



**NOS/BE TO NOS
CONVERSION AIDS
REFERENCE MANUAL**

**CDC® COMPUTER SYSTEMS:
CYBER 170 SERIES
CYBER 70
MODELS 71, 72, 73, 74
6000 SERIES**

LIST OF EFFECTIVE PAGES

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PREFACE

This manual describes the utilities available to the site which is converting from the Network Operating System/Batch Environment (NOS/BE) Version 1 to the Network Operating System (NOS) Version 1 for the CDC® CYBER 170 Series; CDC CYBER 70 Series, Models 71, 72, 73, and 74; and CDC 6000 Series computer systems.

ORGANIZATION

This manual contains information about the HELPBE, LOADBE, and BELOAD utilities. HELPBE gives NOS equivalents for NOS/BE commands. LOADBE loads a single NOS/BE file on a NOS system. BELOAD loads groups of NOS/BE files on a NOS system.

This manual is divided into two parts. Part 1 contains information on HELPBE and LOADBE for the experienced NOS/BE user. Part 2 contains information on the use of BELOAD and the installation of HELPBE, LOADBE, and BELOAD.

AUDIENCE

Part I of this manual is written for the experienced NOS/BE user who is converting to NOS. This includes both application and system programmers.

Part II of this manual is written for site personnel familiar with NOS installation procedures and the hardware configuration on which NOS is installed. Although the site analyst enters the BELOAD control statement from the console, any user can create the BELOAD input directives file.

This manual does not give complete descriptions of NOS/BE and NOS terminology. It assumes that you are familiar with NOS/BE terminology and have access to the NOS Reference Manual, volume 1, and other NOS manuals to check NOS terminology.

CONVENTIONS

- Lowercase letters within statement formats indicate variable fields. Uppercase letters should be entered exactly as given; lowercase letters should be replaced with appropriate characters.
- In this manual, the examples of actual terminal sessions were printed on a class 1 terminal (typically a portable or printing terminal such as a teletypewriter). Uppercase characters represent terminal output; lowercase characters represent user input. (However, user input included in the text of this manual is shown in uppercase characters.) The vertical spacing in examples may not be the same as the spacing on an actual terminal.
- The term user number is used to represent the characters you enter to gain access to the system. In some manuals, user number is called user name.

RELATED PUBLICATIONS

The following manuals contain additional information. NOS Manual Abstracts is an instant-sized manual that contains a brief description of the contents and intended audience of every manual documenting NOS and its product set. The abstracts manual may be useful in determining which manuals would be of greatest interest to a particular user. The Software Publications Release History serves as a guide in determining which revision level of software documentation corresponds to the Programming System Report (PSR) level of installed site software.

<u>Control Data Publication</u>	<u>Publication Number</u>
Network Products Interactive Facility Version 1 Reference Manual	60455250
Network Products Interactive Facility Version 1 User's Guide	60455260
Network Products Network Terminal User's Instant	60455270
Network Products Remote Batch Facility Version 1 Reference Manual	60499600
Network Products Transaction Facility Version 1 Reference Manual	60455340
NOS Version 1 Applications Programmer's Instant	60436000
NOS Version 1 Batch User's Guide	60436300
NOS Version 1 Diagnostic Index	60455720
NOS Version 1 Installation Handbook	60435700
NOS Version 1 Manual Abstracts	84000420
NOS Version 1 Reference Manual, Volume 1	60435400
NOS Version 1 Systems Programmer's Instant	60449200
Software Publications Release History	60481000
Text Editor Reference Manual	60436100
XEDIT Version 3 Reference Manual	60455730

Publication ordering information and latest revision levels are available from the Literature Distribution Services catalog, publication number 90310500.

DISCLAIMER

These products are intended for use only as described in this document. Control Data cannot be responsible for the proper functioning of undescribed features or parameters.

INTRODUCTION

This manual describes the HELPBE, LOADBE, and BELOAD conversion utilities and the procedure for installing them. These utilities operate only on NOS. Use them to load NOS/BE files and gather information about NOS. The information, however, is not complete. Read the manuals listed in the preface for complete descriptions of NOS features. Information on interactive terminal usage is in the Interactive Facility (IAF) Reference Manual. Information on control statement and control language usage is in the NOS Reference Manual, volume 1. For information on batch jobs, refer to the Batch User's Guide.

CONVERSION UTILITIES

Although each utility has a separate function, by using a combination of the utilities, you can move your permanent files from a NOS/BE system to a NOS system and learn the commands necessary to complete a task on NOS as you have done it on NOS/BE.

HELPBE

Call HELPBE to find the NOS equivalents of NOS/BE commands and control statements. After calling HELPBE and entering a NOS/BE command name, HELPBE displays a NOS command that performs a similar function. NOS/BE and NOS do not always have corresponding functions. HELPBE displays a message, if a NOS equivalent does not exist. You can access HELPBE anytime after you log in to IAF.

LOADBE

Use the LOADBE utility to load a single NOS/BE permanent file on a NOS system. On the LOADBE control statement, specify the NOS permanent file type (direct or indirect access), password, file category, user permission mode, auxiliary device type, and the pack name associated with the new NOS file. LOADBE ignores NOS/BE passwords, retention periods, and the creation date associated with the NOS/BE file. You can enter the LOADBE control statement from both time-sharing and batch jobs. To access LOADBE interactively, use the IAF batch subsystem.

BELOAD

The site analyst uses the BELOAD utility to load a group of NOS/BE permanent files on a NOS system. You or the site analyst create input directives that tell BELOAD which files to load. On an input directive, you specify the NOS user number, permanent file type (direct or indirect access), new file name, password, file category, and the user permission mode you want associated with the new NOS file. BELOAD ignores NOS/BE passwords, retention periods, and the creation date associated with the NOS/BE file. The site analyst calls BELOAD from the console through a system origin job.

CLARIFYING NOS

The IAF interruption and termination sequences may vary from terminal to terminal. Refer to the IAF Reference Manual to learn these sequences before using the system.

Unlike NOS/BE, IAF allows you to log in at more than one terminal using the same user number and charge number.

You cannot interact with the system while in the NOS editors XEDIT or Text Editor, but must exit the editor before entering NOS commands.

Your site can change the defaults for the commands and input directives in this manual and in the NOS manuals. Ask site personnel if any changes have been made.

To assign more than one tape to a NOS job, use the RESOURC control statement. There is no parameter on the job statement for specifying tape units, as on NOS/BE.

If the VSN on the DUMPF control statement is not six characters, NOS/BE makes the VSN six characters by adding leading zero characters. NOS does not add zeros to a VSN on a NOS control statement. To avoid problems, specify a six-character VSN on the dump tape.

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PART I

HELPBE

1

HELPBE is an aid to help you become familiar with NOS, the Network Access Method (NAM), IAF, and the Remote Batch Facility (RBF). HELPBE provides the following information:

- General information on NOS permanent files. Refer to the NOS Reference Manual, volume 1, for more information.
- A brief description of a NOS equivalent to a NOS/BE command you enter. The HELPBE description emphasizes comparisons of the associated NOS and NOS/BE commands. For detailed descriptions, refer to the IAF Reference Manual and the NOS Reference Manual, volume 1. Although the commands listed may not indicate the most efficient way of performing the function on NOS, they are similar to the way you did the function on NOS/BE.
- A list of INTERCOM, Remote Batch, and NOS/BE commands. However, HELPBE does not provide a description of the commands. HELPBE assumes that you are an experienced NOS/BE user who understands the commands or knows where to find information on them in the NOS/BE manuals.
- General information on the NOS editor XEDIT and XEDIT equivalents of NOS/BE EDITOR commands. Refer to the IAF Reference Manual and the Text Editor Reference Manual for additional information on other editing methods.
- HELPBE informs you when there is no equivalent to a command you enter.

ACCESSING HELPBE

Log in under IAF to access HELPBE. Refer to the IAF User's Guide or the IAF Reference Manual for the login sequence. Then access HELPBE by entering:

```
HELPBE
```

HELPBE responds:

```
FOR MORE HELP TYPE YES, OTHERWISE ENTER COMMAND DESIRED.
```

```
?
```

If you enter YES, HELPBE prints out general information about the use of HELPBE and lists the commands you can enter to obtain NOS/BE commands, NOS file information, and NOS editor information.

To learn a NOS equivalent to a given NOS/BE command, enter enough characters of the NOS/BE command name to make the NOS/BE command unique. If the characters entered are common to more than one command, HELPBE displays the first command it finds that has the characters you specified as the first characters of the command.

TERMINATING HELPBE

At any question mark you can enter:

END

to terminate HELPBE. The system then returns you to IAF control. To enter END as a NOS/BE command to find out the NOS equivalent command, enter:

XEND

FORMAT OF THE HELPBE FILE

The information supplied after you specify a NOS/BE or EDITOR command name is in the following format:

NOS/BE or EDITOR command name (one to seven characters).

Equivalent NOS command(s) including parameters.

An explanation of parameters and command differences.

Some details that are the same for the NOS and NOS/BE commands are not included. If the NOS command is followed by either RBF or XEDIT, you must be under RBF or XEDIT before using the command. RBF is an application you can enter when you log in or you use the LOGIN command from IAF. The commands not followed by RBF or XEDIT are used in IAF or in batch processing. Many of these commands are control statements that when used in IAF can be used only under the batch subsystem. If you enter these commands not in the batch subsystem, or you abbreviate a command while in the batch subsystem, the system displays an error message (usually ILLEGAL COMMAND). To enter the batch subsystem in IAF type:

BATCH

The system responds:

\$RFL,0

/

Then enter an IAF command or NOS control statement.

If you need more information about a NOS command, refer to the NOS manuals listed in the preface.

USING HELPBE AND NOS CONTROL STATEMENTS

In the following example, the user gains access to a permanent file, copies the file to another local file, and rewinds the local file. The user knows the NOS/BE commands that would have been entered, so he uses HELPBE to learn the equivalent NOS commands.

The user logs into IAF:

```
79/11/08. 13.03.15. L30T1
CDC MULTI-MODE OPERATING SYSTEM.      NOS 1.
FAMILY: nosclsh,rst5123,bbbb,iaf
TERMINAL:      35, NAMIAF
RECOVER/ CHARGE: charge,4344,678s444†
```

Since the user is going to use NOS control statements, he enters the batch subsystem:††

```
batch
$RFL,0.
```

The user calls HELPBE and then enters the control statement name of the NOS/BE ATTACH control statement:

```
/helpbe
FOR MORE HELP TYPE YES, OTHERWISE ENTER COMMAND DESIRED.
? attach
```

HELPBE gives the ATTACH and GET control statements as the equivalents for the NOS/BE ATTACH statement:

```
ATTACH
ATTACH(LFN=PFN/UN=USERNAM,PW=PASSWORD,PN=PACKNAME,M=USERMODE)
.ALLOWS THE USER TO ACCESS A DIRECT ACCESS FILE.
.ATTACH DOES NOT GENERATE A LOCAL COPY OF THE FILE.
GET(LFN=PFN/UN=USERNAM,PW=PASSWORD,PN=PACKNAME)
.ALLOWS THE USER TO ACCESS AN INDIRECT ACCESS FILE.
.GENERATES A LOCAL COPY OF THE FILE.
LFN---LOCAL FILE NAME.
PFN---PERMANENT FILE NAME, 7 CHARACTERS MAXIMUM.
UN----USER NUMBER, IF FILE BELONGS TO ANOTHER USER.
PW----PASSWORD, IF FILE BELONGS TO ANOTHER USER AND IF REQUIRED.
M-----USER MODE WHERE *M* CAN BE (W,M,A,E,R, RM OR RA). DEFAULT IS
R(READ MODE).
PN----PACKNAME, IF FILE RESIDES ON AN AUXILIARY DEVICE.
```

† The CHARGE statement may not be required at the user's site.

†† The batch subsystem may be automatically selected at login.

The user wants to read a direct access file that has no password or packname association. The user terminates HELPBE and enters the NOS ATTACH statement:

```
? end
HELPBE.
/attach(btway)
```

NOS attaches the file BTWAY in read mode.

The user reenters HELPBE and finds out about the NOS equivalent to COPY:

```
/helpbe
FOR MORE HELP TYPE YES, OTHERWISE ENTER COMMAND DESIRED.
? copy
COPY
COPY(LFNFROM,LFNTO)
.UNDER NOS, COPY IS MORE EXTENSIVE THAN THE NOS/BE *COPY*.
THE DEFAULT NOS COPY PARAMETERS RESULT IN IT BEING IDENTICAL
TO THE NOS/BE *COPY*.
.IT IS NOT PERMITTED TO COPY *S*, *SI* AND *L* TAPE TO OUTPUT *F*
FORMAT TAPE. IT IS NOT PERMITTED TO COPY *F* TAPES TO OUTPUT *S*
OR *L* FORMAT TAPE.
```

The user terminates HELPBE and enters the NOS COPY statement:

```
? end
HELPBE.
/copy(btway,bitpath)
EOI ENCOUNTERED.
```

NOS copies file BTWAY to local file BITPATH.

The user reenters HELPBE to check the NOS/BE command REWIND and then uses its NOS equivalent:

```
/helpbe
FOR MORE HELP TYPE YES, OTHERWISE ENTER COMMAND DESIRED.
? rewind
REWIND
REWIND(LFN1,LFN2,.....)
SAME AS NOS/BE.
REWIND(*)
.REWIND ALL LOCAL FILES.
? end
HELPBE.
/rewind(bitpath)
$REWIND(BITPATH)
/
```

The user can continue entering NOS commands and control statements, or reenter HELPBE to check other NOS/BE commands and control statements.

USING HELPBE AND XEDIT

You can enter NOS/BE commands while using NOS/BE EDITOR. Non-EDITOR commands are passed to the system for processing. Under NOS, however, XEDIT does not pass commands to the system. You must terminate XEDIT and then enter other commands. Thus, you cannot call HELPBE while in XEDIT. If another terminal is available, you can log in at both terminals, using one for HELPBE and one for XEDIT. A better method is to ask HELPBE for all commands necessary to complete an XEDIT session before entering XEDIT. Read the general information about XEDIT in HELPBE and in the XEDIT Reference Manual before attempting to use XEDIT.

The following example shows the use of HELPBE and XEDIT. The user has HELPBE print information on the EDITOR commands LIST and LINE=:

```
/helpbe
FOR MORE HELP TYPE YES, OTHERWISE ENTER COMMAND DESIRED.
? list
LIST
PRINT,N OR P,N XEDIT
PRINT N NUMBER OF LINES STARTING AT THE *XEDIT* POINTER POSITION.
THE *XEDIT* POINTER IS POSITIONED AT LAST LINE PRINTED. IF * IS
USED IN PLACE OF N, IT PRINTS ALL LINES STARTING AT THE CURRENT
*XEDIT* POINTER UNTIL E-O-I.
LOCATE/TEXT/N OR L/TEXT/N XEDIT
LOCATE AND PRINT N LINES CONTAINING *TEXT* STARTING AT THE
CURRENT *XEDIT* LINE POINTER POSITION.
? line=
LINE=
REPLACE,N OR R,N XEDIT
.STARTS AT THE *XEDIT* LINE POINTER POSITION, REPLACES N LINES OF
THE EDITED FILE WITH THE NEXT N LINES FROM INPUT.
INSERT,N OR I,N XEDIT
.STARTS AT THE *XEDIT* LINE POINTER, INSERTS N LINES.
? end
HELPBE.
```

The user calls XEDIT to edit a local file TRIAL:

```
/get,trial
/xedit,trial
XEDIT 3.1.00
?? p,* ← The user prints the file.
ORIGINAL FILE
CONTAINS TWO LINES.
END OF FILE
?? r ← The user replaces the first line.
? new file ← The user enters the new line.
?? p,2 ← The user prints two lines.
NEW FILE
CONTAINS TWO LINES.
?? end ← The user terminates XEDIT.
TRIAL IS A LOCAL FILE
```

The user has HELPBE print information on saving the edit file:

```
/helpbe
FOR MORE HELP TYPE YES, OTHERWISE ENTER COMMAND DESIRED.
? save
SAVE
FILE,FILENAME,MODE      OR      F,FILENAME,MODE      XEDIT
.*F* SAVES THE EDIT FILE ACCORDING TO THE MODE SPECIFIED AND
REMAINS IN *XEDIT* MODE.
QUIT,FILENAME,MODE      OR      Q,FILENAME,MODE      XEDIT
END,FILENAME,MODE      OR      E,FILENAME,MODE      XEDIT
.*END* AND *QUIT* TERMINATE EDITING AND SAVE THE EDIT FILE
SPECIFIED BY THE MODE.
FILENAME-----NAME TO BE GIVEN TO THE EDIT FILE.
.ANY OF THE FOLLOWING *MODE*.
S(SAVE)----FILE WILL BE A NEW INDIRECT ACCESS PERMANENT FILE.
R(REPLACE)-FILE WILL REPLACE THE OLD INDIRECT ACCESS PERMANENT
FILE.
C(COPY)----REWRITES THE EDITFILE ONTO THE DIRECT ACCESS FILE
OF THE SAME NAME.
L(LOCAL)---MAKES THE EDITFILE A LOCAL FILE.
RL-----REPLACE AND LOCAL MODES.
SL-----SAVE AND LOCAL MODES.
NOTE: IF MODE IS NOT RECOGNIZABLE OR OMITTED, L MODE IS ASSUMED. IF
FILE NAME IS OMITTED, (EDITFILE) FROM THE *XEDIT* COMMAND IS
ASSUMED.
? end
HELPBE.
```

The user enters XEDIT again, modifies the file, and saves it as an indirect access permanent file, also keeping a local copy:

```
/xedit,trial
XEDIT 3.1.00
?? p,2 ←———— The user prints two lines.
NEW FILE
CONTAINS TWO LINES.
?? r ←———— The user replaces the second line.
? contains three lines. ← The user enters a new line.
?? i ←———— The user inserts a third line after the second line.
? this is the third line.
?? end,trial,rl ←———— The user saves the file as an indirect access file, keeping a local
TRIAL REPLACED copy.
TRIAL IS A LOCAL FILE
```

MESSAGES

You can receive the following HELPBE messages. After each message there is an explanation of the message, and/or the circumstances that caused it to be issued, and the recommended action. Other messages you can receive are explained in the NOS manuals listed in the preface.

<u>Message</u>	<u>Significance</u>	<u>Action</u>
CMDFILE ERROR.	HELPBE tried to use a local file named CMDFILE, but the file's format is not correct.	Enter RETURN, CMDFILE. Retry HELPBE.
DIRECTORY OVERFLOW.	HELPBE is not working properly. The system file BECMDFI is too large.	Inform site analyst.
HELP NOT AVAILABLE.	HELPBE is not working properly.	Inform site analyst. The system file BECMDFI must be created.
ILLEGAL REQUEST - RETRY.	The characters you entered were not one to seven characters of a NOS/BE command name nor of a special command entry.	Check command and retry.

The LOADBE utility loads a single NOS/BE permanent file on a NOS system. This utility enables you to move your files from a NOS/BE dump tape to a NOS system. To use LOADBE, you must have a standard NOS/BE dump tape containing the NOS/BE files to be loaded. Create this tape on NOS/BE using DUMPF. After assigning the tape to the job, use LOADBE to load the files on NOS.

LOADBE USE OF PERMANENT FILE CHARACTERISTICS

LOADBE handles NOS/BE permanent files in the following manner:

- LOADBE ignores NOS/BE passwords, but allows you to supply a NOS password.
- LOADBE ignores the NOS/BE retention period.
- LOADBE discards the NOS/BE creation, access, and modification dates and times. When LOADBE makes the file permanent, a new creation date and time is set.
- NOS does not allow two files under the same user number to have the same permanent file name. However, you can have LOADBE purge the current file and create a new file with that name. If you try to load a file that has the same permanent file name as another permanent file under the same user number, and do not specify that the file replaces the permanent file, LOADBE does not load the file but instead issues a dayfile message.
- LOADBE does not load NOS/BE incomplete cycles and issues a dayfile message indicating this.

USING NOS/BE FILES ON NOS

After LOADBE loads a NOS/BE file on NOS, the following information applies:

- You can use CYBER Record Manager files and Update files, including program libraries (PLs), on NOS the same way you used them on NOS/BE.
- The NOS LIBEDIT utility cannot read user library files that the NOS/BE EDITLIB utility created. You must use LIBGEN to create new libraries on NOS.

ASSIGNING THE DUMP TAPE

You must assign the NOS/BE permanent file dump tape to your job before entering the LOADBE control statement. The LABEL control statement performs this function. The following LABEL statement format shows the parameters used to assign the dump tape:

LABEL(lfn,VSN=vs_n, $\left\{ \begin{array}{l} \text{MT} \\ \text{NT} \end{array} \right\}$,D=den,F=S,LB=KL)

<u>Parameter</u>	<u>Description</u>
lfn	The one- to seven-character local file name for the tape. The default on the LOADBE control statement is TAPE.
VSN=vs _n	The six-character volume serial number that uniquely identifies the reel of tape. If the VSN is not six characters, you must make it six characters by adding leading zero characters. (When NOS/BE created the VSN, it automatically added leading zeros if you specified less than six characters. NOS adds trailing blanks.)
MT or NT	The type of tape drive to be used; seven-track (MT) or nine-track (NT).
D=den	The tape density (den) specified when the tape was created on NOS/BE.
F=S	DUMPF creates a dump tape with S format.
LB=KL	The dump tape has an ANSI label.

For a complete description of all LABEL parameters, refer to the NOS Reference Manual, volume 1.

LOADBE STATEMENT

The LOADBE control statement loads one NOS/BE file on NOS as a direct or indirect access permanent file. The NOS/BE file must be on a standard NOS/BE DUMPF tape. LOADBE searches the tape for the specified file.

The control statement format is:

LOADBE(FN=nosbe filename,ID=nosbe id,CY=nosbe cyclenum,PF=nos filename,p₁,p₂,...,p_n)

LOADBE does not have a multiple-file loading capability. If you have many files to load, you should have site personnel use BELOAD to load your files. The LOADBE control statement can be up to 80 characters but no longer than the page width, and must be contained on one line. Entering:

TRMDEF,PW=n

where n is the number of characters, is one way to change the page width (refer to the IAF Reference Manual for detailed information on page width).

The following order-independent parameters are required.

<u>Parameter</u>	<u>Description</u>
FN=nosbe filename	The 1- to 40-character NOS/BE file name.
ID=nosbe id	The one- to nine-character NOS/BE file ID.
CY=nosbe cyclenum	The one- to three-digit NOS/BE cycle number.
PF=nos filename	The one- to seven-character name you want the NOS/BE file to be called under NOS.

p_i can be one or more of the following optional parameters:

<u>Parameter</u>	<u>Description</u>
OP=load option	Load option. You decide whether the new file can be put in place of an existing NOS file if the files have the same NOS file name and user number.

	<u>Load Option</u>	<u>Description</u>
	N	Normal load option. LOADBE loads the NOS/BE file only if no file currently exists with the same NOS file name under the same user number. If a NOS file has the same name, LOADBE issues a dayfile message and does not load the file. N is the default.
	R	Load with replace option. LOADBE loads the NOS/BE file. If there is a NOS file with the same NOS file name under the same user number, LOADBE purges it and then makes the new file permanent. If no NOS file exists, the system creates one containing the new file information.
T=tape filename		The one- to seven-character name of the tape file that LOADBE reads which contains the NOS/BE permanent files. The default is TAPE. You must specify this parameter if you use a file name other than TAPE on the LABEL control statement.
PN=packname		The one- to seven-character pack name used with the R=device type parameter to identify the auxiliary device to be used. The device must be mounted and available. Specify this parameter only when the file is to reside on an auxiliary device. The default is to use a family permanent file device.

<u>Parameter</u>	<u>Description</u>
R=device type	The two- or three-character name that specifies the type of device on which the permanent file is to reside; device type can be any of the following:

<u>Device Type</u>	<u>Device</u>
DE	Extended core storage. †
Dli	844-21 Disk Storage Subsystem (1≤i≤8) (half track).
Dji	844-4x Disk Storage Subsystem (1≤i≤8) (half track).
DKi	844-21 Disk Storage Subsystem (1≤i≤8) (full track).
DLi	844-4x Disk Storage Subsystem (1≤i≤8) (full track).
DMi	885 Disk Storage Subsystem (1≤i≤3) (half track).
DQi	885 Disk Storage Subsystem (1≤i≤3) (full track).
DP	Distributive data path to ECS. †

The R=device type parameter can be used with the PN=packname parameter. The default device type is set by site personnel.

PW=nos password	A NOS one- to seven-character password which alternate users must specify whenever they access the file. The default is no password.
-----------------	--

CT=file category	The NOS permanent file category determines which users can access a file. There are three categories of permanent files:
------------------	--

<u>File Category</u>	<u>Description</u>
P	Private files are available for access only by the originating user, by those explicitly granted permission (refer to PERMIT control statement in NOS Reference Manual, volume 1), or by those with automatic read-only permission. The system records accesses by alternate users for the originator of the file. This includes the user number of the alternate user, the number of accesses made, and the date and time of the last access (refer to CATLIST control statement in the NOS Reference Manual, volume 1).

† The job must be of system origin or you must be validated for system origin privileges.

Parameter

Description

File Category

Description

S	Semiprivate files are available for access by any alternate user knowing the file name, password, and user number and whose permitted mode of access is not NULL (refer to description of permission mode under the M=mode parameter). The system records accesses by alternate users for the originator of the file. This includes the user number of the alternate user, the number of accesses made, and the date and time of the last access (refer to CATLIST control statement in the NOS Reference Manual, volume 1).
PU	Public files are available for access by all alternate users knowing the file name, password, and user number. Only the total number of accesses and the last access date and time are recorded for the originator of the file. The LOADBE file category default is PU (the default for NOS DEFINE and SAVE permanent file control statements is P).

M=mode

The NOS user permission mode allows the file originator to specify in what mode alternate users can access the file:

Mode

Description

E	Execute permission mode allows alternate users to only execute the file. Relocatable files with execute permission can be loaded and executed only through a stand-alone file name call (such as LGO) which is not preceded by a loader control statement.
R	Read permission mode allows alternate users to read and/or execute the file. The LOADBE permission mode default is R (the default for NOS DEFINE and SAVE permanent file control statements is W).
RA	Read append permission mode allows alternate users to read and/or execute a direct access file with the implication that another user may currently be accessing the same file in append mode.
RM	Read modify permission mode allows alternate users to read and/or execute a direct access file with the implication that another user may currently be accessing the same file in append or modify mode.

Parameter

Description

Mode

Description

A	Append permission mode allows alternate users to append information at the end of the file (EOI).
M	Modify permission mode allows alternate users to modify, append, read, and/or execute a direct access file. Modify mode means that alternate users can change or lengthen a direct access file, but they cannot shorten the file.
W	Write permission mode allows alternate users to write, modify, append, read, execute, and/or purge the file (modify permission applies only to direct access files).
N	Null permission mode allows alternate users no access to the file.

NOTE

You cannot specify modify, read modify, or append permission mode for an indirect access file (TY=I) on the LOADBE control statement.

For more information on permanent file and user permission modes, refer to the ATTACH, DEFINE, and SAVE control statements in the NOS Reference manual, volume 1.

TY=nos file type

NOS permanent files are classified by the manner in which they are accessed: indirect access and direct access.

File Type

Description

I	NOS makes the file an indirect access permanent file. When working on the file, you are actually making changes to a copy of the file. You then have the option of putting those changes into the permanent file, making a new file, or discarding the changes. Indirect access files are usually small files.
D	NOS makes the file a direct access permanent file. When working on the file, any changes are made to the file itself, not to a copy of the file. The default is D.

LOADBE loads the file under the user index of the current user. You cannot load a file under an alternate user index.

LOADBE uses the file ZZZBEZZ as an internal scratch file. You should not use that file name as a local or permanent file name.

If you want to load a file that was archived on NOS/BE (using the DUMPF control statement in archive mode) before the dump tape was created, the information left on NOS/BE includes the VSN of the tape that contains the file. This information is transferred to the dump tape when you dump your files. LOADBE reads the dump tape to find the file. Since the file has been archived, LOADBE issues a dayfile message indicating the VSN of the archive tape containing the file. You must assign the archive tape to your job and then reenter the LOADBE control statement to load the file from the archive tape.

EXAMPLES

The following example shows how the interactive terminal user can move one NOS/BE file to NOS:

```
batch
$RFL,0.
/label(tape,vsn=cst001,nt,d=pe,f=s,lb=kl)
NT62, ASSIGNED TO TAPE    , VSN=CST001.
/loadbe(fn=systems127b,id=model14,cy=32,pf=sys127b,op=r)
FILE REPLACED
/
```

The user enters the batch subsystem so that he can enter NOS control statements. Then, he enters the LABEL statement. NOS assigns the nine-track, 1600-cpi dump tape to the user's job. Its local file name is TAPE. The file which the user wants moved is on this tape. The user enters the LOADBE statement. LOADBE loads the NOS/BE file SYSTEMS127B on NOS as file SYS127B. If a permanent file with the name SYS127B does not exist, LOADBE creates a new file. If a permanent file with the same name exists, LOADBE purges the file and then creates a new file using the NOS/BE file (OP=R). The new file is a public direct access file that has no password associated with it and has a permission mode of read.

The following example shows the statements used for a local batch job that loads one NOS/BE file on NOS:

```
Job statement.
USER(username,password,familyname)
CHARGE(chargenum,projectnum)
LABEL(TAPE,VSN=00DUMP,NT,D=PE,F=S,LB=KL)
LOADBE(FN=REDORANGEYELLOWGREENBLUE,ID=BRIGHT,CY=9,PF=RAINBOW)
6/7/8/9
```

The tape submitted with the job is a nine-track, 1600-cpi dump tape with a VSN of DUMP. LOADBE locates cycle 9 of the NOS/BE file REDORANGEYELLOWGREENBLUE on the tape and makes it the NOS permanent file RAINBOW. If file RAINBOW already exists on NOS, LOADBE does not load the file.

PROCESSING ERRORS

If an error occurs which prevents LOADBE from further processing of a file, LOADBE takes the following action:

- If you specified OP=N, the portion of the file that was processed correctly becomes the NOS file specified on the LOADBE control statement.
- If you specified OP=R and the NOS file does not currently exist on the system, the portion of the file that was processed correctly becomes the NOS file specified on the LOADBE control statement.

- If you specified OP=R and the NOS file currently exists on the system, LOADBE does not purge the existing file until the new file has been fully processed.

If NOS detects errors while processing the DUMPF tape, you can rerun the job with PO=E specified on the LABEL control statement. The PO=E parameter causes NOS to ignore hardware read errors and continue processing. The system does not issue error messages, return error status, nor attempt error recovery. You can enter the following LABEL control statement for a nine-track dump tape with a VSN of DUMP to bypass hardware read errors:

```
LABEL(TAPE,VSN=00DUMP,NT,D=PE,PO=E,F=S,LB=KL)
```

You should not use this statement for normal processing. Refer to the NOS Reference Manual, volume 1, for more information.

MESSAGES

You can receive the following LOADBE messages. After each message there is an explanation of the message, and/or the circumstances that caused it to be issued, and the recommended action. Other messages you receive are explained in the NOS manuals that are listed in the preface.

<u>Message</u>	<u>Significance</u>	<u>Action</u>
ARCHIVED VSN nnnnnn	You requested a file that is not on the dump tape, but is on an archive dump tape with VSN nnnnnn.	Assign the referenced archive dump tape and then use LOADBE to load the file from that tape.
CYCLE NUMBER REQUIRED	You did not specify the CY=nosbe cycle parameter on the LOADBE statement.	Specify the CY=nosbe cycle parameter.
FILE LOADED	LOADBE successfully loaded the file specified.	None.
FILE NOT FOUND	LOADBE did not find the NOS/BE file name on the tape.	Check the accuracy of file name, ID, and cycle number. Also check to see if you have assigned the correct tape. Then retry the statement.
FILE NOT REPLACED	You did not specify OP=R on the LOADBE statement and a file with the same name existed as a permanent file.	Change the NOS file name or use OP=R in the statement.
FILE REPLACED	LOADBE purged the current permanent file and created a new file with the same name.	None.
ID REQUIRED	You did not specify the ID=nosbe id parameter on the LOADBE statement.	Specify the ID=nosbe id parameter.

<u>Message</u>	<u>Significance</u>	<u>Action</u>
INCOMPLETE CYCLE	The dump tape contains only part of the requested file. The file was not complete on NOS/BE before it was dumped.	Regenerate the file on either NOS or NOS/BE. There may be a different cycle of the file available.
LOADBE ABORT	LOADBE detected a system abort or operator drop.	If there is no other message explaining the reason for the abort, inform site analyst.
LOADBE - BAD CONTROL WORD	The DUMPF tape or tape drive is bad. LOADBE lost its position on the DUMPF tape.	Inform site analyst.
LOADBE - CONTROL CARD ERROR	You entered illegal parameters or parameters that are longer than permitted, or the syntax on the LOADBE statement is wrong.	Ensure accuracy of control statement parameters.
	LOADBE also issues this message in conjunction with other messages if you did not specify all required parameters.	Refer to other message for action required.
LOADBE - PREMATURE EOR	LOADBE encountered unexpected end-of-record on the DUMPF tape.	Inform site analyst.
NOS FILE NAME REQUIRED	You did not specify the PF=nos filename parameter on the LOADBE statement.	Specify the PF=nos filename parameter.
NOS/BE FILE NAME REQUIRED	You did not specify the FN=nosbe filename parameter on the LOADBE statement.	Specify the FN=nosbe filename parameter.

PART II

The BELOAD utility loads a group of NOS/BE permanent files on a NOS system. The NOS/BE files to be loaded must be on a standard NOS/BE permanent file dump tape created on NOS/BE using DUMPF. You initiate BELOAD from a system origin job. BELOAD generates two reports. The first report lists the BELOAD input directives and the second report lists the files BELOAD processed.

BELOAD USE OF PERMANENT FILE CHARACTERISTICS

BELOAD handles NOS/BE permanent files in the following manner:

- BELOAD ignores NOS/BE passwords but allows you to supply NOS passwords.
- BELOAD ignores the NOS/BE retention period.
- BELOAD discards the NOS/BE creation, access, and modification dates and times. When BELOAD makes the file permanent, a new creation date and time are set.
- NOS does not allow two files under the same user number to have the same permanent file name. However, you can have BELOAD purge the current file and then create a new file with that name. If you try to load a file that has the same permanent file name as another permanent file under the same user number and do not specify that the file replaces the permanent file, BELOAD does one of two things. If the input directive contains the PF=nos filename parameter, BELOAD does not load the file. If the input directive does not contain the PF=nos filename parameter, BELOAD creates a new file name and loads the file (refer to the PF=nos filename parameter description later in this section).
- BELOAD does not load NOS/BE incomplete cycles and issues a dayfile message indicating this.

USING NOS/BE FILES ON NOS

After BELOAD loads the NOS/BE files on NOS, the following information applies:

- You can use CYBER Record Manager files and Update files including program libraries (PLs) on NOS the same way you used them on NOS/BE.
- The NOS LIBEDIT utility cannot read user library files that the NOS/BE EDITLIB utility created. You must use LIBGEN to create new libraries on NOS.

ASSIGNING THE DUMP TAPE

You must assign the NOS/BE permanent file dump tape to your job before entering the BELOAD control statement. The LABEL control statement performs this function. The following LABEL statement format shows the parameters used to assign the dump tape:

LABEL(lfn,VSN=vs $\left. \begin{array}{l} \text{MT} \\ \text{NT} \end{array} \right\}$,D=den,F=S,LB=KL)

<u>Parameter</u>	<u>Description</u>
lfn	The one- to seven-character local file name for the tape. The default on the BELOAD control statement is TAPE.
VSN=vsn	The six-character volume serial number that uniquely identifies the reel of tape. If the VSN is not six characters, you must make it six characters by adding leading zero characters. (When NOS/BE created the VSN, it automatically added leading zeros if you specified less than six characters. NOS adds trailing blanks.)
MT or NT	The tape drive request; seven-track (MT) or nine-track (NT).
D=den	The tape density (den) specified when the tape was created on NOS/BE.
F=S	DUMPF creates a dump tape with S format.
LB=KL	The dump tape has an ANSI label.

For a complete description of all LABEL parameters, refer to the NOS Reference Manual, volume 1.

BELOAD STATEMENT

The BELOAD control statement loads NOS/BE files onto NOS as direct access or indirect access permanent files. The NOS/BE files must be on a standard NOS/BE DUMPF tape, and you initiate the BELOAD control statement from the operator console under DIS.

The control statement format is:

BELOAD(T=tape filename,L=report file,FM=familyname,I=directives file,OP=load option)

All parameters are optional.

<u>Parameter</u>	<u>Description</u>
T=tape filename	The one- to seven-character name of the tape file that BELOAD reads which contains the NOS/BE permanent files. The default is TAPE. You must specify this parameter if you use a file name other than TAPE on the LABEL control statement.
L=report file	The one- to seven-character name of the file on which BELOAD writes the reports. The default is OUTPUT.
FM=familyname	The one- to seven-character family name you want associated with the files. BELOAD loads the files specified on the input directives on a device that belongs to the family named. You must specify this parameter if the system has two or more families and the files are to be loaded on an alternate family. The default is the current family name.

<u>Parameter</u>	<u>Description</u>
I=directives file	The one- to seven-character name of the file from which BELOAD reads input directives. The default is INPUT.
OP=load option	You decide whether the new files can be put in place of NOS permanent files when the files have the same NOS file name and user number. The OP=load option parameter is in effect only if you specify PF=nos filename on the input directive.

<u>Load Option</u>	<u>Description</u>
N	Normal load option. BELOAD loads the NOS/BE files specified in the input directives only if no file currently exists under the same user number that has the same NOS file name you specified on the input directive (PF=nos filename). The default is N.
R	Load with replace option. BELOAD loads the NOS/BE files specified in the input directives. If there is a NOS file under the same user number with the same NOS filename, NOS purges the current file and makes the new file permanent. If no NOS file exists, the system creates one using the new file. The OP=R parameter is in effect only for files that have the PF=nos filename parameter on the input directive. Otherwise, the file is processed as if you specified OP=N.

INPUT DIRECTIVES

Input directives contain the information that enables BELOAD to find NOS/BE files and make them NOS permanent files. All input directives must be on a local file. You can create the file using IAF or batch (refer to the IAF Reference Manual). Also, you can create the file at the console using the NOTE control statement (refer to the NOS Reference Manual, volume 1) or the O26 editor (refer to the Systems Programmer's Instant).

The input directive format is:

P₁,P₂,...,P_n.

All parameters for one input directive are order-independent and must be on one line. The directive must also end with a terminator (either a period or right parenthesis).

The following parameters are required:

<u>Parameter</u>	<u>Description</u>
UN=nos usernumber	The user number under which the NOS permanent file(s) is to be located. The user number must currently be valid on either the default family if you do not specify the FM=familyname parameter on the BELOAD control statement, or the family you specified on the FM=familyname parameter.

<u>Parameter</u>	<u>Description</u>
ID=nosbe id	The one- to nine-character NOS/BE file ID.

If you specify only the NOS user number and the NOS/BE file ID, the highest cycle of each NOS/BE permanent file whose ID matches the value specified is loaded under the user number specified. The NOS permanent file name becomes the first seven characters of the NOS/BE file name. If BELOAD creates a duplicate NOS file name, the name is changed until a unique name is found (refer to the PF=nos filename parameter description later in this section).

P_i can also be one or more of the following optional parameters:

<u>Parameter</u>	<u>Description</u>
FN=nosbe filename	The 1- to 40-character NOS/BE name of the file that BELOAD loads.
CY=nosbe cyclenum	The one- to three-digit NOS/BE cycle number. If you do not specify the CY=nosbe cyclenum, BELOAD loads the highest cycle of the file.
PF=nos filename	The one- to seven-character NOS permanent file name chosen for the NOS/BE file. If you specify PF=nos filename, you must also specify FN=nosbe filename. If the NOS file name already exists, BELOAD does one of the following:

- If you specify OP=R, BELOAD purges the current permanent file and creates a new permanent file.
- If you do not specify OP=R, BELOAD does not load the file.

If you omit PF=nos filename, BELOAD loads the file as a new file even if you specify OP=R on the BELOAD control statement. BELOAD uses the NOS/BE file name, truncating it to seven characters when necessary. If this new name is the name of a file that is already permanent, BELOAD changes the name until it does not match any of the permanent file names under the given user number. BELOAD tries to create the new name by first changing the last character in the name. If it does not find a unique name doing this, BELOAD changes other characters. This process continues until an unused name is found. BELOAD lists both the NOS/BE file name and the new NOS file name in its output.

CT=file category	The NOS permanent file category determines which alternate users can access a file. There are three categories of permanent files:
------------------	--

<u>File Category</u>	<u>Description</u>
P	Private files are available for access only by the originating user, by those explicitly granted permission (refer to PERMIT control statement in NOS Reference Manual, volume 1), or by those with automatic read-only permission. The system records accesses by alternate users for the originator of the file. This includes the user number of the reset

Parameter

Description

File Category

Description

alternate user, the number of accesses made, and the date and time of the last access (refer to CATLIST control statement in the NOS Reference Manual, volume 1).

S

Semiprivate files are available for access by any alternate user knowing the file name, password, and user number and whose permitted mode of access is not NULL (refer to description of permission mode under the M=mode parameter). The system records accesses by alternate users for the originator of the file. This includes the user number of the alternate user, the number of accesses made, and the date and time of the last access (refer to CATLIST control statement in the NOS Reference Manual, volume 1).

PU

Public files are available for access by all alternate users knowing the file name, password, and user number. Only the total number of accesses and the last access date and time are recorded for the originator of the file. The BELOAD file category default is PU (the default for NOS DEFINE and SAVE permanent file control statements is P).

TY=nos file type

NOS permanent files are classified by the manner in which they are accessed: indirect access and direct access.

File Type

Description

I

BELOAD makes the file an indirect access permanent file. When you work on the file, you are actually making changes to a copy of the file. You then have the option of putting those changes into the permanent file, making a new file, or discarding the changes. Indirect access files are usually small files.

D

BELOAD makes the file a direct access permanent file. When you work on the file, any changes are made to the file itself not to a copy of the file. The default is D.

Parameter

Description

M=mode

The NOS user permission mode allows the file originator to specify in what mode alternate users can access the file:

<u>Mode</u>	<u>Description</u>
E	Execute permission mode allows alternate users to only execute the file. Relocatable files with execute permission can be loaded and executed only through a stand-alone file name call (such as LGO) which is not preceded by a loader control statement.
R	Read permission mode allows alternate users to read and/or execute the file. The BELOAD permission mode default is R (the default for NOS DEFINE and SAVE permanent file control statements is W).
RA	Read append permission mode allows alternate users to read and/or execute a direct access file with the implication that another user may currently be accessing the same file in append mode.
RM	Read modify permission mode allows alternate users to read and/or execute a direct access file with the implication that another user may currently be accessing the same file in append or modify mode.
A	Append permission mode allows alternate users to append information at the end of the file (EOI).
M	Modify permission mode allows alternate users to modify, append, read, and/or execute a direct access file. Modify mode means that alternate users can change or lengthen a direct access file, but they cannot shorten the file.
W	Write permission mode allows alternate users to write, modify, append, read, execute, and/or purge the file (modify permission applies only to direct access files).
N	Null permission mode allows alternate users no access to the file.

NOTE

You cannot specify modify, read modify, or read append permission mode for an indirect access file (TY=I) on input directives.

<u>Parameter</u>	<u>Description</u>
PW=nos password	A NOS one- to seven-character password which alternate users must specify whenever they access the file. The default is no password.

BELOAD does not allow you to specify auxiliary devices on input directives. You can use the LOADBE utility to load files that have this characteristic.

The size and number of files loaded for any one user number is limited to the user number's validation limits (refer to the LIMITS control statement in the NOS Reference Manual, volume 1).

If one of the files you wanted to load has been archived, BELOAD issues a message containing the VSN of the archive tape. To load that file, assign the archive tape to your job, and then use LOADBE or BELOAD to load the file.

BELOAD OUTPUT

BELOAD issues two reports. You can put these reports on a separate file or include them as part of the job printout (refer to the L=report file parameter on the BELOAD control statement). The first report lists the BELOAD input directives. Corresponding messages are also given if any input directive contains errors. The second report lists information on each NOS/BE file that is processed. Listed is the file's NOS/BE ID number, cycle number and permanent file name, the file's NOS user number, and NOS permanent file name (PFN).

EXAMPLES

The following example shows the statements the site analyst enters at the console to call BELOAD using the BELOAD control statement defaults and the output BELOAD issues. The input directives used tell BELOAD to load all files belonging to NOS/BE ID's GU and MKR. BELOAD generates the NOS permanent file names by using the first seven characters of the NOS/BE file names. Duplicate names are changed.

<u>Console Input</u>	<u>Description</u>
X.DIS. O26. . UN=TEST,ID=GU. UN=TEST1,ID=MKR. . DIS. LABEL(TAPE,VSN=BLTAPE,NT,D=PE,F=S,LB=KL)	Using O26, the site analyst creates a local file named INPUT. File INPUT contains the directives BELOAD uses to load files from the dump tape.
BELOAD.	The analyst enters the LABEL statement to make the dump tape local to the job.
	BELOAD processes the NOS/BE files specified on the input directives. The report file is printed on a line printer.

Report File

BELOAD INPUT DIRECTIVES

UN=TEST, ID=GU.

UN=TEST1, ID=MKR.

NOS/BE-ID	CYCLE	NOS-USER-NUMBER	NOS/BE PERMANENT FILE NAME	NOS PFN
GU	1	TEST	U76U	U76U
MKR	20	TEST1	BIPFSPOT	BIPFSP0
MKR	34	TEST1	AOQCSPOT	AOQCSP0
MKR	42	TEST1	AIQSPOT	AIQSPOT
GU	1	TEST	SOURSE	SOURSE
GU	1	TEST	PRSCPCL	PRSCPCL
GU	1	TEST	RECOVER	RECOVER
GU	1	TEST	SCPBIN	SCPBIN
MKR	14	TEST1	CIPFSPOT	CIPFSP0
MKR	1	TEST1	IPFSPOT	IPFSPOT
GU	2	TEST	NEWBIN	NEWBIN
GU	1	TEST	THISISALONGONE	THISISA
GU	1	TEST	LITTLECOPY	LITTLEC
GU	48	TEST	LITTLECOPY	LITTLED
GU	1	TEST	INITIAL	INITIAL
GU	17	TEST	LITTLECOPY	LITTLEE
GU	1	TEST	SVTXT	SVTXT
GU	1	TEST	DOCKUP	DOCKUP
MKR	33	TEST1	BOQCSPOT	BOQCSP0
GU	1	TEST	NEWBIN	NEWBIO
GU	1	TEST	DRLPOSP	DRLPOSP
MKR	13	TEST1	QSPOT	QSPOT
MKR	1	TEST1	QSPOT	QSPOU
MKR	34	TEST1	BIQSPOT	BIQSPOT
GU	1	TEST	LC	LC
GU	1	TEST	T76	T76
GU	1	TEST	PL99E	PL99E
GU	1	TEST	LCBIN	LCBIN

The following example shows the statements the site analyst enters at the console to call BELOAD. The input directives are on the indirect access file BLD created by user RRR2345:

<u>Console Input</u>	<u>Description</u>
X.DIS. USER,MAT8899,LAY.	The analyst provides a user number so that the permanent file system is accessible.
GET,BLD/UN=RRR2345. LABEL(TAPE,VSN=BLTAPE,NT,D=PE,F=S,LB=KL)	The analyst makes BLD a local file.
BELOAD,I=BLD,OP=R.	BELOAD processes the files specified on file BDL. BELOAD replaces files listed under the PF=nos filename parameter that are already permanent NOS files (OP=R).

File BLD

UN=RRR2345, ID=RRR, FN=ROUTINE1, PF=ROUT1.
UN=RRR2345, ID=RRR, FN=SUBROUTINE1.
UN=RRR2345, ID=RRR, FN=ROUTINE2, PF=ROUT2, CY=7.

File BLD contains the directives that tell BELOAD which files to process. User RRR2345 wants three files processed. Each file is listed on a directive.

The user did not specify a NOS file name for file SUBROUTINE1. Although the site analyst specified the replace option (OP=R) on the BELOAD control statement, BELOAD does not replace the file SUBROUT (SUBROUTINE1 truncated to seven characters) if it exists on NOS but changes the name until it finds a unique name and then makes the file permanent.

The other files listed in the directives have NOS file names and replace NOS files that have the same names if they exist.

PROCESSING ERRORS

If the NOS detects errors while processing the DUMPF tape, you can rerun the job with PO=E specified on the LABEL control statement. The PO=E parameters causes NOS to ignore hardware read errors and continue processing. The system does not issue error messages, return error status, nor attempt error recovery. You can enter the following LABEL control statement for a nine-track dump tape with a VSN of DUMP to bypass hardware read errors.

```
LABEL(TAPE,VSN=00DUMP,NT,D=PE,PO=E,F=S,LB=KL)
```

You should not use this statement for normal processing. Refer to the NOS Reference Manual, volume 1, for more information.

MESSAGES

You can receive the following BELOAD messages. After each message there is an explanation of the message, and/or the circumstances that cause it to be issued, and the recommended action. Other messages you can receive are explained in the NOS manuals that are listed in the preface. The output column tells where the message is displayed; B means B-display, D means dayfile, and L means BELOAD listings.

<u>Message</u>	<u>Significance</u>	<u>Action</u>	<u>Output</u>
ARCHIVED VSN nnnnnn	You requested a file that is not on the dump tape, but is on the archive dump tape with VSN nnnnnn.	Assign the archive dump tape and then use LOADBE or BELOAD to load the file from that tape.	L
BAD CONTROL WORD	The DUMPF tape or tape drive is bad. BELOAD lost its position on the tape.	Try another tape drive or create another DUMPF tape.	D
BELOAD ABORTED	BELOAD detected a system abort or operator drop.	Read previous system message explaining why BELOAD aborted.	D
BELOAD - CONTROL CARD ERROR	You entered illegal parameters or parameters that are too long, or the syntax on the BELOAD statement is wrong.	Ensure accuracy of control statement.	D
BELOAD - FAMILY ESTABLISHED	The family specified by the FM= familyname parameter is available for use.	None.	D
BELOAD - ILLEGAL FAMILY NAME	You specified an incorrect family name of the FM= familyname parameter.	Check the accuracy of the family name.	D
BELOAD - INPUT DIRECTIVE ERRORS	You had errors on the input directives. BELOAD did not load any of the files.	Read the error messages in the report file, correct the errors, and reenter BELOAD.	D
BELOAD - INPUT FILE EMPTY	The BELOAD input file starts with an end-of-record (EOR), the file is empty, or the file is not positioned properly.	Check that the input file contains input directives, that the BELOAD I=directives file parameter is correct, and that the input file is positioned correctly.	D
BELOAD - PREMATURE EOR	BELOAD encountered an unexpected end-of-record (EOR) on the DUMPF tape.	Try another tape drive or create another DUMPF tape.	D
FILE PROCESSED OR NOT FOUND	Either BELOAD did not find the file or two of the input directives contain the same NOS/BE file name.	Check the output to see if the file was processed.	L

<u>Message</u>	<u>Significance</u>	<u>Action</u>	<u>Output</u>
ILLEGAL USER CARD.	You did not enable secondary users.	Enable secondary users.	D
INVALID NOS USER NUMBER	You specified an invalid NOS user number on the input directive.	Check the UN=nos usernumber parameter on the input directive.	L
LOADING filename	The system is loading file filename.	None.	B
NOS/BE FILE NAME REQUIRED	You did not include the NOS/BE file name on the input directive.	Include the NOS/BE file name.	L
NOS/BE ID REQUIRED	You did not include the NOS/BE id on the input directive.	Include the NOS/BE id.	L
NOS PF NAME TOO LARGE	You specified a NOS permanent file name longer than seven characters.	Shorten the NOS permanent file name.	L
NOS USER NUMBER REQUIRED	You did not include the NOS user number on the input directive.	Include the NOS user number.	L
ONLY CALLABLE FROM A SYSTEM ORIGIN JOB	You tried to use BELOAD from a terminal or without the proper validations.	Use LOADBE or enter BELOAD from the operator console.	D
PARAMETER ERROR	You specified an illegal parameter on the input directive.	Check the accuracy of the input directive.	L
PROCESSING INPUT FILE	BELOAD is processing the input directives.	None.	B
REPLACED	You specified OP=R on the BELOAD statement. BELOAD replaced the NOS file with the NOS/BE file.	None.	L
SKIPPING	BELOAD is looking for the NOS/BE file names listed on the input directives.	None.	B
filename ALREADY PERMANENT	You did not specify OP=R and the NOS permanent file name specified already exists on NOS. BELOAD did not load the file.	Reenter the BELOAD statement with OP=R or change the permanent file name on the input directive.	L

This section contains installation information for the HELPBE, LOADBE, and BELOAD utilities. For general information about these utilities, refer to other sections in this manual.

SOFTWARE DESCRIPTION

HELPBE software consists of a new routine added to the NOS system and a text permanent file defined under the special user number LIBRARY.

LOADBE and BELOAD software consists of two new routines added to the NOS system.

RELEASE TAPE

The nine-track magnetic tape contains the installation procedure, changes to HELP to create HELPBE, the LOADBE and BELOAD routines, and the BECMDFI text library. Label information is as follows:

D=PE,R,VSN=MIGRAT,L=\$MIGRATION\$

The tape has four files which contain the following information:

<u>File</u>	<u>Description</u>
1	The procedures INSTALL and TEST. INSTALL is the installation procedure that installs HELPBE, LOADBE, and BELOAD. TEST verifies that HELPBE is installed properly.
2	The Modify directives for the HELP deck that enable the installation procedure to create HELPBE binaries from the HELP deck on old program library REL1A.
3	LOADPL program library that contains the BELOAD and LOADBE routines in Modify format.
4	BECMDFI text program library in Modify format.

INSTALLATION PROCEDURE

You should be aware of the following information regarding the installation procedure:

- Since the installation procedure, INSTALL, creates the direct access file BECMDFI on user number LIBRARY, you must run the procedure from the console.
- The old deadstart tape default is the running system. If you want to use a different old deadstart tape, you must assign it to the job as OLD. Refer to the ATTACH or LABEL control statement in the NOS Reference Manual, volume 1.

- If file NEW is assigned to the job, the system uses this file for the new deadstart tape. If the file NEW is not assigned to the job, the installation procedure requests a nine-track, PE density tape for the new deadstart tape.
- The installation procedure takes the HELP deck from old program library REL1A and modifies it to create the HELPBE binary deck. It also gets the common decks for LOADBE and BELOAD from REL1A. If file RELTAPE is assigned to the job, the system uses it as old program library REL1A. If file RELTAPE is not assigned to the job, the procedure requests a nine-track PE density tape file RELTAPE.
- If you want to make changes to HELPBE, LOADBE, or BELOAD, you must put these changes on file USER. The changes must be in Modify format.
- If you want to use more than one tape at the same time, you must enter the RESOURC control statement. Refer to the NOS Reference Manual, volume 1.

You enter the following statements from the console to install BELOAD, HELPBE, LOADBE, and the BECMDFI text file:

<u>Console Input</u>	<u>Description</u>
X.DIS.	You must be under DIS to use the installation procedure.
xxx	Enter the RESOURC control statement if you need to use more than one tape at the same time.
xxx	Enter optional commands to assign file RELTAPE, OLD, NEW, or USER to your job. If any of the above files are permanent files, you must enter a USER statement before you can access them.
LABEL(TAPE,D=PE,R,VSN=MIGRAT)	Make the release tape a local file.
BEGIN,,TAPE,p ₁ ,...,p _n .	Call the installation procedure INSTALL. The procedure sets the user index so that the system can store file BECMDFI under user number LIBRARY. The optional parameters, p _i , can be one or more of the following:

<u>p_i</u>	<u>Description</u>
LIST=1 or LIST	The installation procedure routes all listings the procedure produces to the local printer. The default is that the installation procedure routes the listing only if it detects an error. The day-file listing is always routed.
DST=0	The installation procedure does not build a new deadstart tape. The default is to build a new deadstart tape.

Console Input

Description

Pi

Description

CMDFILE=0

The installation procedure does not build file BECMDFI. HELPBE needs the file to run. The default is to build file BECMDFI.

SYSEDIT=0

The installation procedure does not SYSEDIT BELOAD, HELPBE, or LOADBE into the running system. The default is to perform a SYSEDIT.

DROP.

Drop DIS and the processing of the installation procedure starts.

There are no installation parameters.

VERIFYING HELPBE

You can perform the following verification of HELPBE after you deadstart the system with the tape generated by the installation procedure containing the HELPBE routine or after you add HELPBE to the running system with the SYSEDIT in the installation procedure:

Procedure

Description

TEST

Verification procedure on file 1 of the release tape submits a job called TEST to the input queue and must be run with the default family. You decide whether the TEST job has its own charge number when you enter the BEGIN control statement. The BEGIN statement with the chargenumber specifies a charge number for the TEST job. The BEGIN statement without the charge number but with the word FREE does not specify a charge number for TEST job. You can use the BEGIN statement without the charge number if you are validated to run jobs without a charge number. If HELPBE is installed properly, the verification procedure prints records from BECMDFI text file. If HELPBE is not installed properly, the system issues error messages.

You can run either of the following jobs to call TEST. The first job submits the job TEST with a charge number; the second job submits TEST without a charge number:

Job statement.

USER(usernumber,password)

CHARGE(chargenumber,projectnumber)

LABEL(TAPE,D=PE,R,VSN=MIGRAT)

BEGIN,TEST,TAPE,usernumber,password,chargenumber,projectnumber.

6/7/8/9

or

Job statement.

USER(usernumber,password)

LABEL(TAPE,D=PE,R,VSN=MIGRAT)

BEGIN,TEST,TAPE,usernumber,password,,,FREE.

6/7/8/9

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