

SYNTAX OF NLS COMMANDS: NEW COMMAND LANGUAGE

4 MAY 74

This document assumes that you know the meanings of the basic New NLS concepts. We here define special terms needed to understand the syntax of the command summary. See the on-line Help subsystem for general concepts. However, a conceptual map of addressing is included at the end of this document (see--Address).

2a

For the purpose of this document, each command-word begins with a capital letter, and the rest is lower case. Recognition of command-words will depend on the recognition mode set by the user. Words all in upper case are variables, which stand for certain alternatives; which are either defined below, or are denoted immediately following the command in which they appear.

2b

[...] optional elements, preceded by the OPTION character <control-u>

2c

!...! comments, not part of commands

2d

(...) noise words echoed by system; prompts are not shown

2e

#### ADDRESS

a sequence (ending with an OK) of one or more of the addressing elements separated by spaces and ending with an OK. If you type only an OK, without typing any element, the prior position of the CM is taken. See the Addressing map (ADDRESS) at the end of this file.

2f

#### DESTINATION:

In TNLS: DESTINATION = ADDRESS.

In DNLS: DESTINATION = BUG or OPTION ADDRESS.

When referring to Group or Text, DESTINATION needs two BUGS or two ADDRESSES.

2g

#### SOURCE:

In TNLS: SOURCE = ADDRESS or OPTION TYPEIN

In DNLS: SOURCE = TYPEIN or BUG or OPTION ADDRESS.

When referring to Group or Text, two BUGS or two ADDRESSES are needed.

2h

#### CONTENT:

In TNLS: CONTENT = TYPEIN or OPTION ADDRESS

In DNLS: CONTENT = TYPEIN or BUG or OPTION ADDRESS

(Same as SOURCE in DNLS).

When referring to Group or Text, two BUGS or two ADDRESSES are needed.

2i

OPTION = the <control-u> character

2j

(A field enclosed in squarebrackets--[...]-means that the OPTION character must precede specification of the expression.)

2j1

TYPEIN = any string of characters from the keyboard, terminated by an OK

TYPEIN has a special form when a FILEADDRESS or Ident <sup>or link</sup> is called for (You can tell from the noise words). 2k

LEVEL-ADJUST:

a lowercase u or d or a string of lowercase u's and d's, optionally preceded by integers, terminated by a <SP> or OK, the difference between the number of u's and d's is taken as a level adjustment value. If you only type a <SP> or OK, the level will be the same. 2l

VIEWSPECS:

type a string of any of the viewspec codes, terminated by an OK, or just type an OK if you don't want to change the viewspecs. 2m

ANSWER:

y = yes; n = no  
In a few commands NLS wants a yes or no answer; "yes" to proceed through the command; "no" to cycle back through some field. Type y for yes or n for no. You usually may also type OK here; the command will be immediately executed in MOST CASES. 2n

SUBSYSTEM = Editor or Help or Programs or Readmail or Sendmail or Identification or Tenex or Useroptions or Calculator 2o

(These will be command-words) 2o1

STRING = Character OR Word OR Visible OR Invisible OR Number OR Link OR Text 2p

(These will be command-words) 2p1

STRUCTURE = Statement OR Group OR Branch OR Plex 2q

(These will be command-words) 2q1

OK = CA or INSERT or REPEAT  
default special characters:      display      teletype  
   -----      ----- 2r

CA: Command Accept; terminates the command and returns user to command reset mode <↑d>/CA      <↑d>/CR 2r1

INSERT: At the end of a command in Editor subsystem only, executes command and starts "Insert Statement" defaulting current CM location. User does: <↑e> <↑e> 2r2

INSERT LEVEL-ADJUST CONTENT OK  
(insertion and LEVEL-ADJUST  
is relative to CM)  
INSERT mode continues until  
user types CD  
In all other cases, INSERT has  
no special meaning; it is equi-  
valent to Command Accept

2r2a

REPEAT: at end of any command <↑b>/(.)/ <↑b>/ESC/  
terminates and repeats the ALTMODE ALT  
command from the beginning,  
defaulting each command-word until reaching the first field  
not a command-word that the user can specify. User then  
takes over the command. REPEAT mode continues until user  
types CD

2r3

If a TYPEIN or a LEVEL-ADJUST or VIEWSPECS or an ADDRESS immediately  
precedes OK, its terminator serves as the OK character, so if you  
want to INSERT or REPEAT the command terminate the TYPEIN,  
LEVEL-ADJUST, VIEWSPECS, or DAE with the INSERT or REPEAT instead of  
CA.

2s

Command Summary

3

Universal commands available in almost all subsystems:

Show also: quit

3a

Execute (command in) SUBSYSTEM

3a1

Goto (subsystem) SUBSYSTEM OK

3a2

<control-q>

A brief description of the NLS capabilities you were using follows:

...

For help with help, type <control-q> again.

3a3

questionmark:

?

3a4

less-than:

<

3a5

greater-than:

>

3a6

semicolon:

;any comment, not to be taken as command input OK

3a7

Editor:

3b

Archive File CONTENT [ARCHIVEOPT] OK  
ARCHIVEOPT = Delete (Finished?) ANSWER  
OR Do (not delete) (Finished?) ANSWER  
OR Not (allowed) (Finished?) ANSWER  
OR Deferred (Finished?) ANSWER  
OR Immediate (Finished?) ANSWER

3b1

!Another ARCHIVEOPT is expected if you type "n" for ANSWER!

3b1a

Insert:

3b2

STRING:  
Insert STRING (to follow) DESTINATION CONTENT OK

3b2a

STRUCTURE:  
Insert STRUCTURE (to follow) DESTINATION LEVEL-ADJUST CONTENT  
OK

3b2b

Date:  
Insert Date (to follow) DESTINATION OK

3b2c

Sendmail:  
Insert Journal (submission form to follow) DESTINATION  
LEVEL-ADJUST OK

3b2d

Time:  
Insert Time (and date to follow) DESTINATION OK

3b2e

Show:

3b3

Archive:  
Show Archive (directory) KEN [ADIROPT] OK  
Show also--ADIROPT>  
KEN = OK !directory connected to!  
or TYPEIN  
or [ADDRESS]

3b3a

Directory:  
Show Directory KEN [DIROPT] OK  
Show Directory KEN [DIROPT] OK  
Show also--DIROPT>  
KEN = OK !directory connected to!  
or TYPEIN  
or [ADDRESS]

3b3b

Disk:  
Show Disk (space status) OK

3b3c

File:

3b3d

Link:  
Show File Link (default directory) OK

3b3d1

Marker:		
Show File Marker (list) OK		3b3a2
Modification:		
Show File Modification (status) OK		3b3a3
Return:		
Show File Return (ring) OK		3b3a4
Size:		
Show File Size OK		3b3a5
Status:		
Show File Status OK		3b3a6
Name:		
Show Name (delimiters for statement at) DESTINATION OK		3b3e
Viewspeccs:		
Show Viewspeccs (status) [Verbose] OK		3b3f
Set:		3b4
Case:		3b4a
STRING:		
Set Case STRING (at) DESTINATION OK		3b4a1
STRUCTURE:		
Set Case STRUCTURE (at) DESTINATION OK		3b4a2
Mode:		
Set Case Mode CASEMODE OK		
CASEMODE = Upper or Lower or Initial (upper)		3b4a3
Character:		
Set Character (size for window to) NUMBER OK		
NUMBER = TYPEIN: 0 or 1 or 2		3b4b
Filter:		3b4c
Off:		
Set Filter Off OK		3b4c1
On:		
Set Filter On OK		3b4c2
To:		
Set Filter To (pattern) CONTENT OK		3b4c3
Link:		
Set Link (default for file to directory) CONTENT OK		3b4d

Name:		
Set Name (delimiters in) STRUCTURE (at) DESTINATION (left delimiter) CONTENT (right delimiter) CONTENT OK		3b4e
Temporary:		
Set Temporary (modifications for file) OK		3b4f
Tty:		
Set Tty (window to window) BUG OK		3b4g
Viewspecs:		
Set Viewspecs VIEWSPECS OK		3b4h
Reset:		3b5
Archive:		
Reset Archive (request for file) CONTENT OK		3b5a
Case:		
Reset Case (mode) OK		3b5b
Character:		
Reset Character (size for window) OK		3b5c
Filter:		
Reset Filter OK		3b5d
Link:		
Reset Link (default for file) OK		3b5e
Name:		
Reset Name (delimiters in) STRUCTURE (at) DESTINATION OK		3b5f
Temporary:		
Reset Temporary (modifications for file) OK		3b5g
Tty:		
Reset Tty (window) OK		3b5n
Viewspecs:		
Reset Viewspecs OK		3b5i
modifying-commands:		
Show also, insert, create, useroptions, reset case mode, set case=@ delete modifications, undelete modifications.		3b6
Append Statement (at) SOURCE (to) DESTINATION CONTENT OK		3b6a
Break Statement (at) DESTINATION LEVEL-ADJUST OK		3b6b
Copy:		3b6c

STRING:  
Copy STRING (from) SOURCE (to follow) DESTINATION OK 3b6c1

STRUCTURE:  
Copy STRUCTURE (from) SOURCE (to follow) DESTINATION  
LEVEL-ADJUST [(Filtered:) FILTER] OK  
FILTER = any combination of the following VIEWSPECS -  
terminated by a CA: a, b, c, d, e, g, h, l, w, i, j, k 3b6c2

Archive:  
Copy Archive (directory from) CONTENT (to follow)  
DESTINATION LEVEL-ADJUST [ADIROPT] OK  
Show also--ADIROPT> 3b6c3

Directory:  
Copy Directory (from) CONTENT (to follow) DESTINATION  
LEVEL-ADJUST [DIROPT] OK  
Show also--DIROPT> 3b6c4

File:  
Copy File (from) CONTENT (to) CONTENT OK 3b6c5

Sequential:  
Copy Sequential (file from) CONTENT (to follow) DESTINATION  
LEVEL-ADJUST [ALGORITHM] OK  
ALGORITHM = Heuristic OR Justified OR Assembler 3b6c6

Delete: 3b6d

STRING:  
Delete STRING (at) DESTINATION OK 3b6d1

STRUCTURE:  
Delete STRUCTURE (at) DESTINATION [(Filtered:) FILTER] OK  
FILTER = any combination of the following VIEWSPECS -  
terminated by a CA: a, b, c, d, e, g, h, l, w, i, j, k 3b6d2

All:  
Delete All (markers) OK 3b6d3

Archive:  
delete Archive (file) CONTENT OK 3b6d4

File:  
Delete File CONTENT OK 3b6d5

Marker:  
Delete Marker (named) CONTENT OK 3b6d6

Modifications:  
Delete Modifications (to file) OK (really?) OK 3b6d7

Edit Statement (at) DESTINATION EDITSTRING OK  
 EDITSTRING = a mixed string of the following characters:  
 <control-f>, <control-u>, <control-z>, <control-o>,  
 <control-s>, <control-g>, <control-p>,  
 <control-e>TYPEIN<control-e>, <control-h>, <control-w>,  
 <control-q>, <control-n>, <control-r>, 3b6e

Merge STRUCTURE (at) DESTINATION (into) DESTINATION OK 3b6f

Move: 3b6g

  STRING:  
 Move STRING (from) SOURCE (to follow) DESTINATION OK 3b6g1

  STRUCTURE:  
 Move STRUCTURE (from) SOURCE (to follow) DESTINATION  
 LEVEL-ADJUST [(Filtered:) FILTER] OK  
 FILTER = any combination of the following VIEWSPECS -  
 terminated by a CA: a, b, c, d, e, g, h, l, w, i, j, k 3b6g2

  Boundary:  
 Move Boundary (from) BUG (to) BUG OK 3b6g3

  File:  
 Move File (from old filename) CONTENT (to new filename)  
 CONTENT OK 3b6g4

Replace: 3b6h

  STRING:  
 Replace STRING (at) DESTINATION (by) CONTENT OK 3b6h1

  STRUCTURE:  
 Replace STRUCTURE (at) DESTINATION (by) CONTENT OK 3b6h2

Sort STRUCTURE (at) DESTINATION OK 3b6i

Substitute STRING (in) STRUCTURE (at) DESTINATION (new STRING)  
 CONTENT (for old STRING) CONTENT (Finished?) ANSWER  
 [(filtered:) FILTER] OK  
 FILTER = any combination of the following VIEWSPECS -  
 terminated by a CA: a, b, c, d, e, g, h, l, w, i, j, k 3b6j

Transpose: 3b6k

  STRING:  
 Transpose STRING (at) DESTINATION (and) DESTINATION OK 3b 6k1

  STRUCTURE:  
 Transpose STRUCTURE (at) DESTINATION (and) DESTINATION  
 [(Filtered:) FILTER] OK  
 FILTER = any combination of the following VIEWSPECS -  
 terminated by a CA: a, b, c, d, e, g, h, l, w, i, j, k 3b6k2

Update File PAGING  
 PAGING = Old (version) OK  
           or Compact OK  
           or Rename (filename) CONTENT OK  
           or OK !defaults to update new! 3b61

address-commands:  
 show also: syntax viewing-commands, delete marker, undelete  
 marker, reset name, set name, show file marker, show name, 3b7

Mark Character (at) DESTINATION (with marker named) CONTENT OK 3b7a

Renumber Sids (in file) OK 3b7b

TAB command:  
 <TAB> 3b7c

These 3 commands show the status of your Control Marker: 3b7d

backslash:  
 \ 3b7e

period:  
 . 3b7f

slash:  
 / 3b7g

viewing-commands:  
 Show also: backslash, reset filter, set filter, reset viewspecs,  
 set viewspecs, show viewspecs, tab 3b8

Jump: 3b8a

DNLS: 3b8a1

BUG:  
 Jump (to) BUG VIEWSPECS OK 3b8a1a

Address:  
 Jump (to) Address (relative to) BUG ADDRESS VIEWSPECS OK 3b8a1b

!Show also: ADDRESS! 3b8a1b1

Back:  
 Jump (to) Back DESTINATION VIEWSPECS OK 3b8a1c

Content: 3b8a1d

First:  
 Jump (to) Content First SEARCH VIEWSPECS OK  
 SEARCH = CONTENT or OKREPEAT !accept displayed one!  
 3b8a1d1

Next:  
 Jump (to) Content Next SEARCH VIEWSPECS OK  
 SEARCH = CONTENT or OKREPEAT !accept displayed one! 3b8ald2

Down:  
 Jump (to) Down DESTINATION VIEWSPECS OK 3b8ale

End:  
 Jump (to) End (of branch) DESTINATION VIEWSPECS OK 3b8alf

File:  
 3b8alg

BUG:  
 Jump (to) File BUG VIEWSPECS OK 3b8alg1

<SP>:  
 Jump (to) File <SP> CONTENT VIEWSPECS OK 3b8alg2

Return:  
 Jump (to) File Return CA ANSWER OK 3b8alg3

Head:  
 Jump (to) Head DESTINATION VIEWSPECS OK 3b8alh

Item:  
 Jump (to) Item DESTINATION VIEWSPECS OK 3b8ali

Link:  
 Jump (to) Link CONTENT OK 3b8alj

Name:  
 Jump (to) Name WHICHNAME VIEWSPECS OK  
 WHICHNAME = BUG or Any CONTENT or First CONTENT  
 or Next CONTENT or External CONTENT 3b8alk

Next:  
 Jump (to) Next DESTINATION VIEWSPECS OK 3b8all

Origin:  
 Jump ( TO) Origin DESTINATION VIEWSPECS OK 3b8alm

Predecessor:  
 Jump (to) Predecessor DESTINATION VIEWSPECS OK 3b8aln

Return:  
 Jump (to) Return CA ANSWER OK 3b8alo

Successor:  
 Jump (to) Successor DESTINATION VIEWSPECS OK 3b8alp

Tail:  
 Jump (to) Tail DESTINATION VIEWSPECS OK 3b8alq

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Up:
Jump (to) Up DESTINATION VIEWSPECS OK          3b8a1r

Word:                                           3b8a1s

  First:
  Jump (to) Word First SEARCH VIEWSPECS OK
  SEARCH = CONTENT or OKREPEAT [accept displayed one]
                                                    3b8a1s1

  Next:
  Jump (to) Word Next SEARCH VIEWSPECS OK
  SEARCH = CONTENT or OKREPEAT [accept displayed one]
                                                    3b8a1s2
TNLS:                                           3b8a2

  DESTINATION:
  Jump (to) DESTINATION OK                      3b8a2a

LINEFEED                                       3b8b

Load File CONTENT OK                          3b8c

Output:                                        3b8d

  Assembler:
  Output Assembler (file) CONTENT [Force (upper case)] OK  3b8d1

  Com:
  Output Com [COPYOPT] OK
  COPYOPT = File CONTENT OR Copies TYPEIN!number of copies
  wanted!                                         3b8d2

  Journal:
  Output Journal (quickprint) [COPYOPT] OK
  COPYOPT = File CONTENT OR Copies TYPEIN!number of copies
  wanted!                                         3b8d3

  Printer:
  Output Printer [COPYOPT] OK
  COPYOPT = File CONTENT OR Copies TYPEIN!number of copies
  wanted!                                         3b8d4

  Quickprint:
  Output Quickprint [COPYOPT] OK
  COPYOPT = File CONTENT OR Copies TYPEIN!number of copies
  wanted!                                         3b8d5

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```

Remote:
Output Remote (printer TIP) CONTENT (port #) CONTENT (send
form feeds?) CHOICE (wait at page break?) ANSWER (Go?) START
CHOICE = Yes
      or No (simulate?) ANSWER
START = Yes or OK|same as Yes!
      or No (Type <SP> when ready, CD to abort) <SP>          3b8d6

Sequential:
Output Sequential (file) CONTENT [Force (upper case)] OK      3b8d7

Terminal:
Output Terminal (send form feeds?) CHOICE (wait at page
break?) ANSWER (Go?) START
CHOICE = Yes
      or No (simulate?) ANSWER
START = Yes or OK|same as Yes!
      or No (Type <SP> when ready, CD to abort) <SP>          3b8d8

Print OK                                                       3b8de

STRUCTURE:
Print STRUCTURE (at) DESTINATION VIEWSPECS OK                 3b8e1

uparrow                                                       3b8fi

file-handling:
show also: archiving commands, modifying-commands,
directory-commands, copy file, copy sequential, delete file,
delete modifications, move file, output. update file, show file
status, show file modification, set temporary, reset temporary  3b9

Create File CONTENT OK                                         3b9a

Load File CONTENT OK                                           3b9b

Protect File CONTENT CONTROLS OK
CONTROLS = Reset
      or Allow WHOM DOING (Finished?) ANSWER
      or Forbid WHOM DOING (Finished?) ANSWER
      or Private (for) WHOM
      or Set (to) 18BIT#
WHOM = Self or Group or Public
DOING = Read (access)
      or Write (access)
      or Execute (access)
      or List (access)
      or All (access)
      or Set (to) 6BIT#
18BIT# = a TYPEIN of a 18-bit TENEX protection number
6BIT# = a TYPEIN of a 6-bit TENEX protection number            3b9c

!/Typing n for ANSWER cycles you back to DOING!              3b9cl

```

Verify File OK	3b9d
Undelete:	3b9e
Archive:	
Undelete Archive (file) CONTENT OK	3b9e1
File:	
Undelete File CONTENT OK	3b9e2
Modifications:	
Undelete Modifications (to file) OK	3b9e3
archiving-commands:	
Show also: Show Archive, Archive File, Copy Archive, Delete Archive, Expunge Archive, Reset Archive,	3b10
Retrieve File (from archive) CONTENT OK	3b10a
directory-commands:	
Show also: archiving-commands, Reset Link, set link, show file link, show disk.	3b11
Connect:	3b11a
Directory:	
Connect (to) Directory CONTENT (Password) CONTENT OK	3b11a1
Display:	
Connect (to) Display (number) CONTENT I/O OK	
I/O = Input (and output) OR Output (only)	3b11a2
Tty:	
Connect (to) Tty (number) CONTENT I/O OK	
I/O = Input (and output) OR Output (only)	3b11a3
Expunge:	3b11b
Archive:	
Expunge Archive (directory) OK	3b11b1
Directory:	
Expunge Directory OK	3b11b2
Trim Directory (No. versions to keep) CONTENT OK (really?) OK	3b11c
recording-commands:	3b12
Playback Session (from file) CONTENT OK	3b12a
Record Session (on file) CONTENT OK	3b12b
Stop Record (of session) OK	3b12c

terminal-commands: Display, Teletype, etc.	
show also: syntax semicolon, syntax linefeed dnls, syntax move boundary, syntax reset, syntax set, syntax uparrow dnls.	3b13
Accept Connect (from display #) CONTENT OK	3b13a
Split Window DIRECTION OK DIRECTION = Horizontally or Vertically	3b13b
Release:	3b13c
All:	
Release All (frozen statements) OK	3b13c1
Frozen:	
Release Frozen (statement at) DESTINATION OK	3b13c2
Freeze Statement (at) DESTINATION VIEWSPECS OK	3b13d
Clear Window (at) DESTINATION OK	3b13e
Disconnect Terminal OK	3b13f
Simulate Terminal (type) TYPE OK TYPE = Ti (terminal) or Tasker or Execuport or 33-tty or 35-tty or 37-tty	3b13g
Logout OK	3b14

Help:

Show also: Quit

3c

Algorithm CONTENT OK

3c1

Entrypoint OK

3c2

More OK

3c3

Show CONTENT OK

3c4



Programs:		
Show also: jump, semicolon		3e
Attach Subsystem	CONTENT OK	3e1
Compile:		3e2
Assembler:		
Compile Assembler (file at)	DESTINATION (using) CONTENT (to file)	3e2a
File:		
Compile File (at)	DESTINATION (using) CONTENT (to file)	3e2b
LLO:		
Compile LLO (user program at)	DESTINATION OK	3e2c
Deinstitute:		3e3
Content:		
Deinstitute Content (analyzer program)	OK	3e3a
Seqgenerator:		
Deinstitute Seqgenerator (program)	OK	3e3b
Sort:		
Deinstitute Sort (key extractor program)	OK	3e3c
Delete:		3e4
All:		
Delete All (programs in buffer)	OK	3e4a
Last:		
Delete Last (program in buffer)	OK	3e4b
Execute (command in)	SUBSYSTEM	3e5
Goto (subsystem)	SUBSYSTEM OK	3e6
Institute Program	CONTENT (as) PROGTYPE OK	
PROGTYPE = Content (analyzer program)		
OR Sort (key extractor program)		
OR Seqgenerator (program)		3e7
Load Program	CONTENT OK	3e8
Process Commands (from)	STRUCTURE (at) DESTINATION OK	3e9
Quit	OK	3e10

Nls:		
Quit Nls OK		3e10a
To:		
Quit To SUBSYSTEM OK		3e10b
Reset:		3e11
Buffer:		
Reset Buffer (size) OK		3e11a
Nddt:		
Reset Nddt (control-h) OK		3e11b
Run Program CONTENT OK		3e12
Set:		3e13
Buffer:		
Set Buffer (size to) CONTENT OK		3e13a
Nddt:		
Set Nddt (control-h) OK		3e13b
Show Status (of programs buffer) OK		3e14

Readmail:  
Show also: Quit 3f

Accept: 3f1

Authors:  
Accept Authors ALL/SOME OK 3f1a

    /ALL/SOME = All !or! CONTENT 3f1a1

Titlewords:  
Accept Titlewords ALL/SOME CONTENT OK 3f1b

    /ALL/SOME = All !or! CONTENT 3f1b1

Dates:  
Accept Dates (from) CONTENT (to) CONTENT OK 3f1c

    /Note: Null date after "from" accepts everything. Null  
after "to" specifies today. 3f1c1

Brief (view for category) CONTENT OK 3f2

Category CONTENT OK 3f3

Delete (item number:) CONTENT (from all categories?) ANSWER OK 3f4

Expunge (all deleted items) OK 3f5

File (item number:) CONTENT (under category) CONTENT OK 3f6

Forward (item number) CONTENT (for) ACT/INFO (only to) CONTENT OK 3f7

    /ACT/INFO = Action !or! Information 3f7a

Interrogate OK  
(Category:) CONTENT  
(file it?) ANSWER (category:) CONTENT  
(forward it?) ANSWER (to) CONTENT  
(delete it from this category?) ANSWER 3f8

    /Note: the last three interrogations repeat for each item in  
the specified category. 3f8a

Next (item) OK 3f9

Omit: 3f10

Authors:  
Omit Authors ALL/SOME OK 3f10a

    /ALL/SOME = All !or! CONTENT 3f10a1

Titlewords:		
Omit Titlewords ALL/SOME OK		3f10b
/ALL/SOME = All !or! CONTENT		3f10b1
Dates:		
Omit Dates (from) CONTENT (to) CONTENT OK		3f10c
/Note: Null date after "from" omits nothing. Null after "to" specifies today.		3f10c1
Output (item number:) ALL/SOME (to printer) OK		3f11
/ALL/SOME = All !or! CONTENT		3f11a
Resend (item number:) CONTENT (when?) CONTENT OK		3?F12
/Note: will accept days of the week or the date after "when?".		3f12a
Show (item number:) ALL/SOME OK		3f13
/ALL/SOME = All !or! CONTENT		3f13a
Undelete (item number:) CONTENT (in all categories?) ANSWER OK		3f14
Verbose (view for category) CONTENT OK		3f15

Sendmail:	
Show also: quit	3g
Authors CONTENT OK	3g1
Branch (at) SOURCE OK	3g2
Comments CONTENT OK	3g3
Done OK	3g4
Execute SUBSYSTEM OK	3g5
Expedite OK	3g6
File SPECIFICATION OK	3g7
DESTINATION:	
File DESTINATION OK:	3g7a
Named:	
File Named CONTENT OK:	3g7b
Goto SUBSYSTEM OK	3g8
Group (from) SOURCE OK	3g9
Hardcopy (located at) CONTENT OK	3g10
Initialize (specifications) OK	3g11
Insert:	3g12
Link:	
Inset Link (to follow) DESTINATION OK [Won't work 9APR74]	3g12a
Status:	
Insert Status (form to follow) DESTINATION LEVEL-ADJUST OK:	3g12b
Interrogate OK	
(type of source:) ITEM	
(title:) CONTENT	
(send to:) CONTENT	
(show status?) ANSWER	
(finished?) ANSWER	3g13
/ITEM = STRUCTUPE (at) CONTENT !or!	
File DESTINATION !or!	
File Named CONTENT !or!	
Message CONTENT !or!	
Hardcopy CONTENT	3g13a
Keywords CONTENT OK	3g14
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Message	CONTENT OK	3g15
Number	SPECIFICATION	3g16
/SPECIFICATION = OK	!to get one number or!	
CONTENT OK	!to specify a reserved number!	3g16a
Obsoletes (item number(s))	CONTENT OK	3g17
Plex (at)	SOURCE OK	3g18
Process (send-mail form at)	DESTINATION OK	3g1=
Reserve:		3g20
Journal:		
Reserve Journal (numbers -- how many?)	CONTENT OK	3g20a
Hardcopy:		
Reserve Hardcopy (numbers -- how many?)	CONTENT OK	3g20b
Nic:		
Reserve Nic (numbers -- how many?)	CONTENT OK	3g20c
Rfc:		
Reserve Rfc (number)	OK	
(title)	CONTENT	
(author)	CONTENT	
(send to)	CONTENT	
(online document?)	ANSWER	
(show status?)	ANSWER	
OK		3g20d
Rins:		
Reserve Rins (numbers -- how many?)	CONTENT OK	3g20e
Special:		
Reserve Special (numbers -- how many?)	CONTENT OK	3g20f
Rfc (number)	CONTENT OK	3g21
Send (for)	CATEGORY (only to)	CONTENT OK
/CATEGORY = Action	!or! Information	3g22a
Show (status)	OK	3g23
Statement (at)	CONTENT OK	3g24
Subcollections	CONTENT OK	3g25
Title	CONTENT OK	3g26

Update (to item number(s)) CONTENT OK

3g27

Unrecorded OK

3g28

Useroptions:

3h

Viewspecs SWITCH OK  
SWITCH = Default VIEWSPECS  
or On  
or Off

3h1

Control (characters for terminal) DEVICES OK (control character)  
CONTROLFUNCTIONS (character(s)) CONTENT (echo as) CONTENT OK  
DEVICES = Tasker or Ti (terminal) or Nvt  
or Lineprocessor or Imlac or Execuport  
or 33-tty or 35-tty or 37-tty  
CONTROLFUNCTIONS = Ca or Cd or Rpt or Insert  
or Bc or BW or Bs or Litesc  
or Ignore or Sc or Sw or Tab

3h2

Currentcontext (length) NUMBER OK  
NUMBER = CONTENT !of the number of characters printed!

3h3

Execute (command in) SUBSYSTEM

3h4

Feedback FEEDSPECS OK  
FEEDSPECS = Verbose  
or Terse  
or Length NUMBER  
or Indenting NUMBER  
NUMBER = CONTENT !of the number of characters or spaces!

3h5

Goto (subsystem) SUBSYSTEM OK

3h6

Herald HERALDSPECS OK  
HERALDSPECS = Verbose  
or Terse  
or Length NUMBER  
NUMBER = CONTENT !of the number of characters printed!

3h7

Jump RINGTYPE (ring entries) NUMBER OK  
RINGTYPE = Return !infile-return ring!  
or Filereturn !file-return ring!  
NUMBER = CONTENT !of number of entries in ring!

3h8

Leveladjust SWITCH OK  
SWITCH = On  
or Off

3h9

Printoptions PRINTSPECS OK  
 PRINTSPECS = Right (margin is column) NUMBER  
               or Left (margin is column) NUMBER  
               or Bottom (margin is line) NUMBER  
               or Page (size is (lines)) NUMBER  
               or Indenting (per level) NUMBER  
               or Tab (stop settings) TABTEXT  
 NUMBER = CONTENT !of a number!  
 TABTEXT = CONTENT !of one of the following forms:  
 (1) c    c    c    c        c    c    c    c        c  
       where c stands for any character except <SP>  
 (2) 8,16,24,39,...  
       where the number represents the column position (starting  
       from 1 not 0) for the next tab stop! 3h10

Prompt PMODE OK  
 PMODE = Off or Partial or Full 3h11

Quit OK 3h12

  Nls:  
 Quit Nls OK 3h12a

  To:  
 Quit To SUBSYSTEM OK 3h12b

Recognition (mode) RMODE OK  
 RMODE = Anticipatory  
           or Demand  
           or Fixed  
           or Expert (secondary mode) RMODE2  
 RMODE2 = Anticipatory or Demand or Fixed or Expert 3h13

Reset: 3h14

  All:  
 Reset All OK 3h14a

  Control:  
 Reset Control (characters for terminal) TERMINALS OK  
 TERMINALS = Ti (terminal) or Tasker or Nvt  
               or Lineprocessor or Imlac or Execuport  
               or 33-tty or 35-tty or 37-tty or All 3h14b

  Currentcontext:  
 Reset Currentcontext (length) OK 3h14c

  Feedback:  
 Reset Feedback FEEDPARAMS OK  
 FEEDPARAMS = Mode or Length or Indenting 3h14d

Herald:		
Reset Herald	HERALDPARAMS OK	
HERALDPARAMS =	Mode or Length	3h14e
Jump:		
Reset Jump	RINGTYPE (ring entries) OK	
RINGTYPE =	Return or Filereturn	3h14f
Leveladjust:		
Reset Leveladjust	OK	3h14g
Printoptions:		
Reset Printoptions	PRINTSPECS OK	
PRINTSPECS =	Right (margin)	
	or Left (margin)	
	or Bottom (margin)	
	or Page (size)	
	or Indenting (per level)	
	or Tac (stop settings)	3h14h
Prompt:		
Reset Prompt (mode)	OK	3h14i
Recognition:		
Reset Recognition (mode)	OK	3h14j
Viewspecs:		
Reset Viewspecs	OK	3h14k
Show:		3h15
All:		
Show All	OK	3h15a
Control:		
Show Control (characters for terminal)	TERMINALS OK	
TERMINALS =	Ti (terminal) or Tasker or Nvt	
	or Lineprocessor or Imlac or Execuport	
	or 33-tty or 35-tty or 37-tty or All	3h15b
Currentcontext:		
Show Currentcontext	OK	3h15c
Feedback:		
Show Feedback	OK	3h15d
Herald:		
Show Herald	OK	3h15e
Jump:		
Show Jump	OK	3h15f

Leveladjust: Show Leveladjust OK	3h15g
Printoptions: Show Printoptions OK	3h15h
Prompt: Show Prompt OK	3h15i
Recognition: Show Recognition OK	3h15j
Viewspecs: Show Viewspecs OK	3h15k
semicolon: ; TYPEIN OK	3h16
Calculator:	3i

#### ADDRESS:

a description of a point in a file. It can be a sequence (ending with an OK) of one or more of the following elements separated by spaces and ending with an OK. Each element moves your Control Marker (CM) to a new position relative to the prior position of the CM if the new element points to something that is really there. Whenever you omit the ADDRESS field (by typing an OK at A:), the prior position of the CM is taken. By inserting a Link, you insert an indirect ADDRESS that you can then point to.

4

FILEADDRESS: SITE, DIRECTORY, FILENAME,  
a filename optionally preceded by directory optionally preceded by a site in the form above. If you use FILEADDRESS in an ADDRESS, it must come first. It may include stars or Alt Mode (ALT/ESC)

4a

#### Note:

a comma is unnecessary after the FILENAME in those instances when only a FILEADDRESS is called for, not a whole ADDRESS, such as in Load File command.

4a1

#### FILENAME:

Each file in the system has a full filename which is divided into parts called fields. "." and ";" divide the fields, thus: name.extension;version-number. Each field except the number can be up to 39 characters and can be recognized one field at a time with <↑F>, or all fields (default extension: NLS, default version: latest except when deleting, then oldest) with ALT.. The system assigns a directory to each user in which files reside. NLS files have as their extension "NLS". Version numbers go up when you update.

4a2

#### star convention:

in order to specify more than one file in a command, a star may be placed in any field of a filename. For example, to get all the versions of a file, type <directory>name.extension;\*. Modification files have the extension ".PC;". When you use "\*" in a command it does not touch files with the extension ".PC;" unless it affects the permanent file that bears the modifications.

4a2a

#### ALT: Altmode

If you have typed enough characters in a directory or file name to differentiate it from other names, you may type <ALT> or <ESC> and the command will go on as if you had typed the whole name. Altmode calls only files with the extension "NLS." Altmode calls the highest version number except when you are deleting; then it calls the lowest. You may use \$ in a link to represent Altmode. <Control-f> works as Altmode in a filename for a single field only; then continue with the next field. Altmode works in filenames in the following commands:

4a2b

directory field--

If you are connected to a directory, you do not have to type the directory field of the filename in order to retrieve another file in that directory.

4a2c

extension conventions:

The filename's extension field for an NLS file is .NLS; Other extensions denote other functions.

- .PC; designates this file as a modification file
- .TXT; represents a sequential file unloadable in NLS.
- .REL; means this file contains compiled code for a userprogram.

4a2d

defaults:

The default directory for links is determined by the Set Link default command. The default file for links is the current file. There can be no default file if the directory IS specified. The default ADDRESS is the current location of the link. The default viewspecs or filter are the current ones in effect.

4a3

INFILEADDRESS:

4b

POSITION: .lb2c3d4e5fr6h... (preceded by a period in A:) move your CM in relation to its current location with the character that corresponds to the direction you wish to move. A number before any of these letters indicates the number of moves (default for number is 1).

4b1

- .b back 4b1a
- .c next occurrence of content 4b1b
- .d down 4b1c
- .e end 4b1d
- .fr file return 4b1e
- .h head 4b1f
- .l link 4b1g
- .n next 4b1h
- .o origin 4b1i
- .p predecessor 4b1j
- .r return 4b1k
- .s successor 4b1l
- .t tail 4b1m
- .u up 4b1n
- .w next occurrence of word .Ybs=1 4b1o

STRINGPOSITION: -lc2e3f4i5l6n7v8w (preceded by plus or minus) Letters PRECEDED IMMEDIATELY BY A PLUS (+) mean SKIP FORWARD, BY A MINUS (-) mean SKIP BACKWARD. A number between the plus or minus and the letter indicates the number of skips.

4b2

- c skip character 4b2a
- e skip to end (last character) of statement 4b2b
- f skip to front (first character) of statement 4b2c
- i skip invisible 4b2d
- l skip link 4b2e
- n skip number 4b2f

v skip visible 4b2g  
w skip word 4b2h

SID: Statement Identifier: 012 4b3

STATEMENTNUMBER: 1A2B3C4D5E... 4b4

STATEMENTNAME: statementname 4b5

NEXTNAME: \*statementname (preceded by a star)  
moves your CM to the first character of the statement canonically  
next with that name. To search for the first name, use O in front  
of star name.

EXAMPLE: If statement name is jonathan, type: O \*jonathan  
If you use a statement name alone as an ADDRESS element (no \*),  
the system will randomly search for any statement with that name.  
Thus NEXTNAME is slower but more predictable when two statements  
have the same name. show also: BRANCHNAME, ADDRESS, 4b6

BRANCHNAME: !statementname (preceded by exclamation !)  
moves your CM to the name in the branch under the statement  
containing your CM.

EXAMPLE: Typing: pigs !chauvinist  
would take you to the statement named chauvinist in the branch  
named pigs. 4b7

EXTERNALNAME: &statementname (preceded by ampersand)  
moves your CM to any occurrence of the name in the SYSGD file of  
directory NLS if the name is not found in current file. 4b8

CHARACTERADDRESS: 'CHARACTER (preceded by single quote)  
where CHARACTER = a single character  
A character search moves the CM to the next occurrence of that  
character. If the character is not found in the current  
statement, the search will go on to the next statement in the  
hierarchy, and so on to the end of the file. After you use a  
CHARACTERADDRESS, if you want to jump to a subsequent occurrence of  
that character, use the TAB command. 4b9

#### Special effects

CHARACTERADDRESS may be followed by the equal sign and a Number  
and a "c"

e.g.: 'a=2c indicating the second occurrence of the letter a.  
This may be further followed by another equal sign and a Number  
and a "s" meaning to search only within that number of  
statements. A "w" can be used instead of a "c" to mean the Nth  
occurrence of CHARACTER as a word. (If a number is not specified  
it will be taken to be 1)

EXAMPLE: To search for the word "a" within the next 2  
statements only, type: 'a=w=2s 4b9a

CONTENTADDRESS: "TYPEIN"=2W3S

where TYPEIN = the content to be searched for (surrounded by quotes)

This may be followed by "=" and a Number N and a "w" indicating the Nth occurrence of TYPEIN as a word, and may be further followed by "=" and a Number N and a "s" meaning to search only within N statements. A "c" can be used instead of a "w" to mean the Nth occurrence of TYPEIN as any string. (If a number or letter is not specified it will be taken to be 1)

EXAMPLE: Type: "abit"=s for an instatement content search for "abit"

4b10

word-search: e.g. "word"=w

A word search moves the CM to the next occurrence of that word. If the word is not found in the current statement, the search will go on to the next statement in the hierarchy, and so on to the end of the file. After you use a word search in an ADDRESS, if you want to jump to a subsequent occurrence of that word, use the TAB command

4b10a

MARKER: #MARKER (preceded by poundsign)

jumps to marker of that name

EXAMPLE: If marker name is signal, type: #signal

Markers are assigned to a particular character position and may be subsequently used as a name for that point in a file. You assign markers with the Mark command. A marker name is 1-5 alphanumeric characters (incl. hyphen & quote), and must be unique within a file. They are normally invisible when viewing your file, but you can see a list of all your file's markers with the Show File Marker list command. Marker assignments go away when you use the Delete Marker or Delete All Markers commands.

4b11

slash: / prints context of CM immediately

When a slash (/) element in an ADDRESS is reached, the location of the CM is immediately printed as a line feed break and anglebrackets, in its context of a few (default 7) characters on either side (you can control the number of characters--show 2 below). Then the next element in the ADDRESS is processed. The slash is used to determine where you have moved the CM without interrupting the ADDRESS. There is also a Slash (/) command which is not part of an ADDRESS.

4b12

backslash: \ prints statement containing the CM immediately

When a backslash (\) element in an ADDRESS is reached, the statement which now contains the CM will be immediately printed, without moving the CM, before the next element is processed. This element is used to determine at any point within your ADDRESS where your CM has moved. It is not to be confused with the Backslash (\) command, which is not used as an ADDRESS element, and which does move the CM.

4b13

DIROPT: = a series of the following command-words:  
 /After each one you enter, you will be asked (Finished?). If you answer  
 Yes or OK the option field will be terminated; if you answer No, you may  
 then enter another command-word/

5

Deleted (files only) :	5a
lists data for files deleted but not expunged	5a1
Undeleted (files only):	5b
lists data for undeleted files; this is the default	5b1
All (files):	5c
lists data for both deleted and undeleted files	5c1
For (file) CONTENT:	5d
lists only file or files associated with one name (affected by action of star convention and Altmode)	5d1
Everything:	5e
everything printable about each file	5e1
Verbose:	5f
lists size, last writer, last write date, and last read date for each file	5f1
Account:	5g
account number to which file storage is being charged	5g1
Protection:	5h
protection status of file	5h1
Last (writer):	5i
user who last opened file for write access	5i1
Number (of) Accesses:	5j
number of times file has been written and read	5j1
Number (of) Versions (to keep):	5k
lists the number of versions of each file now being kept	5k1
Dump (tape number):	5l
tape number of last dump	5l1
Archive Status:	5m
one of the following (Show function Archive): already archived; don't delete after archiving; archive not allowed, archive pending; no special status	5m1
Archive Tape (numbers):	5n
lists tape numbers this file is archived on	5n1
Length ((and bytesize)):	5o
size in bytes; then byte length in parentheses	5o1
Size (in pages):	5p
size in disk pages	5p1
Miscellaneous:	5q
info such as whether it's a "long file" or permanent file	5q1
Date (of) Archiving:	5r
date the file was archived (if at all)	5r1
Date (of) Creation:	5s
date this version was created	5s1
Date (of) Last (dump):	5t
date this version of the file was last dumped on tape	5t1
Date (of) Original (version creation):	5u
date first version of this file was created	5u1
Date (of) Read:	5v
date file was last opened for read access	5v1

Date (of) Write:	5w
date file was last opened for write access	5wl
Time (and date of) Archiving:	5x
time and date the file was archived (if at all)	5xl
Time (and date of) Creation:	5y
time and date this version was created	5yl
Time (and date of) Last (dump):	5z
time and date this version of the file was last dumped on tape	5zl
Time (and date of) Original (version creation):	5a@
time and date first version of this file was created	5a@l
Time (and date of) Read:	5aa
time and date file was last opened for read access	5aal
Time (and date of) Write:	5ab
time and date file was last opened for write access	5abl
/(Note) NULL/Reverse means that you can specify the command-word	
Reverse, or that you can do nothing for this field and go on to the	
next command-word.	
	5ac
Group (group by:) NULL/Reverse No (grouping):	5ad
Backs out of grouping; files will not be listed in categories; the	
Sort options can still be used to sort the whole list. Whether you	
specify Reverse or omit it has no effect on this DIROPT.	
	5adl
Group (group by:) NULL/Reverse Account:	5ae
Files charged to the same account number will be grouped together,	
with groups sorted highest number first for Reverse.	
	5ael
Group (group by:) NULL/Reverse Archive Date:	5af
Files archived on the same date will be grouped together, with	
groups sorted most recent date first for Reverse.	
	5afl
Group (group by:) NULL/Reverse Archive Status:	5ag
Files with the same archive status will be grouped together.	
	5agl
Group (group by:) NULL/Reverse Archive Tape:	5ah
Files stored on the same archive tape will be grouped together,	
with groups sorted highest tape number first for Reverse.	
	5ahl
Group (group by:) NULL/Reverse Creation (date):	5ai
Versions created on the same date will be grouped together, with	
groups sorted most recent date first for Reverse.	
	5ail
Group (group by:) NULL/Reverse Deletion (status):	5aj
Separates deleted from Undeleted files if you also ask for All	
(files), with deleted files first for Reverse	
	5ajl
Group (group by:) NULL/Reverse Dump Date:	5ak
Files last dumped on tape on the same date will be grouped	
together, with groups sorted most recent date first for Reverse.	
	5akl
Group (group by:) NULL/Reverse Dump Tape:	5al
Files dumped on the same tape will be grouped together, with	
groups sorted highest tape number first for Reverse.	
	5all
Group (group by:) NULL/Reverse Last (writer):	5am
Files with the same last writer will be grouped together	
	5aml
Group (group by:) NULL/Reverse Number (of versions to keep):	5an
Files with the same number of versions being kept will be grouped	
together, with groups sorted highest number first for Reverse.	
	5anl
Group (group by:) NULL/Reverse Original (version creation):	5ao
Files whose original versions were created on the same date will	
be grouped together, with groups sorted most recent date first for	
Reverse	5aol

Group (group by:) NULL/Reverse Protection:	5ap
Files with the same protection status will be grouped together.	5ap1
Group (group by:) NULL/Reverse Read (date):	5aq
Files with the same date of last read will be grouped together, with groups sorted most recent date first for Reverse.	5aq1
Group (group by:) NULL/Reverse Write (date):	5ar
Files with the same date of last write will be grouped together, with groups sorted most recent date first for Reverse.	5ar1
Sort (sort by:) NULL/Reverse Account:	5as
Sort WITHIN groups (or sort the whole list if it hasn't been grouped) by files charged to the same account number, with highest number first for Reverse.	5as1
Sort (sort by:) NULL/Reverse Alphabetical:	5at
Sort WITHIN groups (or sort the whole list if it hasn't been grouped) by alphabetical order of filenames (the sort will go back to this default) or, if you specify Reverse by reverse alphabetical order of filenames.	5at1
Sort (sort by:) NULL/Reverse Archive Status:	5au
Sort WITHIN groups (or sort the whole list if it hasn't been grouped) by files with the same archive status.	5au1
Sort (sort by:) NULL/Reverse Archive Tape:	5av
Sort WITHIN groups (or sort the whole list if it hasn't been grouped) by archive tape numbers, with highest tape numbers first for Reverse.	5av1
Sort (sort by:) NULL/Reverse Archive Time (and date):	5aw
Sort WITHIN groups (or sort the whole list if it hasn't been grouped) by time archived, most recent first for Reverse.	5aw1
Sort (sort by:) NULL/Reverse Bytesize:	5ax
Sort WITHIN groups (or sort the whole list if it hasn't been grouped) by size of bytes, largest bytesize first for Reverse.	5ax1
Sort (sort by:) NULL/Reverse Creation (time and date):	5ay
Sort WITHIN groups (or sort the whole list if it hasn't been grouped) by time this version was created, most recent first for Reverse.	5ay1
Sort (sort by:) NULL/Reverse Deletion (status):	5az
Sort WITHIN groups (or sort the whole list if it hasn't been grouped) by files with the same deletion status.	5az1
Sort (sort by:) NULL/Reverse Dump Tape:	5b@
Sort WITHIN groups (or sort the whole list if it hasn't been grouped) by latest dump tape numbers, with highest tape numbers first for Reverse.	5b@1
Sort (sort by:) NULL/Reverse Dump Time (and date):	5ba
Sort WITHIN groups (or sort the whole list if it hasn't been grouped) by time of last dump, most recent first for Reverse.	5ba1
Sort (sort by:) NULL/Reverse Last (writer):	5bb
Sort WITHIN groups (or sort the whole list if it hasn't been grouped) by name of last writer.	5bb1
Sort (sort by:) NULL/Reverse Length (in bytes):	5bc
Sort WITHIN groups (or sort the whole list if it hasn't been grouped) by size of file in bytes, largest file first for Reverse.	5bc1
Sort (sort by:) NULL/Reverse Number (of) Accesses:	5bd

Sort WITHIN groups (or sort the whole list if it hasn't been grouped) by number of times written and read, highest number first for Reverse. 5bd1

Sort (sort by:) NULL/Reverse Number (of) Reads: 5be

Sort WITHIN groups (or sort the whole list if it hasn't been grouped) by number of times read, highest number first for Reverse. 5bel

Sort (sort by:) NULL/Reverse Number (of) Versions (to keep): 5bf

Sort WITHIN groups (or sort the whole list if it hasn't been grouped) by number of versions kept for each file, highest number first for Reverse. 5bf1

Sort (sort by:) NULL/Reverse Number (of) Writes: 5bg

Sort WITHIN groups (or sort the whole list if it hasn't been grouped) by number of times written, highest number first for Reverse. 5bgl

Sort (sort by:) NULL/Reverse Original (version creation): 5bh

Sort WITHIN groups (or sort the whole list if it hasn't been grouped) by time and date the original version of this file was created, with most recent first for Reverse 5bh1

Sort (sort by:) NULL/Reverse Read (time and date): 5bi

Sort WITHIN groups (or sort the whole list if it hasn't been grouped) by time last read, most recently read first for Reverse. 5bi1

Sort (sort by:) NULL/Reverse Size (in pages): 5bj

Sort WITHIN groups (or sort the whole list if it hasn't been grouped) by size of file in pages, largest file first for Reverse. 5bj1

Sort (sort by:) NULL/Reverse Write (time and date): 5bk

Sort WITHIN groups (or sort the whole list if it hasn't been grouped) by time last written, most recently written first for Reverse. 5bk1