE                         00000430
00009E 1831                         133          LR     3,1                                                      00000440
000000                              134          USING PPL,3    ESTABLISH ADDRESSABILITY                         00000450
                                    135 ********** MOVE PTR FOR PARSE                                            00000460
0000A0 D203 3000 2004 00000 00004   136          MVC    PPLUPT(4),CPPLUPT                                        00000470
0000A6 D203 3004 200C 00004 0000C   137          MVC    PPLECT(4),CPPLECT                                        00000480
0000AC D203 3008 C58C 00008 00998   138          MVC    PPLECB(4),AEVENT                                         00000490
0000B2 D203 3014 2000 00014 00000   139          MVC    PPLCBUF(4),CPPLCBUF                                      00000500
0000B8 58B0 C59C            009A8   140          L      11,VPARM   SET PTR TO PCL FOR PARSE                      00000510
0000BC 50B0 300C            0000C   141          ST     11,PPLPCL                                                00000520
0000C0 41B0 C5A0            009AC   142          LA      11,POANS     SET PTR TO ANSWER FOR PARSE                00000530
0000C4 50B0 3010            00010   143          ST     11,PPLANS                                                00000540
                                    144          LINK   EP=IKJPARS                                               00000550
0000DE 5850 C5A0            009AC   151          L      5,POANS    GET PTR TO PDL                                00000560
0000E2 5950 C5A4            009B0   152          C      5,FF          PARS SUCCESSFULL?                          00000570
0000E6 4780 D328            00344   153          BE     PARSER        NO PRINT MESSAGE - RETURN                  00000580
000000                              154          USING IKJPARMD,5                                                00000590
0000EA 5860 5008            00008   155          L      6,USER GET PTR TO USERID                                 00000600
```

```
  LOC  OBJECT CODE     ADDR1 ADDR2  STMT   SOURCE STATEMENT                                                F01MAY72   8/10/73

0000EE 4890 500C             0000C   156          LH    9,USER+4          GET LENGTH OF USERID                      00000610
0000F2 5090 C598             009A4   157          ST    9,USERLEN                                                   00000620
0000F6 0690                          158          BCTR  9,0  DECREASE BY 1 FOR EX                                   00000630
0000F8 4490 C5A8             009B4   159          EX    9,MOVE   MOVE USERID IN DYNAM FOR ENQ                     00000640
0000FC 4190 D0EC             00108   160          LA    9,BRLIST                                                    00000650
000100 4860 5018             00018   161          LH    6,KEW1   GET KEYWORD NUMMER                               00000660
000104 8960 0002             00002   162          SLL   6,2    *4                                                   00000670
000108                               163 BRLIST   EQU   *                                                         00000680
000108 1A96                          164          AR    9,6                                                         00000690
00010A 07F9                          165          BR    9                                                           00000700
00010C 47F0 D0F8             00114   166          B     SUBF     ADD                                                00000710
000110 9601 C41F       0082B         167          OI    POINTER,X'01'      CHANGED                                 00000720
000114 5860 501C             0001C   168 SUBF     L     6,VALUE1   GET PTR TO STRING                              00000730
000118 4870 5020             00020   169          LH    7,VALUE1+4    GET LENGTH OF STRING                        00000740
00011C 1B88                          170          SR    8,8                                                         00000750
00011E 8980 0008             00008   171 GET      SLL   8,8                                                         00000760
000122 4386 0000             00000   172          IC    8,0(6)   GET 1 BYTE                                        00000770
000126 4166 0001             00001   173          LA    6,1(6)   PTR TO NEXT BYTE                                  00000780
00012A 4670 D102             0011E   174          BCT   7,GET   GO TO GET NEXT BYTE                               00000790
00012E 5080 C3F0             007FC   175          ST    8,DOUBLE+4                                                  00000800
                                     176          DROP  3                                                           00000810
                                     177          DROP  5                                                           00000820
000132 F273 C3EC C3F0 007F8  007FC   178           PACK  DOUBLE(8),DOUBLE+4(4)                                      00000830
000138 4F80 C3EC             007F8   179           CVB   8,DOUBLE                                                   00000840
00013C 4080 C3F4             00800   180           STH   8,MIST                                                     00000850
000140 8880 0004             00004   181          SRL   8,4            IS FAKTOR > 15                              00000860
000144 1288                          182          LTR   8,8                                                         00000870
000146 4770 D328             00344   183          BNZ   ERROR          YES BRANCH                                  00000880
                                     184 ***************************************                                  00000890
                                     185 * SET UP ATTENTION HANDLING EXIT                                         00000900
00014A 5850 200C             0000C   186          L     5,CPPLECT     PASS POINTER TO ECT TO STAX                   00000910
                                     187          STAX  AEXIT,OBUF=(OUTBUF,21),USADDR=(5),MF=(E,STAXLIST)        *00000920
                                                        REPLACE=NO                                                 00000930
00017C 9601 C5AE       009BA         201          OI    PSTAX,X'01'                                                 00000940
000180 47F0 D1A4             001C0   202           B     UADSREAD                                                   00000950
                                     203 ***************************************                                  00000960
000184                               204 ENDE       EQU   *                                                      00000970
000184 9101 C41F       0082B         205           TM    POINTER,X'01'      CHANGED  ?                            00000980
000188 4780 D178             00194   206          BZ    ADDED                                                       00000990
00018C 4170 C42B             00837   207           LA    7,MESS2                                                    00001000
000190 47F0 D17C             00198   208           B     *+8                                                        00001010
000194 4170 C436             00842   209 ADDED      LA    7,MESS3                                                   00001020
000198 45A0 D38C             003A8   210           BAL   10,PUTL                                                    00001030
00019C 47F0 D184             001A0   211           B     RETURN                                                     00001040
                                     212 ***************************************                                  00001050
0001A0                               213 RETURN     EQU   *                                                      00001060
0001A0 9101 C5AE       009BA         214          TM    PSTAX,X'01'                                                 00001070
0001A4 4780 D190             001AC   215          BZ    NOSTAX                                                      00001080
                                     216          STAX                                                            00001090
0001AC                               220 NOSTAX   EQU   *                                                         00001100
0001AC 5850 200C             0000C   221          L     5,CPPLECT                                                   00001110
000000                               222          USING ECT,5                                                       00001120
0001B0 18FF                          223          SR    15,15                                                       00001130
0001B2 50F0 5000             00000   224          ST    15,ECTRCDF                                                  00001140
0001B6 58D0 D004             00020   225          L     13,SAVE+4                                                   00001150
0001BA 98EC D00C             0000C   226          LM    14,12,12(13)                                                00001160
0001BE 07FE                          227          BR    14                                                          00001170
0001C0                               228 UADSREAD   EQU   *                                                      00001180
                                     229 ***  ENQ ON UADS SHARE                                                   00001190
                                     230           ENQ   (QNAME,RNAME,S,8,SYSTEM),RET=HAVE                       00001200
```

```
  LOC  OBJECT CODE    ADDR1 ADDR2  STMT   SOURCE STATEMENT                                                F01MAY72   8/10/73
0001D2 12FF                          241           LTR   15,15                                                     00001210
0001D4 4770 D1C0            001DC    242           BNZ   ENQ                                                       00001220
0001D8 9640 C41F      0082B          243           OI    POINTER,X'40'                                             00001230
0001DC                               244 ENQ        EQU   *                                                        00001240
                                     245           OPEN  (UADDCB,(UPDAT))                                          00001250
0001E6 9110 C50C      00918          251           TM    UADDCB+48,B'00010000'  OPEN SUCCESSFULL    ?              00001260
0001EA 4780 D30E            0032A    252            BC    8,OPENER                                                 00001270
0001EE 9610 C41F      0082B          253           OI    POINTER,X'10'                                             00001280
0001F2 D206 C3FA C534 00806 00940    254           MVC   TEXT+4(7),DYNAM                                           00001290
                                     255 ** ENQ ON USERID EXCLUSIVE - IF USER ACTIV RETURN                         00001300
                                     256 * READ HEADER BLOCK FOR USER                                              00001310
                                     257 * MOVE FAKTOR INTO BUFFER                                                 00001320
                                     258 * REWRITE HEADER BLOCK                                                    00001330
                                     259 **                                                                        00001340
                                     260           PRINT OFF                                                       00001350
                                     351 **                                                                        00001690
                                     352           CLOSE UADDCB                                                    00001700
00031A 45A0 C03E            0044A    358           BAL   10,DEQUE                                                  00001710
00031E 47F0 D168            00184    359           B     ENDE                                                      00001720
                                     360 ********************************************                              00001730
000322                               361 EXIT      EQU   *                                                         00001740
000322 4170 C4A3            008AF    362           LA    7,MESSIO                                                  00001750
000326 47F0 D352            0036E    363           B     WRI                                                       00001760
00032A                               364 OPENER    EQU   *                                                         00001770
00032A D214 C3FA C48E 00806 0089A    365           MVC   TEXT+4(21),MESSO                                          00001780
000330 4170 0019            00019    366           LA    7,25                                                      00001790
000334 4070 C3F6            00802    367           STH   7,TEXT                                                    00001800
000338 45A0 D39A            003B6    368           BAL   10,PUTL1                                                  00001810
00033C 45A0 C024            00430    369           BAL   10,DEQ                                                    00001820
000340 47F0 D184            001A0    370           B     RETURN                                                    00001830
000344                               371 ERROR      EQU   *                                                        00001840
000344                               372 PARSER    EQU   *                                                         00001850
000344 4170 C420            0082C    373            LA    7,MESS1                                                  00001860
000348 45A0 D38C            003A8    374            BAL   10,PUTL                                                  00001870
00034C 45A0 C09E            004AA    375           BAL   10,FREE2                                                  00001880
000350 47F0 D184            001A0    376            B     RETURN                                                   00001890
000354                               377 DIRER     EQU   *        NOT FOUND(R15=4) OR I/O ERROR ?                  00001900
000354 4170 0004            00004    378            LA    7,4                                                      00001910
000358 19F7                          379            CR    15,7                                                     00001920
00035A 4770 D34A            00366    380            BNE   IOER                                                     00001930
00035E 4170 C441            0084D    381            LA    7,MESS4                                                  00001940
000362 47F0 D352            0036E    382            B     WRI                                                      00001950
000366 4170 C46D            00879    383 IOER       LA    7,MESS7                                                  00001960
00036A 47F0 D352            0036E    384            B     WRI                                                      00001970
00036E 45A0 D38C            003A8    385 WRI        BAL   10,PUTL                                                  00001980
000372 45A0 C024            00430    386           BAL   10,DEQ                                                    00001990
000376 47F0 D184            001A0    387           B     RETURN                                                    00002000
00037A 4170 C44C            00858    388 INER       LA    7,MESS5                                                  00002010
00037E 47F0 D352            0036E    389            B     WRI                                                      00002020
000382 4170 C457            00863    390 INER1     LA    7,MESS50                                                  00002030
000386 47F0 D352            0036E    391           B     WRI                                                       00002040
00038A 4170 C462            0086E    392 INUSE      LA    7,MESS6                                                  00002050
00038E 47F0 D352            0036E    393            B     WRI                                                      00002060
000392                               394 NOTAL      EQU   *                                                        00002070
000392 D215 C3FA C478 00806 00884    395           MVC   TEXT+4(22),MESS8                                          00002080
000398 4170 001A            0001A    396           LA    7,26                                                      00002090
00039C 4070 C3F6            00802    397           STH   7,TEXT                                                    00002100
0003A0 45A0 D39A            003B6    398           BAL   10,PUTL1                                                  00002110
0003A4 47F0 D184            001A0    399           B     RETURN                                                    00002120
                                     400 ********************************************                              00002130
```

```
  LOC  OBJECT CODE     ADDR1 ADDR2  STMT   SOURCE STATEMENT                                          F01MAY72   8/10/73

0003A8                               401 PUTL       EQU   *                                                        00002140
0003A8 D20A C401 7000 0080D 00000    402            MVC   TEXT+11(11),0(7)                                         00002150
0003AE 4170 0016            00016    403            LA    7,22                                                     00002160
0003B2 4070 C3F6            00802    404            STH   7,TEXT                                                   00002170
0003B6                               405 PUTL1      EQU   *                                                        00002180
0003B6 1B66                          406            SR    6,6                                                      00002190
0003B8 5060 C4B0            008BC    407            ST    6,ECBADS                                                 00002200
0003BC 4060 C3F8            00804    408            STH   6,TEXT+2                                                 00002210
0003C0 5830 2004            00004    409            L     3,CPPLUPT                                                00002220
0003C4 5840 200C            0000C    410            L     4,CPPLECT                                                00002230
                                     411            PUTLINE PARM=PUTBLOCK,UPT=(3),ECT=(4),ECB=ECBADS,             *00002240
                                                          OUTPUT=(TEXT,TERM,SINGLE,DATA),MF=(E,IOPLADS)            00002250
00040A 07FA                          429            BR    10                                                       00002260
                                     430 ***********************************************                          00002270
                                     431 ***************************************                                  00002280
                                     432 **** EXIT ROUTINE FUER STAX ******                                       00002290
                                     433 AEXIT      SAVE  (14,12),,AEXIT                                           00002300
00041A 18CF                          438            LR    12,15                                                    00002310
00040C                               439            USING AEXIT,12                                                 00002320
00041C 5851 0008            00008    440            L     5,8(1)    GET POINTER TO ECT                             00002330
000420 45A0 C024            00430    441            BAL   10,DEQ                                                   00002340
000000                               442            USING ECT,5  ADDRESSIBILITY FUER ECT DSECT                     00002350
000424 18FF                          443            SR    15,15                                                    00002360
000426 50F0 5000            00000    444            ST    15,ECTRCDF                                               00002370
00042A 98EC D00C            0000C    445            LM    14,12,12(13)                                             00002380
00042E 07FE                          446            BR    14                                                       00002390
                                     447 ***************************************                                  00002400
000430                               448 DEQ        EQU   *                                                        00002410
000430 9110 C41F      0082B          449            TM    POINTER,X'10'                                            00002420
000434 4780 C036            00442    450            BZ    NOCLOSE                                                  00002430
                                     451            CLOSE     UADDCB                                               00002440
000442                               457 NOCLOSE    EQU   *                                                        00002450
000442 9120 C41F      0082B          458            TM    POINTER,X'20'                                            00002460
000446 4780 C054            00460    459            BZ    NODEUSE                                                  00002470
00044A                               460 DEQUE      EQU   *                                                        00002480
00044A 5860 C598            009A4    461            L     6,USERLEN                                                00002490
                                     462            DEQ   (,DYNAM,(6),),MF=(E,USERDEQ)                             00002500
000460                               468 NODEUSE    EQU   *                                                        00002510
000460 9140 C41F      0082B          469            TM    POINTER,X'40'                                            00002520
000464 4780 C06E            0047A    470            BZ    NODEUAD                                                  00002530
                                     471            DEQ   (QNAME,RNAME,8,SYSTEM),RET=HAVE                          00002540
00047A                               482 NODEUAD    EQU   *                                                        00002550
00047A 4110 C5A0            009AC    483 FREE1      LA    1,POANS                                                  00002560
                                     484            IKJRLSA (1)                                                    00002570
0004A4 D203 C5A0 C5A4 009AC 009B0    498            MVC   POANS(4),FF                                              00002580
0004AA                               499 FREE2      EQU   *                                                        00002590
0004AA 9140 C41F      0082B          500            TM    POINTER,X'40'                                            00002600
0004AE 4780 C0B4            004C0    501            BZ    NOFREE                                                   00002610
0004B2 5810 C594            009A0    502            L     1,APPL                                                   00002620
                                     503            FREEMAIN R,LV=32,A=(1)                                         00002630
0004C0                               507 NOFREE     EQU   *                                                        00002640
0004C0 9200 C41F      0082B          508            MVI   POINTER,X'00'                                            00002650
0004C4 07FA                          509            BR    10                                                       00002660
                                     510 ***********************************************                          00002670
0004C6 0000
0004C8 0000000000000000              511 UADBUF     DC    200F'0'                                                  00002680
0007E8 E2E8E2C9D2D1E4C1              512 QNAME      DC    C'SYSIKJUA'                                              00002690
0007F0 D6D7C5D5E4C1C4E2              513 RNAME      DC    C'OPENUADS'                                              00002700
0007F8                               514 DOUBLE     DS    D                                                        00002710
000800 0000                          515 MIST       DC    H'0'                                                     00002720
```

```
  LOC  OBJECT CODE    ADDR1 ADDR2  STMT   SOURCE STATEMENT                                       F01MAY72  8/10/73

000802 0000                         516 TEXT       DC    H'0'                                            00002730
000804 0000                         517            DC    H'0'                                            00002740
000806 4040404040404040             518 TEXT1      DC    26X'40'                                         00002750
000820 4040404040404040             519 TEXT2      DC    11X'40'                                         00002760
00082B 00                           520 POINTER    DC    X'00'                                           00002770
00082C D7C1D9D44B40C5D9             521 MESS1      DC    CL11'PARM. ERROR'                               00002780
000837 C3C8C1D5C7C5C440             522 MESS2      DC    CL11'CHANGED    '                               00002790
000842 C1C4C4C5C4404040             523 MESS3      DC    CL11'ADDED      '                               00002800
00084D D5D6E340C6D6E4D5             524 MESS4      DC    CL11'NOT FOUND  '                               00002810
000858 C5D5E3C5D940D4C9             525 MESS5      DC   C'ENTER MIT A'                                   00002820
000863 C5D5E3C5D940D4C9             526 MESS50     DC   CL11'ENTER MIT C'                                00002830
00086E C9D540E4E2C54040             527 MESS6      DC   CL11'IN USE     '                                00002840
000879 C4C9D94B40C5D9D9             528 MESS7      DC    CL11'DIR. ERROR '                               00002850
000884 C3D6D4D4C1D5C440             529 MESS8      DC    C'COMMAND NOT AUTHORIZED'                       00002860
00089A E4C1C4E240C3C1D5             530 MESSO      DC   CL21'UADS CANNOT BE OPENED'                      00002870
0008AF C961D640C5D9D9D6             531 MESSIO     DC   CL11'I/O ERROR  '                                00002880
0008BC                              532 ECBADS     DS   F                                                00002890
                                    533 PUTBLOCK PUTLINE MF=L                                            00002900
0008CC 0000000000000000             538 IOPLADS  DC     4F'0'                                            00002910
                                    539 USERENQ    ENQ   (QNAME,,E,,SYSTEM),RET=USE,MF=L                 00002920
                                    547 UADDCB     DCB   DDNAME=SYSUADS,MACRF=(R,W),DSORG=PO,SYNAD=EXIT  00002930
000940                              598            DS    0D                                              00002940
000940 4040404040404040             599 DYNAM      DC    8X'40'                                          00002950
                                    600 UADREAD  READ   UADDECB,SF,,,,'S',,MF=L                          00002960
                                    609 USERDEQ    DEQ   (QNAME,,,SYSTEM),RET=HAVE,MF=L                  00002970
                                    617 STAXLIST STAX AEXIT,MF=L                                         00002980
00097C C1E3E3D54BC9D5E3             626 OUTBUF     DC   CL21'ATTN.INTERRUPT-DONE ?'                      00002990
000991 C4D6D5C54040                 627 OUT2       DC   CL6'DONE  '                                      00003000
000997 00
000998 0000099C                     628 AEVENT     DC   A(EVENT)                                         00003010
00099C 00000000                     629 EVENT      DC   F'0'                                             00003020
0009A0 00000000                     630 APPL       DC   F'0'                                             00003030
0009A4 00000000                     631 USERLEN    DC   F'0'                                             00003040
0009A8 00000000                     632 VPARM      DC   V(PARMTAB)                                       00003050
0009AC 00000000                     633 POANS      DC   F'0'                                             00003060
0009B0 FF000000                     634 FF         DC   X'FF000000'                                      00003070
0009B4 D200 C534 6000 00940 00000   635 MOVE       MVC  DYNAM(0),0(6)                                    00003080
0009BA 00                           636 PSTAX      DC   X'00'                                            00003090
                                    637          IKJCPPL                                                 00003100
                                    648          IKJECT                                                  00003110
                                    676          IKJPPL                                                  00003120
                                    691          END                                                     00003130
```

POS.ID	REL.ID	FLAG	ADDRESS
01	01	0C	0000CC
01	01	0C	0001C8
01	01	0C	0001CC
01	01	08	0001E1
01	01	08	000315
01	01	0C	0003F8
01	01	08	00043D
01	01	0C	000470
01	01	0C	000474
01	01	0C	0008F0
01	01	0C	000920
01	01	0C	000960
01	01	0C	000968
01	01	0C	000998
01	03	1C	0009A8

SYMBOL	LEN	VALUE	DEFN	REFERENCES								
ADD	00004	000286	00305	0301								
ADDED	00004	000194	00209	0206								
ADDSPACE	00001	000000	00001	0014	0045	0058	0071	0081	0091	0096	0116	0126
AEVENT	00004	000998	00628	0138								
AEXIT	00004	00040C	00434	0023	0024	0189	0439	0619				
APPL	00004	0009A0	00630	0131	0502							
BRLIST	00001	000108	00163	0160								
CPPL	00001	000000	00642	0022								
CPPLCBUF	00004	000000	00643	0139								
CPPLECT	00004	00000C	00646	0137	0186	0221	0410					
CPPLPSCB	00004	000008	00645	0028								
CPPLUPT	00004	000004	00644	0136	0409							
C1	00004	00028E	00307	0304								
DEND0009	00001	000A04	00113	0103								
DENT0009	00001	0009EF	00101	0103								
DEQ	00001	000430	00448	0369	0386	0441						
DEQUE	00001	00044A	00460	0358								
DIRER	00001	000354	00377	0280								
DOUBLE	00008	0007F8	00514	0175	0178	0178	0179					
DYNAM	00001	000940	00599	0254	0265	0271	0276	0465	0635			
ECBADS	00004	0008BC	00532	0407	0415							
ECT	00001	000000	00649	0222	0442							
ECTATRM	00001	000020	00667									
ECTDDNUM	00003	00001D	00672									
ECTIOWA	00004	000004	00659									
ECTLOGF	00001	000010	00669									
ECTMSGF	00001	000008	00660									
ECTNMBL	00001	000008	00670									
ECTNNOT	00001	000004	00671									
ECTNOPD	00001	000080	00666									
ECTPCMD	00008	00000C	00663									
ECTRCDF	00001	000000	00656	0224	0444							
ECTRTCD	00003	000001	00657									
ECTSCMD	00008	000014	00664									
ECTSMSG	00003	000009	00662									
ECTSWS	00001	00001C	00665									
ECTUSER	00004	000020	00673									
ENDE	00001	000184	00204	0359								
ENQ	00001	0001DC	00244	0242								
ERROR	00001	000344	00371	0183								
EVENT	00004	00099C	00629	0628								
EXIT	00001	000322	00361	0584								
FF	00004	0009B0	00634	0152	0498							
FREE1	00004	00047A	00483									
FREE2	00001	0004AA	00499	0375								
GET	00004	00011E	00171	0174								
IHB0014A	00002	00016A	00196	0197								
IHB0014B	00006	00016C	00197	0195								
IHB0016	00002	0001D0	00239	0232								
IHB0026	00004	0002A4	00313	0311								
IHB0031	00004	0002F8	00341	0339								
IHB0042	00002	000478	00480	0473								
IKJ$0002	00001	000A05	00125	0039								
IKJ$0009	00001	000A04	00112	0111								
IKJ$0043	00002	0004A4	00497	0488								
IKJa0002	00001	000028	00123	0040								
IKJa0003	00001	000014	00061	0041								
IKJa0004	00001	0009D4	00054	0053								
IKJa0005	00001	0009DC	00067	0066								
IKJa0006	00001	0009E2	00078	0077								

8/10/73

SYMBOL	LEN	VALUE	DEFN	REFERENCES												
IKJ@0007	00001	0009EA	00088	0087												
IKJ@0008	00001	000044	00119	0095												
IKJ@0009	00001	000A02	00110	0109												
IKJ@0043	00002	00048C	00489	0496												
IKJPARMD	00001	000000	00043	0051	0056	0065	0069	0104	0114	0121	0123	0154				
INER	00004	00037A	00388	0306												
INER1	00004	000382	00390	0303												
INUSE	00004	00038A	00392	0269												
IOER	00004	000366	00383	0380												
IOPLADS	00004	0008CC	00538	0412												
KEND0005	00001	0009DC	00068	0064												
KEW1	00002	000018	00070	0065	0161											
KEYW0005	00001	0009D4	00062	0064												
MESSID	00011	0008AF	00531	0362												
MESSO	00021	00089A	00530	0365												
MESS1	00011	00082C	00521	0373												
MESS2	00011	000837	00522	0207												
MESS3	00011	000842	00523	0209												
MESS4	00011	00084D	00524	0381												
MESS5	00011	000858	00525	0388												
MESS50	00011	000863	00526	0390												
MESS6	00011	00086E	00527	0392												
MESS7	00011	000879	00528	0383												
MESS8	00022	000884	00529	0395												
MIST	00002	000800	00515	0180	0307											
MOVE	00006	0009B4	00635	0159												
NAME0006	00001	0009DC	00074	0076												
NAME0007	00001	0009E4	00084	0086												
NEND0006	00001	0009E4	00080	0076												
NEND0007	00001	0009EC	00090	0086												
NOCLOSE	00001	000442	00457	0450												
NODEUAD	00001	00047A	00482	0470												
NODEUSE	00001	000460	00468	0459												
NOFREE	00001	0004C0	00507	0501												
NOSTAX	00001	0001AC	00220	0215												
NOTAL	00001	000392	00394	0030												
OPENER	00001	00032A	00364	0252												
OUTBUF	00021	00097C	00626	0193	0337											
OUT2	00006	000991	00627	0337												
PARMTAB	00001	0009C0	00038	0039	0042	0047	0060	0061	0073	0079	0083	0089	0093	0098	0118	0119	0124
PARSER	00001	000344	00372	0153													
PEND0004	00001	0009D4	00055	0050													
POANS	00004	0009AC	00633	0142	0151	0483	0498										
POINTER	00001	00082B	00520	0025	0132	0167	0205	0243	0253	0270	0302	0305	0449	0458	0469	0500	0508
POST0004	00001	0009C6	00048	0050													
PPL	00001	000000	00677	0134													
PPLANS	00004	000010	00687	0143													
PPLCBUF	00004	000014	00688	0139													
PPLECB	00004	000008	00685	0138													
PPLECT	00004	000004	00684	0137													
PPLPCL	00004	00000C	00686	0141													
PPLUPT	00004	000000	00683	0136													
PPLUWA	00004	000018	00689														
PSTAX	00001	0009BA	00636	0201	0214												
PUTBLOCK	00004	0008C0	00535	0417													
PUTL	00001	0003A8	00401	0210	0374	0385											
PUTL1	00001	000386	00405	0368	0398												
QNAME	00008	0007E8	00512	0237	0478	0545	0615										
RETURN	00001	0001A0	00213	0211	0370	0376	0387	0399									
RNAME	00008	0007F0	00513	0238	0479												

8/10/73

SYMBOL	LEN	VALUE	DEFN	REFERENCES											
SAVE	00004	00001C	00017	0014	0015	0225									
START	00001	000064	00018	0016											
STAXLIST	00004	000968	00618	0188											
SUBF	00004	000114	00168	0166											
TEXT	00002	000802	00516	0026	0027	0027	0254	0365	0367	0395	0397	0402	0404	0408	0421
TEXT1	00001	000806	00518												
TEXT2	00001	000820	00519												
UADBUF	00004	0004C8	00511	0286	0297	0309	0327								
UADDCB	00004	0008E8	00551	0249	0251	0275	0284	0325	0356	0455					
UADDECB	00004	000948	00602	0282	0292	0323	0333								
UADREAD	00004	000948	00601												
UADSREAD	00001	0001C0	00228	0202											
USER	00004	000008	00057	0051	0155	0156									
USERDEQ	00004	00095C	00610	0463											
USERENQ	00004	0008DC	00540	0263											
USERLEN	00004	0009A4	00631	0157	0261	0272	0461								
VALUE	00002	0009ED	00095	0079	0089										
VALUE1	00004	00001C	00115	0104	0168	0169									
VPARM	00004	0009A8	00632	0140											
WRI	00004	00036E	00385	0363	0382	0384	0389	0391	0393						

NO STATEMENTS FLAGGED IN THIS ASSEMBLY
STATISTICS SOURCE RECORDS (SYSIN) = 313 SOURCE RECORDS (SYSLIB) = 6627
OPTIONS IN EFFECT LIST, NODECK, LOAD, NORENT, XREF, NOTEST, ALGN, OS, NOTERM, LINECNT = 60
465 PRINTED LINES

SYMBOL	TYPE	ID	ADDR	LENGTH	LD ID
SPACE	SD	01	000000	000320	
IPARM	SD	02	000320	00000E	
IPARM	ER	03			

```
  LOC  OBJECT CODE    ADDR1 ADDR2  STMT   SOURCE STATEMENT                                                F01MAY72   8/10/73

000000                               1 SPACE    CSECT                                                        00000010
                                     2 * AFTER CHECKING THE COMMAND SYNTAX, THE PROCESSOR LINK TO DSSPACE    00000020
                                     3 * WHICH GIVES SPACE INFORMATION ABOUT ONE OR ALL THE DATA SETS        00000030
                                     4 * BELONGING TO THE USER, DEPENDING UPON THE COMMAND PARAMETERS        00000040
                                     5 *   SPACE ALL      PARM=X'04'  INFORMATION FOR EACH DATA SET          00000050
                                     6 *   SPACE DSNAME  PARM=X'0C'  INFORMATION FOR ONE DATA SET            00000060
                                     7 *   SPACE          PARM=X'02'  ONLY THE SUM OF THE ALLOCATED AND USED 00000070
                                     8 *                              SPACE ARE PRINTED                      00000080
                                     9          PRINT NOGEN                                                  00000090
                                    10          SAVE  (14,12),,SPACE                                         00000100
00000E 05A0                         15          BALR  10,0                                                   00000110
000010                              16          USING *,10                                                   00000120
000010 1821                         17          LR    2,1                                                    00000130
000000                              18          USING CPPL,2                                                 00000140
000012 41E0 A2C8          002D8     19          LA    14,SAVE                                                00000150
000016 50ED 0008          00008     20          ST    14,8(13)                                               00000160
00001A 50DE 0004          00004     21          ST    13,4(14)                                               00000170
00001E 18DE                         22          LR    13,14                                                  00000180
000020 5020 A2B8          002C8     23          ST    2,ACPPL                                                00000190
                                    24 ******  GET USER IDENTIFICATION                                       00000200
000024 5860 2008          00008     25          L     6,CPPLPSCB    GET PSCB ADDR                            00000210
000028 1B77                         26          SR    7,7                                                    00000220
00002A 4376 0007          00007     27          IC    7,7(6)        GET USER LENGTH                          00000230
00002E 1837                         28          LR    3,7           SAVE USER LENGTH                         00000240
000030 0670                         29          BCTR  7,0           DECREASE BY 1 FOR EX                     00000250
000032 4180 A280          00290     30          LA    8,USER                                                 00000260
000036 4470 A2C0          002D0     31          EX    7,MOVEL       MOVE USER ID                             00000270
00003A 1A83                         32          AR     8,3          SET POINTER TO FIRST BLK IN USER ID      00000280
                                    33 * CHECK COMMAND SYNTAX                                                00000290
                                    34 IPARM     IKJPARM                                                     00000300
                                    43 DSNAM     IKJPOSIT DSNAME                                             00000310
                                    54          IKJENDP                                                      00000320
                                    64 * PREPARE CALL TO  IKJPARS                                            00000330
                                    65          GETMAIN R,LV=32     GET CORE FOR PPL                         00000340
000046 1831                         69          LR    3,1                                                    00000350
000000                              70          USING  PPL,3                                                 00000360
000048 D203 3000 2004 00000 00004   71          MVC   PPLUPT(4),CPPLUPT                                      00000370
00004E D203 3008 A1EC 00008 001FC   72          MVC   PPLECB(4),AEVENT                                       00000380
000054 D203 3004 200C 00004 0000C   73          MVC   PPLECT(4),CPPLECT                                      00000390
00005A D203 3014 2000 00014 00000   74          MVC   PPLCBUF(4),CPPLCBUF                                    00000400
000060 58B0 A1FC          0020C     75          L     11,VIPARM                                              00000410
000064 50B0 300C          0000C     76          ST    11,PPLPCL                                              00000420
000068 41B0 A1F8          00208     77          LA    11,POANS                                               00000430
00006C 50B0 3010          00010     78          ST    11,PPLANS                                              00000440
000070 D203 A1F8 A1F0 00208 00200   79          MVC   POANS(4),NULL                                          00000450
000076 D203 A1DC A1F0 001EC 00200   80          MVC   ECBADS(4),NULL                                         00000460
                                    81          LINK EP=IKJPARS                                              00000470
000092 5850 3010          00010     88          L     5,PPLANS                                               00000480
000096 5855 0000          00000     89          L     5,0(5)        GET POINTER TO PDL                       00000490
00009A 5950 A1F4          00204     90          C     5,FF          PARS SUCCESSFULL                         00000500
00009E 4780 A0F0          00100     91          BC    8,PARSER      NO ERROR                                 00000510
0000A2 4165 0008          00008     92          LA    6,8(5)        GET POINTER TO DSN PDE                   00000520
0000A6 9180 6006    00006           93          TM    6(6),X'80'    DSN PRESENT ?                            00000530
0000AA 4780 A106          00116     94          BZ    TOTAL         NO BRANCH                                00000540
0000AE 9604 A2B4    002C4           95          OI    PARM,X'04'    SET IN PARM ALL OR DSNAME                00000550
0000B2 4876 0004          00004     96          LH    7,4(6)   GET LENGTH                                    00000560
0000B6 41B0 0003          00003     97          LA    11,3                                                   00000570
0000BA 5896 0000          00000     98          L     9,0(6)                                                 00000580
0000BE 197B                         99          CR    7,11          LENGTH OF DSN=3?                         00000590
0000C0 4770 A0BE          000CE    100          BNE   NOTALL        NO BRANCH                                00000600
```

```
 LOC  OBJECT CODE     ADDR1 ADDR2  STMT   SOURCE STATEMENT                                  F01MAY72   8/10/73

0000C4 D502 9000 A2BC 00000 002CC   101          CLC   0(3,9),ALL     PARAMETER = ALL?                    00000610
0000CA 4780 A10A              0011A 102          BE    WEITER         YES BRANCH                          00000620
0000CE                              103 NOTALL    EQU   *              SPACE DSNAME                        00000630
0000CE 9140 6006       00006        104          TM    6(6),X'40'     DSN IN QUOTE ?                      00000640
0000D2 4710 A0E6              000F6 105          BO    DSNER          YES ERROR                           00000650
0000D6 9180 600E       0000E        106          TM    14(6),X'80'    MEMBER NAME PRESENT ?               00000660
0000DA 4710 A0E6              000F6 107          BO    DSNER          YES ERROR                           00000670
0000DE 924B 8000       00000        108          MVI   0(8),X'4B'     MOVE . AFTER USER ID                00000680
0000E2 4188 0001              00001 109          LA    8,1(8)         SET POINTER TO NEXT FIRST BLK       00000690
0000E6 0670                         110          BCTR  7,0            DECREASE LENGTH OF DSN BY 1 FOR EX  00000700
0000E8 1869                         111          LR    6,9                                               00000710
0000EA 4470 A2C0              002D0 112          EX    7,MOVEL        MOVE DSNAME INTO USER FIELD         00000720
0000EE 9608 A2B4       002C4        113          OI    PARM,X'08'     SET IN PARM FIELD DSNAME PRESENT    00000730
0000F2 47F0 A10A              0011A 114          B     WEITER                                             00000740
0000F6 D20F A21E A200 0022E 00210   115 DSNER      MVC   TEXT+4(16),INVDSN                                00000750
0000FC 47F0 A0F6              00106 116          B     PARS2                                              00000760
000100 D20F A21E A210 0022E 00220   117 PARSER     MVC   TEXT+4(16),INVPARS                               00000770
000106 4170 0014              00014 118 PARS2      LA    7,20                                               00000780
00010A 4070 A21A              0022A 119          STH   7,TEXT                                             00000790
00010E 45B0 A184              00194 120          BAL   11,PUTL                                            00000800
000112 47F0 A13E              0014E 121          B     RETURN                                             00000810
                                    122 ********************************************************        00000820
000116 9602 A2B4       002C4        123 TOTAL      OI    PARM,X'02'     SET IN PARM NO PARAM. PRESENT       00000830
00011A                              124 WEITER     EQU   *                                                00000840
                                    125 * LINK TO DSSPACE TO COMPUTE ALLOC. AND USED SPACE                00000850
                                    126          LINK  EP=DSSPACE,PARAM=(USER,ALLOC,USED,PARM,ACPPL),VL=1 00000860
00014A 47F0 A13E              0014E 143          B     RETURN                                             00000870
                                    144 ********************************************************        00000880
00014E                              145 RETURN     EQU   *                                                00000890
00014E 1813                         146 FREE       LR    1,3                                              00000900
                                    147          FREEMAIN R,LV=32,A=(1) RELEASE CORE FOR PPL            00000910
                                    151          IKJRLSA PDANS        RELEASE CORE FOR PDL              00000920
000180 5850 200C              0000C 165          L     5,CPPLECT                                          00000930
000000                              166          USING ECT,5                                              00000940
000184 1BFF                         167          SR    15,15                                              00000950
000186 50F0 5000              00000 168          ST    15,ECTRCDF                                         00000960
00018A 58D0 A2CC              002DC 169          L     13,SAVE+4                                          00000970
00018E 98EC D00C              0000C 170          LM    14,12,12(13)                                       00000980
000192 07FE                         171          BR    14                                                 00000990
                                    172 ********************************************************        00001000
000194                              173 PUTL       EQU   *                                                00001010
000194 D201 A21C A1F0 0022C 00200   174          MVC   TEXT+2(2),NULL                                     00001020
00019A 1B66                         175          SR    6,6                                                00001030
00019C 5060 A1DC              001EC 176          ST    6,ECBADS                                           00001040
0001A0 5850 2004              00004 177          L     5,CPPLUPT                                          00001050
0001A4 5840 200C              0000C 178          L     4,CPPLECT                                          00001060
                                    179          PUTLINE PARM=PUTBLOCK,UPT=(5),ECT=(4),ECB=ECBADS,      *00001070
                                                       OUTPUT=(TEXT,TERM,SINGLE,DATA),MF=(E,IOPLADS)     00001080
0001EA 07FB                         197          BR    11                                                 00001090
                                    198 ********************************************************        00001100
0001EC                              199 ECBADS     DS    F                                                00001110
                                    200 PUTBLOCK   PUTLINE MF=L                                           00001120
0001FC 000001EC                     205 AEVENT     DC    A(ECBADS)                                        00001130
000200 00000000                     206 NULL       DC    F'0'                                             00001140
000204 FF000000                     207 FF         DC    X'FF000000'                                      00001150
000208 00000000                     208 PDANS      DC    F'0'                                             00001160
00020C 00000000                     209 VIPARM     DC    V(IPARM)                                         00001170
000210 C9D5E5C1D3C9C440             210 INVDSN     DC    CL16'INVALID DSNAME'                             00001180
000220 D7C1D9E240C5D9D9              211 INVPARS    DC    C'PARS ERROR'                                    00001190
000228 0000                         212 TEXT       DC    H'0'                                             00001200
```

```
  LOC  OBJECT CODE     ADDR1 ADDR2  STMT   SOURCE STATEMENT                    F01MAY72   8/10/73

00022C 0000                          213           DC    H'0'                              00001210
00022E 0000
000230 0000000000000000              214           DC    20F'0'                            00001220
000280 0000000000000000              215 IOPLADS   DC    4F'0'                             00001230
000290                               216           DS    0F                                00001240
000290 4040404040404040              217 USER      DC    CL44' '                           00001250
0002BC 00000000                      218 USED      DC    F'0'                              00001260
0002C0 00000000                      219 ALLOC     DC    F'0'                              00001270
0002C4 00                            220 PARM      DC    X'00'                             00001280
0002C5 000000
0002C8 00000000                      221 ACPPL      DC    F'0'                             00001290
0002CC C1D3D3                        222 ALL       DC    C'ALL'                            00001300
0002D0                               223           DS    0F                                00001310
0002D0 D200 8000 6000 00000 00000    224 MOVEL     MVC   0(0,8),0(6)                       00001320
0002D6 0000
0002D8 0000000000000000              225 SAVE      DC    18F'0'                            00001330
                                     226           IKJCPPL                                 00001340
                                     237           IKJPPL                                  00001350
                                     252           IKJECT                                  00001360
                                     280           END                                     00001370
```

POS.ID	REL.ID	FLAGS	ADDRESS
01	01	0C	000080
01	01	0C	000120
01	01	0C	000124
01	01	0C	000128
01	01	0C	00012C
01	01	08	000131
01	01	0C	000138
01	01	0C	0001D8
01	01	0C	0001FC
01	03	1C	00020C

SYMBOL	LEN	VALUE	DEFN	REFERENCES					
ACPPL	00004	0002C8	00221	0023	0135				
AEVENT	00004	0001FC	00205	0072					
ALL	00003	0002CC	00222	0101					
ALLOC	00004	0002C0	00219	0131					
CPPL	00001	000000	00231	0018					
CPPLCBUF	00004	000000	00232	0074					
CPPLECT	00004	00000C	00235	0073	0165	0178			
CPPLPSCB	00004	000008	00234	0025					
CPPLUPT	00004	000004	00233	0071	0177				
DSNAM	00004	000008	00052	0048					
DSNER	00006	0000F6	00115	0105	0107				
ECBADS	00004	0001EC	00199	0080	0176	0183	0205		
ECT	00001	000000	00253	0166					
ECTATRM	00001	000020	00271						
ECTDDNUM	00003	00001D	00276						
ECTIOWA	00004	000004	00263						
ECTLOGF	00001	000010	00273						
ECTMSGF	00001	000008	00264						
ECTNMAL	00001	000008	00274						
ECTNNOT	00001	000004	00275						
ECTNOPD	00001	000080	00270						
ECTPCMD	00008	00000C	00267						
ECTRCDF	00001	000000	00260	0168					
ECTRTCD	00003	000001	00261						
ECTSCMD	00008	000014	00268						
ECTSMSG	00003	000009	00266						
ECTSWS	00001	00001C	00269						
ECTUSER	00004	000020	00277						
FF	00004	000204	00207	0090					
FREE	00002	00014E	00146						
IHB0010	00001	000120	00129						
IHB0010A	00001	000134	00136	0128					
IKJ$0002	00001	00032E	00062	0036					
IKJ$0013	00002	000180	00164	0155					
IKJ@0002	00001	000020	00060	0037					
IKJ@0003	00001	00000D	00056	0038					
IKJ@0013	00002	000168	00156	0163					
IKJPARMD	00001	000000	00040	0048	0051	0058	0060		
INVDSN	00016	000210	00210	0115					
INVPARS	00010	000220	00211	0117					
IOPLADS	00004	000280	00215	0180					
IPARM	00001	000320	00035	0036	0039	0044	0055	0056	0061
MOVEL	00006	0002D0	00224	0031	0112				
NOTALL	00001	0000CE	00103	0100					
NULL	00004	000200	00206	0079	0080	0174			
PARM	00001	0002C4	00220	0095	0113	0123	0133		
PARSER	00006	000100	00117	0091					
PARS2	00004	000106	00118	0116					
PEND0004	00001	00032D	00050	0047					
PQANS	00004	000208	00208	0077	0079	0152			
POST0004	00001	000326	00045	0047					
PPL	00001	000000	00238	0070					
PPLANS	00004	000010	00248	0078	0088				
PPLCBUF	00004	000014	00249	0074					
PPLECB	00004	000008	00246	0072					
PPLECT	00004	000004	00245	0073					
PPLPCL	00004	00000C	00247	0076					
PPLUPT	00004	000000	00244	0071					
PPLUWA	00004	000018	00250						
PUTBLOCK	00004	0001F0	00202	0185					

8/10/73

SYMBOL	LEN	VALUE	DEFN	REFERENCES				
PUTL	00001	000194	00173	0120				
RETURN	00001	00014E	00145	0121	0143			
SAVE	00004	0002D8	00225	0019	0169			
SPACE	00001	000000	00001	0042	0053	0063		
TEXT	00002	00022A	00212	0115	0117	0119	0174	0189
TOTAL	00004	000116	00123	0094				
USED	00004	0002BC	00218	0132				
USER	00044	000290	00217	0030	0130			
VIPARM	00004	00020C	00209	0075				
WETTER	00001	00011A	00124	0102	0114			

NO STATEMENTS FLAGGED IN THIS ASSEMBLY
STATISTICS SOURCE RECORDS (SYSIN) = 137 SOURCE RECORDS (SYSLIB) = 2275
OPTIONS IN EFFECT LIST, NODECK, LOAD, NORENT, XREF, NOTEST, ALGN, OS, NOTERM, LINECNT = 60
242 PRINTED LINES

SYMBOL	TYPE	ID	ADDR	LENGTH	LD ID
RELEASE	SD	01	000000	000774	
PARM	SD	02	000778	00001C	
PARM	ER	03			

```
  LOC  OBJECT CODE     ADDR1 ADDR2  STMT   SOURCE STATEMENT                                  F01MAY72   8/10/73

000000                              1 RELEASE  CSECT                                                    00000010
                                    2          PRINT NOGEN                                           00000020
                                    3          SAVE  (14,12),,RELEASE                                00000030
000010 18CF                         8          LR    12,15                                           00000040
000000                              9          USING RELEASE,12                                      00000050
000012 41E0 C5B0            005B0  10          LA    14,SAVE                                         00000060
000016 50ED 0008            00008  11          ST    14,8(13)                                        00000070
00001A 50DE 0004            00004  12          ST    13,4(14)                                        00000080
00001E 18DE                        13          LR    13,14                                           00000090
000020 1821                        14          LR    2,1                                             00000100
000000                             15          USING CPPL,2                                          00000110
                                   16 PARM     IKJPARM                                               00000120
                                   25 DSNAM    IKJPOSIT DSNAME,LIST,PROMPT='DATA SET NAME'           00000130
                                   39          IKJENDP                                               00000140
                                   49          GETMAIN R,LV=32     GET CORE FOR PPL DSECT            00000150
00002C 9601 C3AC       003AC       53          OI    POINTER,X'01' SET BIT GET CORE FOR PPL          00000160
000030 1841                        54          LR    4,1                                             00000170
000000                             55          USING PPL,4                                           00000180
                                   56 * PREPARE CALL TO IKJPARS                                      00000190
000032 D203 4000 2004 00000 00004  57          MVC   PPLUPT(4),CPPLUPT                             00000200
000038 D203 4004 200C 00004 0000C  58          MVC   PPLECT(4),CPPLECT                             00000210
00003E D203 4008 C684 00008 00684  59          MVC   PPLECB(4),AEVENT                              00000220
000044 D203 4014 2000 00014 00000  60          MVC   PPLCBUF(4),CPPLCBUF                           00000230
00004A 58B0 C3A8            003A8  61          L     11,VPARM                                      00000240
00004E 50B0 400C            0000C  62          ST    11,PPLPCL     SET POINTER TO PCL FOR PARS     00000250
000052 D203 C3A4 C34C 003A4 0034C  63          MVC   PDANS(4),NULL                                 00000260
000058 41B0 C3A4            003A4  64          LA    11,PDANS      SET POINTER TO ANSWER FOR PARS  00000270
00005C 50B0 4010            00010  65          ST    11,PPLANS                                     00000280
000060 1814                        66          LR    1,4                                           00000290
                                   67          LINK  EP=IKJPARS                                    00000300
00007A 5850 4010            00010  74          L     5,PPLANS                                      00000310
00007E 5855 0000            00000  75          L     5,0(5)        GET POINTER  TO  PDL            00000320
000082 5950 C348            00348  76          C     5,FF          PARS SUCCESSFULL                00000330
000086 4780 C2A6            002A6  77          BC    8,PARSER      NO PRINT MESSAGE RETURN         00000340
00008A 58A0 2008            00008  78          L     10,CPPLPSCB   GET PSCB ADR.                   00000350
00008E 1899                        79          SR    9,9                                           00000360
000090 439A 0007            00007  80          IC    9,7(10)       GET LENGTH OF USER ID           00000370
000094 0690                        81          BCTR  9,0           DECREASE BY U FOR EX            00000380
000096 4180 C470            00470  82          LA    8,DSNAME                                      00000390
00009A 4490 C650            00650  83          EX    9,MOVEL       MOVE USER ID IN DSNAME FOR LOCATE 00000400
00009E 4189 8001            00001  84          LA    8,1(9,8)                                      00000410
0000A2 9248 8000       00000       85          MVI   0(8),X'4B'    MOVE '.'                        00000420
0000A6 4188 0001            00001  86          LA    8,1(8)        SAVE ADR OF FIRST BLK           00000430
0000AA 5080 C45C            0045C  87          ST    8,ADSN2                                       00000440
000000                             88          USING IKJPARMD,5                                    00000450
0000AE 4165 0008            00008  89          LA    6,8(5)        GET POINTER TO PDE              00000460
                                   90          GETMAIN R,LV=24     GET CORE FOR DAPL               00000470
0000BC 9602 C3AC       003AC       94          OI    POINTER,X'02' SET BIT GETCORE FOR DAPL          00000480
0000C0 1831                        95          LR    3,1                                           00000490
000000                             96          USING DAPL,3                                          00000500
                                   97 * PREPARE CALL TO IKJDAIR                                      00000510
0000C2 D203 3000 2004 00000 00004  98          MVC   DAPLUPT(4),CPPLUPT                            00000520
0000C8 D203 3004 200C 00004 0000C  99          MVC   DAPLECT(4),CPPLECT                            00000530
0000CE D203 300C 2008 0000C 00008 100          MVC   DAPLPSCB(4),CPPLPSCB                          00000540
0000D4 D203 3008 C684 00008 00684 101          MVC   DAPLECB(4),AEVENT                             00000550
                                  102 ************************************************************ 00000560
0000DA                            103 GOON       EQU   *                                            00000570
0000DA 58A6 0000            00000 104          L     10,0(6)       GET POINTER TO DSNAME           00000580
0000DE 4896 0004            00004 105          LH    9,4(6)        GET DSNAME LENGTH               00000590
0000E2 4180 C658            00658 106          LA    8,DSN1                                        00000600
```

```
 LOC  OBJECT CODE     ADDR1 ADDR2  STMT   SOURCE STATEMENT                                  F01MAY72   8/10/73

0000E6 4090 C656             00656   107          STH    9,DSN         STORE LENGTH IN DSN BUFFER FOR DAIR      00000610
0000EA 0690                          108          BCTR   9,0           DECREASE BY 1 FOR EXEC                   00000620
0000EC 4490 C650             00650   109          EX     9,MOVEL       MOVE DSN IN DSN BUFFER FOR DAIR          00000630
0000F0 9140 6006       00006         110          TM     6(6),X'40'    DSN IN QUOTE ?                           00000640
0000F4 4710 C28C             0028C   111          BO     DSNER         YES PRINT MESSAGE.GET NEXT DSN           00000650
0000F8 9180 600E       0000E         112          TM     14(6),X'80'   MEMBER NAME PRESENT ?                    00000660
0000FC 4710 C28C             002BC   113          BO     DSNER         YES PRINT MESSAGE.GET NEXT DSN           00000670
000100 5880 C45C             0045C   114          L      8,ADSN2       MOVE DSNAME IN DSNAME FUER LOCATE        00000680
000104 4490 C650             00650   115          EX     9,MOVEL                                                00000690
                                     116          LOCATE LISTLOC       DATA SET IN CATALOG ?                    00000700
00010E 0690                          119          BCTR   9,0           RESET                                    00000710
000110 9240 8000       00000         120          MVI    0(8),X'40'    DSNAME TO BLANCK                         00000720
000114 18A8                          121          LR     10,8                                                   00000730
000116 4188 0001             00001   122          LA     8,1(8)                                                 00000740
00011A 4490 C650             00650   123          EX     9,MOVEL                                                00000750
00011E 12FF                          124          LTR    15,15         LOCATE SUCCESSFUL   ?                    00000760
000120 4780 C12C             0012C   125          BZ     CATLG                                                  00000770
000124 4190 C443             00443   126          LA     9,MESS7       NO PRINT MESSAGE.GET NEXT DSN            00000780
000128 47F0 C2CC             002CC   127          B      PUTL2                                                  00000790
00012C                               128 CATLG     EQU    *                                                    00000800
00012C 45A0 C1A2             001A2   129          BAL    10,DAIR                                                00000810
000130 4166 0018             00018   130 NEXT      LA     6,24(6)       GET POINTER TO NEXT PDE ADR.             00000820
000134 D503 6000 C348 00000  00348   131          CLC    0(4,6),FF        ANY PDE  ?                           00000830
00013A 4780 C146             00146   132          BE     RETURN        NO ENDE                                  00000840
00013E 5866 0000             00000   133          L      6,0(6)        GET POINTER TO NEXT PDE                  00000850
000142 47F0 C0DA             000DA   134          B      GOON          CONTINUE                                 00000860
                                     135 ********************************************************             00000870
000146                               136 RETURN    EQU    *                                                    00000880
000146 4110 C3A4             003A4   137          LA     1,POANS                                                00000890
                                     138          IKJRLSA (1)                                                   00000900
000170 9101 C3AC       003AC         152          TM     POINTER,X'01'      CORE FOR PPL ?                      00000910
000174 4780 C184             00184   153          BZ     NOFR1                                                  00000920
000178 1814                          154          LR     1,4                                                    00000930
                                     155          FREEMAIN R,LV=32,A=(1)   FREE COR FOR PPL                     00000940
000184                               159 NOFR1     EQU    *                                                    00000950
000184 9102 C3AC       003AC         160          TM     POINTER,X'02'      CORE FOR DAPL  ?                    00000960
000188 4780 C198             00198   161          BZ     NOFR2                                                  00000970
00018C 1813                          162          LR     1,3                                                    00000980
                                     163          FREEMAIN R,LV=24,A=(1)        FREE CORE FOR DAPL               00000990
000198                               167 NOFR2     EQU    *                                                    00001000
000198 58D0 C5B4             005B4   168          L      13,SAVE+4                                              00001010
                                     169          RETURN (14,12)                                                00001020
                                     172 ********************************************************             00001030
0001A2                               173 DAIR      EQU    *             FREE SPECIFIED DATA SET                  00001040
0001A2 41B0 C6D8             006D8   174          LA     11,DAP18      MOVE ADR    OF DAPB IN DAPL              00001050
0001A6 50B0 3010             00010   175          ST     11,DAPLDAPB                                            00001060
0001AA D203 C688 C34C 00688  0034C   176          MVC    EVENT(4),NULL                                          00001070
0001B0 D227 C6D8 C74C 006D8  0074C   177          MVC    DAP18(40),ORIG18      MOVE DAPB   FOR FREE             00001080
0001B6 1813                          178          LR     1,3                                                    00001090
                                     179          LINK   EP=IKJDAIR                                             00001100
0001CE 12FF                          186          LTR    15,15         FREE SUCCESSFULL  ?                      00001110
0001D0 4780 C1E6             001E6   187          BZ     FREED         YES - OK                                 00001120
0001D4 41E0 001C             0001C   188          LA     14,28                                                  00001130
0001D8 19FE                          189          CR     15,14         NOT FREED NOT ALLOCATED ?                00001140
0001DA 4780 C1E6             001E6   190          BE     FREED         YES - OK                                 00001150
0001DE 4190 C3DF             003DF   191          LA     9,MESS3       PRINT MESSAGE.GET NEXT DSN               00001160
0001E2 47F0 C2CC             002CC   192          B      PUTL2                                                  00001170
0001E6                               193 FREED     EQU    *                                                    00001180
                                     194 * ALLOCATE SPECIFIED DATA SET                                          00001190
0001E6 41B0 C68C             0068C   195          LA     11,DAP08                                               00001200
```

```
 LOC  OBJECT CODE     ADDR1 ADDR2  STMT   SOURCE STATEMENT                                  F01MAY72   8/10/73

0001EA 5080 3010             00010   196          ST    11,DAPLDAPB                                        00001210
0001EE D203 C688 C34C 00688 0034C   197          MVC   EVENT(4),NULL                                      00001220
0001F4 1813                         198          LR    1,3                                                00001230
0001F6 D248 C68C C700 0068C 00700   199          MVC    DAP08(76),ORIG08                                  00001240
                                    200          LINK  EP=IKJDAIR     ALLOC MOD,KEEP,KEEP,RLSE,PREFIX      00001250
000212 12FF                         207          LTR   15,15          SUCCESSFULL  ?                     00001260
000214 4780 C220             00220  208          BZ    OK1                                                00001270
000218 4190 C3C6             003C6  209          LA    9,MESS2                                            00001280
00021C 47F0 C2CC             002CC  210          B     PUTL2                                              00001290
000220                              211 OK1      EQU   *                                                  00001300
000220 9180 C6D7      006D7         212          TM    DORG,X'80'     DSORG = ISAM ?                      00001310
000224 4710 C29E             0029E  213          BO    ISAM                                               00001320
000228 9120 C6D7      006D7         214          TM    DORG,X'20'     DSORG = DA ?                        00001330
00022C 4710 C29E             0029E  215          BO    DIRECT                                             00001340
000230 D207 C620 C698 00620 00698   216          MVC   OUT+40(8),DA08DDNM  MOVE DDNAME INTO DCB           00001350
000236 D200 C612 C6D7 00612 006D7   217          MVC   OUT+26(1),DORG      MOVE DSORG INTO DCB            00001360
                                    218          OPEN  (OUT,(OUTPUT))      OPEN FOR OUTPUT                00001370
000246 9110 C628      00628         224          TM    OUT+48,B'00010000'  OPEN SUCCESSFULL ?             00001380
00024A 4710 C256             00256  225          BC    1,OK3          YES BRANCH                          00001390
00024E 4190 C3F8             003F8  226          LA    9,MESS4        NO - PRINT MESSAGE - GET NEXT DSN   00001400
000252 47F0 C2C4             002C4  227          B     PUTL1                                              00001410
000256                              228 OK3      EQU   *                                                  00001420
                                    229          CLOSE OUT            CLOSE DATA SET                     00001430
000262                              235 DAIR1     EQU   *             FREE ALLOCATED DATA SET            00001440
000262 D203 C688 C34C 00688 0034C   236          MVC   EVENT(4),NULL                                      00001450
000268 4180 C6D8             006D8  237          LA    11,DAP18                                           00001460
00026C 5080 3010             00010  238          ST    11,DAPLDAPB                                        00001470
000270 1813                         239          LR    1,3                                                00001480
000272 D227 C6D8 C74C 006D8 0074C   240          MVC   DAP18(40),ORIG18   MOVE DAPB FOR FREE              00001490
                                    241          LINK  EP=IKJDAIR                                         00001500
00028E 12FF                         248          LTR   15,15          DAIR SUCCESSFULL ?                 00001510
000290 4780 C29C             0029C  249          BZ    OK2            YES BRANCH                          00001520
000294 4190 C3DF             003DF  250          LA    9,MESS3        NO PRINT MESSAGE                    00001530
000298 47F0 C2CC             002CC  251          B     PUTL2                                              00001540
00029C                              252 OK2      EQU   *                                                  00001550
00029C 07FA                         253          BR    10             GET NEXT DSNAME                     00001560
                                    254 ********************************************************************00001570
00029E                              255 ISAM      EQU   *                                                 00001580
00029E 4190 C42A             0042A  256 DIRECT    LA    9,MESS6                                          00001590
0002A2 47F0 C2C4             002C4  257          B     PUTL1                                              00001600
0002A6 4170 001D             0001D  258 PARSER    LA    7,29                                             00001610
0002AA 4070 C350             00350  259          STH   7,TEXT                                             00001620
0002AE D218 C354 C411 00354 00411   260          MVC   TEXT1(25),MESS5                                    00001630
0002B4 4580 C2E4             002E4  261          BAL   11,PUTL3                                           00001640
0002B8 47F0 C146             00146  262          B     RETURN                                             00001650
0002BC 4190 C3AD             003AD  263 DSNER     LA    9,MESS1                                          00001660
0002C0 47F0 C2CC             002CC  264          B     PUTL2                                              00001670
0002C4 4180 C262             00262  265 PUTL1     LA    11,DAIR1                                         00001680
0002C8 47F0 C2D0             002D0  266          B     PUTL20                                             00001690
0002CC                              267 PUTL2     EQU   *                                                  00001700
0002CC 41B0 C130             00130  268          LA    11,NEXT                                            00001710
0002D0 D228 C354 C658 00354 00658   269 PUTL20    MVC   TEXT1(44),DSN1                                   00001720
0002D6 D218 C380 9000 00380 00000   270          MVC   TEXT1+44(25),0(9)                                  00001730
0002DC 4170 0049             00049  271          LA    7,73                                               00001740
0002E0 4070 C350             00350  272          STH   7,TEXT                                             00001750
0002E4                              273 PUTL3     EQU   *                                                 00001760
0002E4 D201 C352 C34C 00352 0034C   274          MVC   TEXT+2(2),NULL                                     00001770
0002EA 5880 2004             00004  275          L     8,CPPLUPT                                          00001780
0002EE 5890 200C             0000C  276          L     9,CPPLECT                                          00001790
0002F2 D203 C688 C34C 00688 0034C   277          MVC   EVENT(4),NULL                                      00001800
```

```
 LOC  OBJECT CODE    ADDR1 ADDR2  STMT   SOURCE STATEMENT                                  F01MAY72   8/10/73

                                   278          PUTLINE PARM=PUTL,UPT=(8),ECT=(9),ECB=EVENT,MF=(E,IOPL)      00001810
00032A 07FB                        292          BR    11                                              00001820
                                   293 ************************************************************      00001830
                                   294 PUTL     PUTLINE OUTPUT=(TEXT,,,DATA),MF=L                       00001840
000338 0000000000000000            301 IOPL     DC    4F'0'                                             00001850
000348 FF000000                    302 FF       DC    X'FF000000'                                       00001860
00034C 00000000                    303 NULL     DC    F'0'                                              00001870
000350 00000000                    304 TEXT     DC    F'0'                                              00001880
000354 4040404040404040            305 TEXT1    DC    CL80' '                                           00001890
0003A4 00000000                    306 POANS    DC    F'0'                                              00001900
0003A8 00000000                    307 VPARM    DC    V(PARM)                                           00001910
0003AC 00                          308 POINTER  DC    X'00'                                             00001920
0003AD C9D5E5C1D3C9C440            309 MESS1    DC    CL25'INVALID DATA SET NAME'                       00001930
0003C6 C1D3D3D6C3C1E3C5            310 MESS2    DC    CL25'ALLOCATE ERROR'                              00001940
0003DF C6D9C5C540C5D9D9            311 MESS3    DC    CL25'FREE ERROR'                                  00001950
0003F8 D6D7C5D540C5D9D9            312 MESS4    DC    CL25'OPEN ERROR'                                  00001960
000411 D7C1D9C1D4C5E3C5            313 MESS5    DC    CL25'PARAMETER ERROR'                             00001970
00042A C9E2C1D440D6D940            314 MESS6    DC    CL25'ISAM OR DO DATEI'                            00001980
000443 D5D6E340C3C1E3D3            315 MESS7    DC    CL25'NOT CATLG OR LOCATE ERROR'                   00001990
00045C 00000000                    316 ADSN2    DC    F'0'                                              00002000
                                   317 LISTLOC  CAMLST NAME,DSNAME,,LOCAREA                             00002010
000470 4040404040404040            326 DSNAME   DC    CL44' '                                           00002020
0004A0                             327 LOCAREA  DS    0D                                                00002030
0004A0 4040404040404040            328          DC    CL200' '                                          00002040
000568 4040404040404040            329          DC    CL70' '                                           00002050
0005AE 0000
0005B0 0000000000000000            330 SAVE     DC    18F'0'                                            00002060
                                   331 OUT      DCB   DDNAME=OUTPUT,DSORG=PS,MACRF=(R,W)                00002070
000650 D200 8000 A000 00000 00000  382 MOVEL    MVC   0(0,8),0(10)                                      00002080
000656 0000                        383 DSN      DC    H'0'                                              00002090
000658 4040404040404040            384 DSN1     DC    CL44' '                                           00002100
000684 00000688                    385 AEVENT   DC    A(EVENT)                                          00002110
000688 00000000                    386 EVENT    DC    F'0'                                              00002120
00068C 0008                        387 DAP08    DC    X'0008'                                           00002130
00068E 000000000000                388          DC    6X'00'                                            00002140
000694 00000656                    389 DA08DSN  DC    A(DSN)                                            00002150
000698 4040404040404040            390 DA08DDNM DC    24C' '                                            00002160
0006B0 0000000000000000            391          DC    4F'0'                                             00002170
0006C0 4040404040404040            392          DC    16C' '                                            00002180
0006D0 02080810                    393          DC    X'02080810'                                       00002190
0006D4 000000                      394          DC    X'000000'                                         00002200
0006D7 00                          395 DORG     DC    X'00'                                             00002210
0006D8 0018                        396 DAP18    DC    X'0018'                                           00002220
0006DA 000000000000                397          DC    6X'00'                                            00002230
0006E0 00000656                    398          DC    A(DSN)                                            00002240
0006E4 4040404040404040            399          DC    18C' '                                            00002250
0006F6 0810                        400          DC    X'0810'                                           00002260
0006F8 4040404040404040            401          DC    8C' '                                             00002270
000700 0008                        402 ORIG08   DC    X'0008'                                           00002280
000702 000000000000                403          DC    6X'00'                                            00002290
000708 00000656                    404          DC    A(DSN)                                            00002300
00070C 4040404040404040            405          DC    24C' '                                            00002310
000724 0000000000000000            406          DC    4F'0'                                             00002320
000734 4040404040404040            407          DC    16C' '                                            00002330
000744 02080830                    408          DC    X'02080830'                                       00002340
000748 00000000                    409          DC    4X'00'                                            00002350
00074C 0018                        410 ORIG18   DC    X'0018'                                           00002360
00074E 2000                        411          DC    X'2000'                                           00002370
000750 00000000                    412          DC    4X'00'                                            00002380
000754 00000656                    413          DC    A(DSN)                                            00002390
```

```
 LOC   OBJECT CODE     ADDR1 ADDR2  STMT   SOURCE STATEMENT                    F01MAY72   8/10/73

000758 4040404040404040              414          DC     18C' '                          00002400
00076A 0830                          415          DC     X'0830'                         00002410
00076C 4040404040404040              416          DC     8C' '                           00002420
                                     417          IKJDAPL                                00002430
                                     431          IKJCPPL                                00002440
                                     442          IKJPPL                                 00002450
                                     457          END                                    00002460
```

POS.ID	REL.ID	FLAGS	ADDRESS
01	01	0C	000068
01	01	0C	0001BC
01	01	0C	000200
01	01	08	000241
01	01	08	00025D
01	01	0C	00027C
01	01	0C	000318
01	01	0C	000330
01	01	0C	000464
01	01	0C	00046C
01	01	0C	000684
01	01	0C	000694
01	01	0C	0006E0
01	01	0C	000708
01	01	0C	000754
01	03	1C	0003A8

SYMBOL	LEN	VALUE	DEFN	REFERENCES					
ADSN2	00004	00045C	00316	0087	0114				
AEVENT	00004	000684	00385	0059	0101				
CATLG	00001	00012C	00128	0125					
CPPL	00001	000000	00436	0015					
CPPLCBUF	00004	000000	00437	0060					
CPPLECT	00004	00000C	00440	0058	0099	0276			
CPPLPSCB	00004	000008	00439	0078	0100				
CPPLUPT	00004	000004	00438	0057	0098	0275			
DAIR	00001	0001A2	00173	0129					
DAIR1	00001	000262	00235	0265					
DAPL	00001	000000	00423	0096					
DAPLDAPB	00004	000010	00429	0175	0196	0238			
DAPLECB	00004	000008	00427	0101					
DAPLECT	00004	000004	00426	0099					
DAPLPSCB	00004	00000C	00428	0100					
DAPLUPT	00004	000000	00425	0098					
DAP08	00002	00068C	00387	0195	0199				
DAP18	00002	0006D8	00396	0174	0177	0237	0240		
DA08DDNM	00001	000698	00390	0216					
DA08DSN	00004	000694	00389						
DIRECT	00004	00029E	00256	0215					
DORG	00001	0006D7	00395	0212	0214	0217			
DSN	00002	000656	00383	0107	0389	0398	0404	0413	
DSNAM	00004	000008	00036	0030					
DSNAME	00044	000470	00326	0082	0323				
DSNER	00004	0002BC	00263	0111	0113				
DSN1	00044	000658	00384	0106	0269				
EVENT	00004	000688	00386	0176	0197	0236	0277	0282	0385
FF	00004	000348	00302	0076	0131				
FREED	00001	0001E6	00193	0187	0190				
GOON	00001	0000DA	00103	0134					
IKJ$0002	00001	000794	00047	0018					
IKJ$0012	00002	000170	00151	0142					
IKJ@0002	00001	000028	00045	0019					
IKJ@0003	00001	00001B	00041	0020					
IKJ@0004	00001	000793	00033	0032					
IKJ@0012	00002	000158	00143	0150					
IKJPARMD	00001	000000	00022	0030	0035	0043	0045	0088	
IOPL	00004	000338	00301	0279					
ISAM	00001	00029E	00255	0213					
LISTLOC	00004	000460	00318	0117					
LOCAREA	00008	0004A0	00327	0325					
MESS1	00025	0003AD	00309	0263					
MESS2	00025	0003C6	00310	0209					
MESS3	00025	0003DF	00311	0191	0250				
MESS4	00025	0003F8	00312	0226					
MESS5	00025	000411	00313	0260					
MESS6	00025	00042A	00314	0256					
MESS7	00025	000443	00315	0126					
MOVEL	00006	000650	00382	0083	0109	0115	0123		
NEXT	00004	000130	00130	0268					
NOFR1	00001	000184	00159	0153					
NOFR2	00001	000198	00167	0161					
NULL	00004	00034C	00303	0063	0176	0197	0236	0274	0277
OK1	00001	000220	00211	0208					
OK2	00001	00029C	00252	0249					
OK3	00001	000256	00228	0225					
ORIG08	00002	000700	00402	0199					
ORIG18	00002	00074C	00410	0177	0240				
OUT	00004	0005F8	00335	0216	0217	0222	0224	0233	

SYMBOL	LEN	VALUE	DEFN	REFERENCES					
PARM	00001	000778	00017	0018	0021	0026	0040	0041	0046
PARSER	00004	0002A6	00258	0077					
PEND0004	00001	000793	00034	0029					
POANS	00004	0003A4	00306	0063	0064	0137			
POINTER	00001	0003AC	00308	0053	0094	0152	0160		
POST0004	00001	00077E	00027	0029					
PPL	00001	000000	00443	0055					
PPLANS	00004	000010	00453	0065	0074				
PPLCBUF	00004	000014	00454	0060					
PPLECB	00004	000008	00451	0059					
PPLECT	00004	000004	00450	0058					
PPLPCL	00004	00000C	00452	0062					
PPLUPT	00004	000000	00449	0057					
PPLUWA	00004	000018	00455						
PUTL	00001	00032C	00296	0284					
PUTL1	00004	0002C4	00265	0227	0257				
PUTL2	00001	0002CC	00267	0127	0192	0210	0251	0264	
PUTL20	00006	0002D0	00269	0266					
PUTL3	00001	0002E4	00273	0261					
RELEASE	00001	000000	00001	0009	0024	0038	0048		
RETURN	00001	000146	00136	0132	0262				
SAVE	00004	0005B0	00330	0010	0168				
TEXT	00004	000350	00304	0259	0272	0274	0299		
TEXT1	00080	000354	00305	0260	0269	0270			
VPARM	00004	0003A8	00307	0061					

NO STATEMENTS FLAGGED IN THIS ASSEMBLY
STATISTICS SOURCE RECORDS (SYSIN) = 246 SOURCE RECORDS (SYSLIB) = 4655
OPTIONS IN EFFECT LIST, NODECK, LOAD, NORENT, XREF, NOTEST, ALGN, OS, NOTERM, LINECNT = 60
374 PRINTED LINES

SYMBOL	TYPE	ID	ADDR	LENGTH	LD ID
COMPRESS	SD	01	000000	000844	
PARM	SD	02	000848	00003B	
PARM	ER	03			

```
  LOC  OBJECT CODE    ADDR1 ADDR2  STMT   SOURCE STATEMENT                                  F01MAY72   8/10/73

000000                             1 COMPRESS CSECT                                                    00000010
                                   2          PRINT NOGEN                                              00000020
                                   3          SAVE  (14,12),,COMPRESS                                  00000030
000012 18CF                        8          LR    12,15                                              00000040
000000                             9          USING COMPRESS,12                                        00000050
000014 41E0 C660           00660  10          LA    14,SAVE                                            00000060
000018 50ED 0008           00008  11          ST    14,8(13)                                           00000070
00001C 50DE 0004           00004  12          ST    13,4(14)                                           00000080
000020 18DE                       13          LR    13,14                                              00000090
000022 1821                       14          LR    2,1                                                00000100
000000                            15          USING CPPL,2                                             00000110
                                  16 PARM     IKJPARM                                                  00000120
                                  25 DSNAM    IKJPOSIT DSNAME,PROMPT='DATA SET NAME'                   00000130
                                  38 KEW1     IKJKEYWD DEFAULT='LIST'                                  00000140
                                  51          IKJNAME 'LIST'                                           00000150
                                  60          IKJNAME 'NOLIST'                                         00000160
                                  69          IKJENDP                                                  00000170
                                  78          GETMAIN R,LV=32     GET CORE FOR PPL                     00000180
00002E 9601 C588       00588      82          OI    POINTER,X'01'                                      00000190
000032 1841                       83          LR    4,1                                                00000200
000000                            84          USING PPL,4                                              00000210
                                  85 ** PREPARE CALL TO IKJPARS                                        00000220
000034 D203 4000 2004 00000 00004 86          MVC   PPLUPT(4),CPPLUPT                                  00000230
00003A D203 4004 200C 00004 0000C 87          MVC   PPLECT(4),CPPLECT                                  00000240
000040 D203 4008 C784 00008 00784 88          MVC   PPLECB(4),AEVENT                                   00000250
000046 D203 4014 2000 00014 00000 89          MVC   PPLCBUF(4),CPPLCBUF                                00000260
00004C 58B0 C584           00584  90          L     11,VPARM                                           00000270
000050 50B0 400C           0000C  91          ST    11,PPLPCL                                          00000280
000054 D203 C580 C524 00580 00524 92          MVC   POANS(4),NULL                                      00000290
00005A 41B0 C580           00580  93          LA    11,POANS                                           00000300
00005E 50B0 4010           00010  94          ST    11,PPLANS                                          00000310
000062 1814                       95          LR    1,4                                                00000320
                                  96          LINK  EP=IKJPARS                                         00000330
00007A 5850 4010           00010 103          L     5,PPLANS                                           00000340
00007E 5855 0000           00000 104          L     5,0(5)          GET POINTER TO PDL                 00000350
000082 5950 C520           00520 105          C     5,FF             PARS SUCCESSFULL   ?              00000360
000086 4780 C2E6           002E6 106          BC    8,PARSER                                           00000370
000000                           107          USING IKJPARMD,5                                         00000380
00008A 4165 0008           00008 108          LA    6,8(5)          GET POINTER TO PDE                 00000390
                                 109 **  PREPARE CALL TO IKJDAIR                                      00000400
                                 110          GETMAIN R,LV=24     GET CORE FOR DAPL                    00000410
000098 9602 C588       00588     114          OI    POINTER,X'02'                                      00000420
00009C 1831                      115          LR    3,1                                                00000430
000000                           116          USING DAPL,3                                             00000440
00009E D203 3000 2004 00000 00004 117          MVC   DAPLUPT(4),CPPLUPT                                 00000450
0000A4 D203 3004 200C 00004 0000C 118          MVC   DAPLECT(4),CPPLECT                                 00000460
0000AA D203 300C 2008 0000C 00008 119          MVC   DAPLPSCB(4),CPPLPSCB                               00000470
0000B0 D203 3008 C784 00008 00784 120          MVC   DAPLECB(4),AEVENT                                  00000480
0000B6                           121 GOON       EQU   *                                                00000490
0000B6 58A6 0000           00000 122          L     10,0(6)         GET POINTER TO DSNAME              00000500
0000BA 4896 0004           00004 123          LH    9,4(6)          GET DSNAME LENGTH                  00000510
0000BE 4180 C6B0           006B0 124          LA    8,DSN1                                             00000520
0000C2 4090 C6AE           006AE 125          STH    9,DSN          STORE LENGTH IN DSN BUFFER FOR DAIR 00000530
0000C6 0690                      126          BCTR  9,0             DECREASE BY 1 FOR EX               00000540
0000C8 4490 C6A8           006A8 127          EX    9,MOVEL         MOVE DSN INTO DSN BUFFER FOR DAIR  00000550
0000CC 9140 6006       00006     128          TM    6(6),X'40'      DSN IN QUOTE ?                     00000560
0000D0 4710 C304           00304 129          BO    DSNER           YES ERROR                          00000570
0000D4 9180 600E       0000E     130          TM    14(6),X'80'                                        00000580
0000D8 4710 C304           00304 131          BO    DSNER           MBER NAME PRESENT  YES ERROR       00000590
0000DC 4890 5020           00020 132          LH    9,KEW1     GET KEYWORD NR.                         00000600
```

```
  LOC  OBJECT CODE    ADDR1 ADDR2  STMT   SOURCE STATEMENT                                              F01MAY72   8/10/73

0000E0 0690                         133          BCTR  9,0                                                   00000610
0000E2 1299                         134          LTR   9,9                                                   00000620
0000E4 4780 C0EC              000EC 135          BZ    ALLOC                                                 00000630
0000E8 9601 C65C        0065C       136          OI    OPLIST,X'01'                                          00000640
                                    137 *************************************************************        00000650
                                    138 ******** ALLOC USER DATASET BY DSNAME AND DDNAME                     00000660
                                    139 *        INPUT/OUTPUT DATA SET FOR IEBCOPY                           00000670
0000EC 41B0 C6AE              006AE 140 ALLOC    LA    11,DSN                                                00000680
0000F0 50B0 C718              00718 141          ST    11,ADSN08                                             00000690
0000F4 9201 C754        00754       142          MVI   STAT08,OLD                                            00000700
0000F8 D201 C755 C70A 00755 0070A   143          MVC   DISP108(2),KEEP                                       00000710
0000FE 9220 C757        00757       144          MVI   CTL08,PREFIX     PREFIX USERID                        00000720
000102 D207 C71C C7A4 0071C 007A4   145          MVC   DD08(8),INOUT MOVE REQUESTED DDNAME                   00000730
000108 45A0 C35C              0035C 146          BAL   10,DAIR08                                             00000740
00010C 12FF                         147          LTR   15,15   SUCCESSFULL ?                                 00000750
00010E 4780 C13E              0013E 148          BZ    OK                                                    00000760
000112 41F0 0014              00014 149          LA    14,20                                                 00000770
000116 19EF                         150          CR    14,15          DDNAME UNAVAILABLE                     00000780
000118 4780 C12C              0012C 151          BE    USED           YES  PRINT MESSAGE                     00000790
00011C 4190 C5A2              005A2 152          LA    9,MESS2        NO                                     00000800
000120 45A0 C4E8              004E8 153          BAL   10,CODE        CONVERT RETURN CODE - MOVE IN MESSAGE  00000810
000124 45A0 C396              00396 154          BAL   10,PUTL2                                              00000820
000128 47F0 C274              00274 155          B     RETURN1                                               00000830
00012C                              156 USED     EQU   *                                                     00000840
00012C D207 C530 C71C 00530 0071C   157          MVC   TEXT1(8),DD08                                         00000850
000132 4190 C606              00606 158          LA    9,MESS6                                               00000860
000136 45A0 C384              00384 159          BAL   10,PUTL1                                              00000870
00013A 47F0 C28A              0028A 160          B     RETURN                                                00000880
00013E                              161 OK       EQU   *                                                     00000890
00013E 9102 C75B        0075B       162          TM    DORG08,X'02'   DSORG = PO ?                           00000900
000142 4710 C152              00152 163          BO    OKK            YES OK                                 00000910
000146 4190 C5D4              005D4 164          LA    9,MESS4        NO  PRINT MESSAGE                      00000920
00014A 45A0 C396              00396 165          BAL   10,PUTL2                                              00000930
00014E 47F0 C274              00274 166          B     RETURN1                                               00000940
000152 45A0 C3F4              003F4 167 OKK      BAL   10,RESET08     CLEAR DAIR PARAM. BLOCK                00000950
                                    168 ************* ALLOC TS0749.COPY.DATA BY DSNAME *****************     00000960
                                    169 *********** SYSIN DATA SET FOR IEBCOPY         *****************     00000970
000156 41B0 C6DC              006DC 170          LA    11,TSODSN                                             00000980
00015A 50B0 C718              00718 171          ST    11,ADSN08                                             00000990
00015E 9208 C754        00754       172          MVI   STAT08,SHR                                            00001000
000162 D201 C755 C70A 00755 0070A   173          MVC   DISP108(2),KEEP                                       00001010
000168 45A0 C35C              0035C 174          BAL   10,DAIR08                                             00001020
00016C D207 C79C C71C 0079C 0071C   175          MVC   SYSIN(8),DD08 SAVE DDNAME RETURN BY DAIR              00001030
000172 12FF                         176          LTR   15,15          ALLOC. SUCCESSFULL ?                   00001040
000174 4780 C18E              0018E 177          BZ    OK1            YES  BRANCH                            00001050
000178 D22B C530 C6DE 00530 006DE   178          MVC   TEXT1(44),TSODSN+2  NO  MOVE DSNAME INTO MESS         00001060
00017E 4190 C5A2              005A2 179          LA    9,MESS2                                               00001070
000182 45A0 C4E8              004E8 180          BAL   10,CODE        CONVERT CODE AND MOVE IN MESS          00001080
000186 45A0 C39C              0039C 181          BAL   10,PUTL21      PRINT MESS                             00001090
00018A 47F0 C274              00274 182          B     RETURN1        RETURN                                 00001100
00018E 45A0 C3F4              003F4 183 OK1      BAL   10,RESET08     CLEAR DAIR PARAM. BLOCK                00001110
                                    184 **************  ALLOC SYSUT3,SYSUT4  ********                        00001120
000192 4180 0002              00002 185          LA    8,2            LOAD COUNT                             00001130
000196 4190 C78C              0078C 186          LA    9,SYSUT3       GET ADDR OF AREA TO SAVE DDNAME RETURN 00001140
                                    187 *                             BY DAIR                                00001150
00019A 41B0 C7D0              007D0 188          LA    11,UT3         GET ADDR OF DSN BUFFER FOR DAIR        00001160
00019E                              189 UALLOC   EQU   *                                                     00001170
00019E 41A0 000A              0000A 190          LA    10,10                                                 00001180
0001A2 50A0 C738              00738 191          ST    10,SP1     PRIMARY QUANTITY                           00001190
0001A6 50A0 C73C              0073C 192          ST    10,SP2     SECONDARY QUANTITY                         00001200
```

```
  LOC  OBJECT CODE     ADDR1 ADDR2  STMT   SOURCE STATEMENT                                  F01MAY72   8/10/73

0001AA 50B0 C718             00718   193           ST    11,ADSN08     SAVE ADDR OF DSN BUFFER IN DAPL          00001210
0001AE D207 C724 C7B4 00724 007B4    194           MVC   UNIT08(8),SYSDA MOVE UNIT NAME INTO DAPB               00001220
0001B4 9204 C754      00754          195           MVI   STAT08,NEW                                              00001230
0001B8 D201 C755 C70C 00755 0070C    196           MVC   DISP108(2),DEL                                        00001240
0001BE 9280 C757      00757          197           MVI   CTL08,TRK     SPACE IN TRKS                           00001250
0001C2 45A0 C35C             0035C   198           BAL   10,DAIR08                                             00001260
0001C6 D207 9000 C71C 00000 0071C    199           MVC   0(8,9),DD08   SAVE DDNAME RETURN BY DAIR              00001270
0001CC 12FF                          200           LTR   15,15         DAIR SUCCESSFULL ?                      00001280
0001CE 4780 C1E8             001E8   201           BZ    OK2           YES - BRANCH                            00001290
0001D2                               202 ERROR     EQU   *                                                     00001300
0001D2 D207 C530 B002 00530 00002    203           MVC   TEXT1(8),2(11) NO - MOVE DSN INTO MESSAGE             00001310
0001D8 4190 C5A2             005A2   204           LA    9,MESS2                                               00001320
0001DC 45A0 C4E8             004E8   205           BAL   10,CODE       CONVERT CODE - MOVE IN MESSAGE          00001330
0001E0 45A0 C39C             0039C   206           BAL   10,PUTL21     PRINT MESSAGE                           00001340
0001E4 47F0 C274             00274   207           B     RETURN1                                               00001350
0001E8 45A0 C3F4             003F4   208 OK2       BAL   10,RESET08    CLEAR DAPB                              00001360
0001EC 4199 0008             00008   209           LA    9,8(9)        GET ADDR OF NEXT DSN                    00001370
0001F0 41BB 000A             0000A   210           LA    11,10(11)     GET ADDR OF NEXT AREA FOR DDNAME        00001380
0001F4 4680 C19E             0019E   211           BCT   8,UALLOC      BRANCH TO ALLOC. NEXT UTILITY DATA SET  00001390
                                     212 *******   ALLOCATE TERMINAL OR DUMMY DATA SET FOR SYSPRINT  ***       00001400
0001F8 9101 C65C      0065C          213           TM    OPLIST,X'01'    NOLIST ?                              00001410
0001FC 4710 C246             00246   214           BO    DUMMY    YES BR.                                      00001420
                                     215 ************************************************************        00001430
000200                               216 TERM      EQU   *         ALLOC TERMINAL AS "SYSPRINT" FOR IEBCOPY    00001440
000200 921C C711      00711          217           MVI   DAP08+1,X'1C'  SET CODE FOR TERMINAL ALLOCATION       00001450
000204 9240 C718      00718          218           MVI   ADSN08,X'40'    SET  DDNAME BLANCK                    00001460
000208 D206 C719 C718 00719 00718    219           MVC   ADSN08+1(7),ADSN08                                    00001470
00020E D205 C712 C524 00712 00524    220           MVC   FLG08(6),NULL SET FLAGS TO ZERO                       00001480
000214 45A0 C35C             0035C   221           BAL   10,DAIR08                                             00001490
000218 D207 C7AC C718 007AC 00718    222           MVC   SYSPRINT(8),ADSN08  SAVE DDNAME RETURNED BY DAIR      00001500
00021E 12FF                          223           LTR   15,15         YES  BRANCH                             00001510
000220 4780 C242             00242   224           BZ    ATERM         NO                                      00001520
000224 4190 C61F             0061F   225           LA    9,MESS8       CONVERT CODE - MOVE IN MESSAGE          00001530
000228 45A0 C4E8             004E8   226           BAL   10,CODE                                               00001540
00022C D218 C530 C61F 00530 0061F    227           MVC   TEXT1(25),MESS8                                       00001550
000232 4170 001D             0001D   228           LA    7,29                                                  00001560
000236 4090 C52C             0052C   229           STH   9,TEXT                                                00001570
00023A 45A0 C3AA             003AA   230           BAL   10,PUTL       PRINT MESSAGE                           00001580
00023E 47F0 C274             00274   231           B     RETURN1                                               00001590
000242                               232 ATERM     EQU   *                                                     00001600
000242 47F0 C270             00270   233           B     LINK                                                  00001610
                                     234 ************************************************************        00001620
                                     235 ********  ALLOCATE DUMMY DATA SET AS 'SYSPRINT' FOR IEBCOPY  **       00001630
000246                               236 DUMMY     EQU   *                                                     00001640
000246 41B0 C652             00652   237           LA    11,NULLFILE                                           00001650
00024A 50B0 C718             00718   238           ST    11,ADSN08                                             00001660
00024E 9201 C754      00754          239           MVI   STAT08,OLD                                            00001670
000252 D201 C755 C70A 00755 0070A    240           MVC   DISP108(2),KEEP                                       00001680
000258 45A0 C35C             0035C   241           BAL   10,DAIR08                                             00001690
00025C D207 C7AC C71C 007AC 0071C    242           MVC   SYSPRINT(8),DD08                                      00001700
000262 12FF                          243           LTR   15,15                                                 00001710
000264 4780 C26C             0026C   244           BZ    OK3                                                   00001720
000268 47F0 C1D2             001D2   245           B     ERROR                                                 00001730
00026C 45A0 C3F4             003F4   246 OK3       BAL   10,RESET08                                            00001740
                                     247 ********************************************                        00001750
000270                               248 LINK      EQU   *                                                     00001760
000270 45A0 C43C             0043C   249           BAL   10,ULINK      GO TO LINK TO IEBCOPY                   00001770
                                     250 ************************************************************        00001780
000274                               251 RETURN1   EQU   *                                                     00001790
000274 4180 0005             00005   252           LA    8,5     COUNT FOR FREE                                00001800
```

```
 LOC  OBJECT CODE     ADDR1 ADDR2  STMT   SOURCE STATEMENT                                                F01MAY72   8/10/73

000278 4190 C78C            0078C   253          LA     9,SYSUT3       ADDR OF FIRST DDNAME TO BE FREE          00001810
00027C 4560 C310            00310   254          BAL    6,LFREE                                                 00001820
000280 47F0 C28A            0028A   255          B      RETURN         NORMAL RETURN OF LFREE                   00001830
000284 189B                         256          LR     9,11  RESTORE PTR TO DDANME RETURN FOR LFREE UNSUCCESS- 00001840
                                    257 *                     FULL                                            00001850
000286 47F0 C34E            0034E   258          B      FREE                                                    00001860
                                    259 ********************************************************            00001870
00028A                              260 RETURN   EQU    *                                                      00001880
00028A 4110 C580            00580   261          LA     1,POANS                                                 00001890
                                    262          IKJRLSA (1)                                                   00001900
0002B4 9101 C588      00588         276          TM     POINTER,X'01'                                           00001910
0002B8 4780 C2C8            002C8   277          BZ     NOFR1                                                   00001920
0002BC 1814                         278          LR     1,4                                                     00001930
                                    279          FREEMAIN R,LV=32,A=(1)   FREE CORE FOR PPL                    00001940
0002C8                              283 NOFR1    EQU    *                                                      00001950
0002C8 9102 C588      00588         284          TM     POINTER,X'02'                                           00001960
0002CC 4780 C2DC            002DC   285          BZ     NOFR2                                                   00001970
0002D0 1813                         286          LR     1,3                                                     00001980
                                    287          FREEMAIN R,LV=24,A=(1)   FREE CORE FOR DAPL                   00001990
0002DC                              291 NOFR2    EQU    *                                                      00002000
0002DC 58D0 C664            00664   292          L      13,SAVE+4                                               00002010
                                    293          RETURN (14,12)                                                00002020
                                    296 ********************************************************            00002030
0002E6 4170 001D            0001D   297 PARSER   LA     7,29                                                    00002040
0002EA 4070 C52C            0052C   298          STH    7,TEXT                                                  00002050
0002EE 4190 C5ED            005ED   299          LA     9,MESS5                                                 00002060
0002F2 45A0 C4E8            004E8   300          BAL    10,CODE                                                 00002070
0002F6 D218 C530 C5ED 00530 005ED   301          MVC    TEXT1(25),MESS5                                         00002080
0002FC 45A0 C3AA            003AA   302          BAL    10,PUTL                                                 00002090
000300 47F0 C28A            0028A   303          B      RETURN                                                  00002100
000304 4190 C589            00589   304 DSNER    LA     9,MESS1                                                 00002110
000308 45A0 C396            00396   305          BAL    10,PUTL2                                                00002120
00030C 47F0 C28A            0028A   306          B      RETURN                                                  00002130
                                    307 ********************************************************            00002140
000310                              308 LFREE    EQU    *              FREE ALLOCATED DATA SETS                 00002150
000310 9540 9000      00000         309          CLI    0(9),X'40'     DDNAME ALLOCATED ?                       00002160
000314 4780 C352            00352   310          BE     NOFREE         NO - SKIP                                00002170
000318 D207 C768 9000 00768 00000   311          MVC    DD18(8),0(9)       MOVE DDNAME                          00002180
00031E 41B0 C75C            0075C   312          LA     11,DAP18       GET DAPB ADR                             00002190
000322 50B0 3010            00010   313          ST     11,DAPLDAPB    STORE IN DAPL                            00002200
000326 45A0 C364            00364   314          BAL    10,DAIR      LINK TO DAIR                               00002210
00032A 12FF                         315          LTR    15,15          FREE SUCCESSFULL                         00002220
00032C 4780 C34E            0034E   316          BZ     FREE           YES  BRANCH                              00002230
000330 41E0 001C            0001C   317          LA     14,28     NOT FREE ,NOT ALLOCATED ?                     00002240
000334 19FE                         318          CR     15,14     YES OK                                        00002250
000336 4780 C34E            0034E   319          BE     FREE                                                    00002260
00033A 18B9                         320          LR     11,9     SAVE PTR TO DDNAME                             00002270
00033C D207 C530 9000 00530 00000   321          MVC    TEXT1(8),0(9) MOVE DDNAME INTO MESS.                    00002280
000342 4190 C5BB            005BB   322          LA     9,MESS3                                                 00002290
000346 45A0 C384            00384   323          BAL    10,PUTL1       PRINT MESSAGE                            00002300
00034A 47F6 0004            00004   324          B    4(6)             RETURN FOR ERROR                         00002310
00034E 45A0 C41E            0041E   325 FREE     BAL    10,RESET18                                              00002320
000352                              326 NOFREE   EQU    *                                                      00002330
000352 4199 0008            00008   327          LA     9,8(9)  GET ADR OF NEXT DDNAME                          00002340
000356 4680 C310            00310   328          BCT    8,LFREE                                                 00002350
00035A 07F6                         329          BR     6                                                       00002360
                                    330 ******************************************LER                         00002370
00035C                              331 DAIR08   EQU    *                                                      00002380
00035C 4170 C710            00710   332          LA     7,DAP08                                                 00002390
000360 5070 3010            00010   333          ST     7,DAPLDAPB                                              00002400
```

```
  LOC  OBJECT CODE    ADDR1 ADDR2  STMT   SOURCE STATEMENT                                        F01MAY72   8/10/73

000364                              334 DAIR     EQU   *                                                        00002410
000364 D203 C788 C524 00788 00524   335          MVC   EVENT(4),NULL                                            00002420
00036A 1813                         336          LR    1,3                                                      00002430
                                    337          LINK  EP=IKJDAIR                                               00002440
000382 07FA                         344          BR    10                                                       00002450
                                    345 ************************************************************************ 00002460
000384                              346 PUTL1    EQU   *                                                        00002470
000384 D218 C538 9000 00538 00000   347          MVC   TEXT1+8(25),0(9)                                         00002480
00038A 4170 0025            00025   348          LA    7,37                                                     00002490
00038E 4070 C52C            0052C   349          STH   7,TEXT                                                   00002500
000392 47F0 C3AA            003AA   350          B     PUTL                                                     00002510
000396                              351 PUTL2    EQU   *                                                        00002520
000396 D22B C530 C6B0 00530 006B0   352          MVC   TEXT1(44),DSN1                                           00002530
00039C                              353 PUTL21   EQU   *                                                        00002540
00039C D218 C55C 9000 0055C 00000   354          MVC   TEXT1+44(25),0(9)                                        00002550
0003A2 4170 0049            00049   355          LA    7,73                                                     00002560
0003A6 4070 C52C            0052C   356          STH   7,TEXT                                                   00002570
0003AA                              357 PUTL     EQU   *                                                        00002580
0003AA D201 C52E C524 0052E 00524   358          MVC   TEXT+2(2),NULL                                           00002590
0003B0 5870 2004            00004   359          L     7,CPPLUPT                                                00002600
0003B4 5890 200C            0000C   360          L     9,CPPLECT                                                00002610
0003B8 D203 C788 C524 00788 00524   361          MVC   EVENT(4),NULL                                            00002620
                                    362          PUTLINE PARM=PUTX,UPT=(7),ECT=(9),ECB=EVENT,MF=(E,IOPL)        00002630
0003F2 07FA                         376          BR    10                                                       00002640
                                    377 *******************************************************                 00002650
0003F4                              378 RESET08  EQU   *                                                        00002660
0003F4 D205 C712 C524 00712 00524   379          MVC   FLG08(6),NULL                                            00002670
0003FA 9240 C71C      0071C         380          MVI   DD08,X'40'  BLK DDNAME UNIT SERIAL NR.                   00002680
0003FE D216 C71D C71C 0071D 0071C   381          MVC   DD08+1(23),DD08                                          00002690
000404 D207 C734 C524 00734 00524   382          MVC   BLK08(8),NULL  ZERO BLKSIZE SPACE DIRECTORY              00002700
00040A D207 C73C C524 0073C 00524   383          MVC   BLK08+8(8),NULL                                          00002710
000410 D200 C757 C524 00757 00524   384          MVC   CTL08(1),NULL   ZERO CTL                                 00002720
000416 D203 C758 C524 00758 00524   385          MVC   FFLG08(4),NULL  ZERO RESERVED,DSORG                      00002730
00041C 07FA                         386          BR    10                                                       00002740
00041E                              387 RESET18  EQU   *                                                        00002750
00041E D203 C75E C524 0075E 00524   388          MVC   FLG18(4),NULL  ZERO FLAG DARD                            00002760
000424 D205 C762 C75E 00762 0075E   389          MVC    FLG18+4(6),FLG18  ZERO CTRC DSN POINTER                 00002770
00042A 9240 C770      00770         390          MVI   MB18,X'40'   BLK MBER NAME SYSOUT                        00002780
00042E D208 C771 C770 00771 00770   391          MVC   MB18+1(9),MB18                                           00002790
000434 D201 C77A C524 0077A 00524   392          MVC   STAT18(2),NULL  ZERO DISP,CTRL                           00002800
00043A 07FA                         393          BR    10                                                       00002810
                                    394 *******************************************************                 00002820
00043C                              395 ULINK    EQU   *                                                        00002830
00043C D207 C80C C79C 0080C 0079C   396          MVC   CSYSIN(8),SYSIN                                          00002840
000442 D207 C834 C78C 00834 0078C   397          MVC   CSYSUT3(8),SYSUT3                                        00002850
000448 D207 C83C C794 0083C 00794   398          MVC   CSYSUT4(8),SYSUT4                                        00002860
00044E D207 C814 C7AC 00814 007AC   399          MVC   CPRINT(8),SYSPRINT                                       00002870
                                    400          STAX  DEFER=YES   DON 'T ALLOW INTERRUPT                       00002880
                                    412          LINK  EP=IEBCOPY,PARAM=(OPTION,DDLIST),VL=1                    00002890
000496 9101 C65C      0065C         426          TM    OPLIST,X'01'                                             00002900
00049A 078A                         427          BCR   8,10                                                     00002910
00049C 4190 C638            00638   428          LA    9,MESS9                                                  00002920
0004A0 12FF                         429          LTR   15,15                                                    00002930
0004A2 4780 C4AE            004AE   430          BZ    MOVE                                                     00002940
0004A6 45A0 C4E8            004E8   431          BAL   10,CODE                                                  00002950
0004AA 47F0 C4B2            004B2   432          B     MOVE1                                                    00002960
0004AE                              433 MOVE     EQU   *                                                        00002970
0004AE 92F0 C64D      0064D         434          MVI   MESS9+21,X'F0'                                           00002980
0004B2                              435 MOVE1    EQU   *                                                        00002990
0004B2 D216 C530 9000 00530 00000   436          MVC   TEXT1(23),0(9)                                           00003000
```

```
  LOC  OBJECT CODE    ADDR1 ADDR2  STMT   SOURCE STATEMENT                                        F01MAY72   8/10/73

0004B8 41A0 001B            0001B   437            LA    10,27                                               00003010
0004BC 40A0 C52C            0052C   438            STH   10,TEXT                                             00003020
0004C0 45A0 C3AA            003AA   439            BAL   10,PUTL                                             00003030
0004C4 47F0 C274            00274   440            B     RETURN1                                             00003040
                                    441            STAX  DEFER=NO    ALLOW I NTERRUPT                        00003050
0004E6 07FA                         453            BR    10                                                  00003060
                                    454 ************************************************************         00003070
0004E8                              455 CODE       EQU   *                                                   00003080
0004E8 4EF0 C7C0            007C0   456            CVD   15,PACK                                             00003090
0004EC 9220 C7C9      007C9         457            MVI   UNPK+1,X'20'                                        00003100
0004F0 D205 C7CA C7C9 007CA 007C9   458            MVC   UNPK+2(6),UNPK+1                                    00003110
0004F6 DE07 C7C8 C7C4 007C8 007C4   459            ED    UNPK(8),PACK+4                                      00003120
0004FC D201 9015 C7CE 00015 007CE   460            MVC   21(2,9),UNPK+6                                      00003130
000502 07FA                         461            BR    10                                                  00003140
                                    462 ************************************************************         00003150
                                    463 ************************************************************         00003160
                                    464 PUTX       PUTLINE OUTPUT=(TEXT,,,DATA),MF=L                         00003170
000510 0000000000000000             471 IOPL       DC    4F'0'                                               00003180
000520 FF000000                     472 FF         DC    X'FF000000'                                         00003190
000524 0000000000000000             473 NULL       DC    2F'0'                                               00003200
00052C 00000000                     474 TEXT       DC    F'0'                                                00003210
000530 4040404040404040             475 TEXT1      DC    CL80' '                                             00003220
000580 00000000                     476 POANS      DC    F'0'                                                00003230
000584 00000000                     477 VPARM      DC    V(PARM)                                             00003240
000588 00                           478 POINTER    DC    X'00'                                               00003250
000589 C9D5E5C1D3C9C440             479 MESS1      DC    CL25'INVALID DATA SET NAME'                         00003260
0005A2 C1D3D3D6C3C1E3C5             480 MESS2      DC    CL25'ALLOCATE ERROR'                                00003270
0005BB C6D9C5C540C5D9D9             481 MESS3      DC    CL25'FREE ERROR'                                    00003280
0005D4 C4E2D6D9C740C9E2             482 MESS4      DC    CL25'DSORG IS NOT PARTITIONED'                      00003290
0005ED D7C1D9C1D4C5E3C5             483 MESS5      DC    CL25'PARAMETER ERROR'                               00003300
000606 C1D3D9C5C1C4E840             484 MESS6      DC    CL25'ALREADY IN USE'                                00003310
00061F E3C5D9D4C9D5C1D3             485 MESS8      DC    CL25'TERMINAL ALLOC.ERROR'                          00003320
000638 C9C5C2C3D6D7E840             486 MESS9      DC    CL25'IEBCOPY RETURN CODE'                           00003330
000651 00
000652 0008                         487 NULLFILE DC      H'8'                                                00003340
000654 D5E4D3D3C6C9D3C5             488            DC    CL8'NULLFILE'                                       00003350
00065C 00                           489 OPLIST     DC    X'00'                                               00003360
00065D 000000
000660 0000000000000000             490 SAVE       DC    18F'0'                                              00003370
0006A8 D200 8000 A000 00000 00000   491 MOVEL      MVC   0(0,8),0(10)                                        00003380
0006AE 0000                         492 DSN        DC    H'0'                                                00003390
0006B0 4040404040404040             493 DSN1       DC    CL44' '                                             00003400
0006DC 0010                         494 TSODSN     DC    H'16'                                               00003410
0006DE E3E2D6F7F4F94BC3             495            DC    CL44'TSO749.COPY.DATA'                              00003420
000001                              496 OLD        EQU   X'01'                                               00003430
000004                              497 NEW        EQU   X'04'                                               00003440
000008                              498 SHR        EQU   X'08'                                               00003450
000020                              499 PREFIX     EQU   X'20'                                               00003460
000080                              500 TRK        EQU   X'80'                                               00003470
00070A 0808                         501 KEEP       DC    X'0808'                                             00003480
00070C 0404                         502 DEL        DC    X'0404'                                             00003490
000710                              503            DS    0F                                                  00003500
000710 0008                         504 DAP08      DC    X'0008'                                             00003510
000712 000000000000                 505 FLG08      DC    6X'00'                                              00003520
000718 00000000                     506 ADSN08     DC    F'0'                                                00003530
00071C 4040404040404040             507 DD08       DC    CL8' '                                              00003540
000724 4040404040404040             508 UNIT08     DC    CL8' '                                              00003550
00072C 4040404040404040             509 SET08      DC    CL8' '                                              00003560
000734 00000000                     510 BLK08      DC    F'0'                                                00003570
000738 00000000                     511 SP1        DC    F'0'                                                00003580
```

```
  LOC  OBJECT CODE    ADDR1 ADDR2  STMT   SOURCE STATEMENT
000738 00000000                    512 SP2      DC    F'0'                    00003590
000740 00000000                    513          DC    F'0'                    00003600
000744 4040404040404040            514          DC    CL16' '                 00003610
000754 00                          515 STAT08   DC    X'00'                   00003620
000755 00                          516 DISP108  DC    X'00'                   00003630
000756 00                          517 DISP208  DC    X'00'                   00003640
000757 00                          518 CTL08    DC    X'00'                   00003650
000758 000000                      519 FFLG08   DC    3X'00'                  00003660
00075B 00                          520 DORG08   DC    X'00'                   00003670
00075C                             521          DS    0F                      00003680
00075C 0018                        522 DAP18    DC    X'0018'                 00003690
00075E 000000000000                523 FLG18    DC    6X'00'                  00003700
000764 00000000                    524 ADSN18   DC    F'0'                    00003710
000768 0000000000000000            525 DD18     DC    2F'0'                   00003720
000770 4040404040404040            526 MB18     DC    CL10' '                 00003730
000778 00                          527 STAT18   DC    X'00'                   00003740
000779 00                          528 CTL18    DC    X'00'                   00003750
00077C 4040404040404040            529          DC    8C' '                   00003760
000784 00000788                    530 AEVENT   DC    A(EVENT)                00003770
000788 00000000                    531 EVENT    DC    F'0'                    00003780
00078C 4040404040404040            532 SYSUT3   DC    CL8' '                  00003790
000794 4040404040404040            533 SYSUT4   DC    CL8' '                  00003800
00079C 4040404040404040            534 SYSIN    DC    CL8' '                  00003810
0007A4 C9D5D6E4E3404040            535 INOUT    DC    CL8'INOUT'              00003820
0007AC 4040404040404040            536 SYSPRINT DC    CL8' '                  00003830
0007B4 E2E8E2C4C1404040            537 SYSDA    DC    CL8'SYSDA'              00003840
0007BC 00000000
0007C0 0000000000000000            538 PACK     DC    D'0'                    00003850
0007C8 4040404040404040            539 UNPK     DC    CL8' '                  00003860
0007D0 0008                        540 UT3      DC    H'8'                    00003870
0007D2 50C3E2E8E2E4E3F3            541          DC    C'&&CSYSUT3'            00003880
0007DA 0008                        542 UT4      DC    H'8'                    00003890
0007DC 50C3E2E8E2E4E3F4            543          DC    C'&&CSYSUT4'            00003900
0007E4                             544          DS    0F                      00003910
0007E4 0000                        545          DC    H'0'                    00003920
0007E6 0000                        546 OPTION   DC    H'0'                    00003930
0007E8 0000                        547          DC    H'0'                    00003940
0007EA 0048                        548 DDLIST   DC    H'72'                   00003950
0007EC 0000000000000000            549          DC    8F'0'                   00003960
000800 4040404040404040            550 CSYSIN   DC    8C' '                   00003970
000814 4040404040404040            551 CPRINT   DC    CL8' '                  00003980
000810 0000000000000000            552          DC    2F'0'                   00003990
000824 E2E8E2E4E3F14040            553          DC    CL8'SYSUT1'             00004000
00082C E2E8E2E4E3F24040            554          DC    CL8'SYSUT2'             00004010
000834 4040404040404040            555 CSYSUT3  DC    8C' '                   00004020
00083C 4040404040404040            556 CSYSUT4  DC    8C' '                   00004030
                                   557          IKJDAPL                       00004040
                                   571          IKJCPPL                       00004050
                                   582          IKJPPL                        00004060
                                   597          END                           00004070
```

POS.ID	REL.ID	FLAGS	ADDRESS
01	01	0C	000068
01	01	0C	000370
01	01	0C	0003E0
01	01	0C	000478
01	01	08	00047D
01	01	0C	000484
01	01	0C	000508
01	01	0C	000784
01	03	1C	000584

SYMBOL	LEN	VALUE	DEFN	REFERENCES							
ADSN08	00004	000718	00506	0141	0171	0193	0218	0219	0219	0222	0238
ADSN18	00004	000764	00524								
AEVENT	00004	000784	00530	0088	0120						
ALLOC	00004	0000EC	00140	0135							
ATERM	00001	000242	00232	0224							
BLK08	00004	000734	00510	0382	0383						
CODE	00001	0004E8	00455	0153	0180	0205	0226	0300	0431		
COMPRESS	00001	000000	00001	0009	0024	0037	0050	0059	0068	0077	
CPPL	00001	000000	00576	0015							
CPPLCBUF	00004	000000	00577	0089							
CPPLECT	00004	00000C	00580	0087	0118	0360					
CPPLPSCB	00004	000008	00579	0119							
CPPLUPT	00004	000004	00578	0086	0117	0359					
CPRINT	00008	000814	00551	0399							
CSYSIN	00001	00080C	00550	0396							
CSYSUT3	00001	000834	00555	0397							
CSYSUT4	00001	00083C	00556	0398							
CTL08	00001	000757	00518	0144	0197	0384					
CTL18	00001	00077B	00528								
DAIR	00001	000364	00334	0314							
DAIR08	00001	00035C	00331	0146	0174	0198	0221	0241			
DAPL	00001	000000	00563	0116							
DAPLDAPB	00004	000010	00569	0313	0333						
DAPLECB	00004	000008	00567	0120							
DAPLECT	00004	000004	00566	0118							
DAPLPSCB	00004	00000C	00568	0119							
DAPLUPT	00004	000000	00565	0117							
DAP08	00002	000710	00504	0217	0332						
DAP18	00002	00075C	00522	0312							
DDLIST	00002	0007EA	00548	0418							
DD08	00008	00071C	00507	0145	0157	0175	0199	0242	0380	0381	0381
DD18	00004	000768	00525	0311							
DEL	00002	00070C	00502	0196							
DISP108	00001	000755	00516	0143	0173	0196	0240				
DISP208	00001	000756	00517								
DORG08	00001	00075B	00520	0162							
DSN	00002	0006AE	00492	0125	0140						
DSNAM	00004	000008	00036	0030							
DSNER	00004	000304	00304	0129	0131						
DSN1	00044	0006B0	00493	0124	0352						
DUMMY	00001	000246	00236	0214							
ERROR	00001	0001D2	00202	0245							
EVENT	00004	000788	00531	0335	0361	0366	0530				
FF	00004	000520	00472	0105							
FFLG08	00001	000758	00519	0385							
FLG08	00001	000712	00505	0220	0379						
FLG18	00001	00075E	00523	0388	0389	0389					
FREE	00004	00034E	00325	0258	0316	0319					
GOON	00001	0000B6	00121								
IHB0023	00004	00045C	00403	0401							
IHB0025	00001	000478	00415								
IHB0025A	00001	000480	00419	0414							
IHB0027	00004	0004D0	00444	0442							
IKJ$0002	00001	000883	00076	0018							
IKJ$0013	00002	0002B4	00275	0266							
IKJ@0002	00001	000028	00074	0019							
IKJ@0003	00001	00001B	00040	0020							
IKJ@0004	00001	000863	00033	0032							
IKJ@0005	00001	00086E	00046	0045							
IKJ@0006	00001	000877	00057	0056							

SYMBOL	LEN	VALUE	DEFN	REFERENCES										
IKJ@0007	00001	000882	00066	0065										
IKJ@0013	00002	00029C	00267	0274										
IKJPARMD	00001	000000	00022	0030	0035	0044	0048	0072	0074	0107				
INOUT	00008	0007A4	00535	0145										
IOPL	00004	000510	00471	0363										
KEEP	00002	00070A	00501	0143	0173	0240								
KEND0005	00001	00086E	00047	0043										
KEW1	00002	000020	00049	0044	0132									
KEYW0005	00001	000863	00041	0043										
LFREE	00001	000310	00308	0254	0328									
LINK	00001	000270	00248	0233										
MB18	00010	000770	00526	0390	0391	0391								
MESS1	00025	000589	00479	0304										
MESS2	00025	0005A2	00480	0152	0179	0204								
MESS3	00025	0005BB	00481	0322										
MESS4	00025	0005D4	00482	0164										
MESS5	00025	0005ED	00483	0299	0301									
MESS6	00025	000606	00484	0158										
MESS8	00025	00061F	00485	0225	0227									
MESS9	00025	000638	00486	0428	0434									
MOVE	00001	0004AE	00433	0430										
MOVE1	00006	0006A8	00491	0127										
MOVE1	00001	0004B2	00435	0432										
NAME0006	00001	00086E	00053	0055										
NAME0007	00001	000877	00062	0064										
NEND0006	00001	000877	00058	0055										
NEND0007	00001	000882	00067	0064										
NEW	00001	000004	00497	0195										
NOFREE	00001	000352	00326	0310										
NOFR1	00001	0002C8	00283	0277										
NOFR2	00001	0002DC	00291	0285										
NULL	00004	000524	00473	0092	0220	0335	0358	0361	0379	0382	0383	0384	0385	0388	0392
NULLFILE	00002	000652	00487	0237										
OK	00001	00013E	00161	0148										
OKK	00004	000152	00167	0163										
OK1	00004	00018E	00183	0177										
OK2	00004	0001E8	00208	0201										
OK3	00004	00026C	00246	0244										
OLD	00001	000001	00496	0142	0239									
OPLIST	00001	00065C	00489	0136	0213	0426								
OPTION	00002	0007E6	00546	0416										
PACK	00008	0007C0	00538	0456	0459									
PARM	00001	000848	00017	0018	0021	0026	0039	0040	0052	0061	0070	0075		
PARSER	00004	0002E6	00297	0106										
PEND0004	00001	000863	00034	0029										
POANS	00004	000580	00476	0092	0093	0261								
POINTER	00001	000588	00478	0082	0114	0276	0284							
POST0004	00001	00084E	00027	0029										
PPL	00001	000000	00583	0084										
PPLANS	00004	000010	00593	0094	0103									
PPLCBUF	00004	000014	00594	0089										
PPLECB	00004	000008	00591	0088										
PPLECT	00004	000004	00590	0087										
PPLPCL	00004	00000C	00592	0091										
PPLUPT	00004	000000	00589	0086										
PPLUWA	00004	000018	00595											
PREFIX	00001	000020	00499	0144										
PUTL	00001	0003AA	00357	0230	0302	0350	0439							
PUTL1	00001	000384	00346	0159	0323									
PUTL2	00001	000396	00351	0154	0165	0305								

SYMBOL	LEN	VALUE	DEFN	REFERENCES									
PUTL21	00001	00039C	00353	0181	0206								
PUTX	00001	000504	00466	0368									
RESET08	00001	0003F4	00378	0167	0183	0208	0246						
RESET18	00001	00041E	00387	0325									
RETURN	00001	00028A	00260	0160	0255	0303	0306						
RETURN1	00001	000274	00251	0155	0166	0182	0207	0231	0440				
SAVE	00004	000660	00490	0010	0292								
SET08	00008	00072C	00509										
SHR	00001	000008	00498	0172									
SP1	00004	000738	00511	0191									
SP2	00004	00073C	00512	0192									
STAT08	00001	000754	00515	0142	0172	0195	0239						
STAT18	00001	00077A	00527	0392									
SYSDA	00008	0007B4	00537	0194									
SYSIN	00008	00079C	00534	0175	0396								
SYSPRINT	00008	0007AC	00536	0222	0242	0399							
SYSUT3	00008	00078C	00532	0186	0253	0397							
SYSUT4	00008	000794	00533	0398									
TERM	00001	000200	00216										
TEXT	00004	00052C	00474	0229	0298	0349	0356	0358	0438	0469			
TEXT1	00080	000530	00475	0157	0178	0203	0227	0301	0321	0347	0352	0354	0436
TRK	00001	000080	00500	0197									
TSODSN	00002	0006DC	00494	0170	0178								
UALLOC	00001	00019E	00189	0211									
ULINK	00001	00043C	00395	0249									
UNIT08	00008	000724	00508	0194									
UNPK	00008	0007C8	00539	0457	0458	0458	0459	0460					
USED	00001	00012C	00156	0151									
UT3	00002	0007D0	00540	0188									
UT4	00002	0007DA	00542										
VPARM	00004	000584	00477	0090									

NO STATEMENTS FLAGGED IN THIS ASSEMBLY
STATISTICS SOURCE RECORDS (SYSIN) = 407 SOURCE RECORDS (SYSLIB) = 2576
OPTIONS IN EFFECT LIST, NODECK, LOAD, NORENT, XREF, NOTEST, ALGN, OS, NOTERM, LINECNT = 60
602 PRINTED LINES