

NLS-8 GLOSSARY

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Sorting also is an aid to searching ...
and therefore it helps to make computer output
more suitable for human consumption. In fact, a listing
that has been sorted into alphabetic order often looks quite
authoritative even when the associated numerical information
has been incorrectly computed,
-- Donald E. Knuth
"The Art of Computer Programming" (1973)

Introduction

This list of terms was generated from the information available online in a file built to be read by an automatic question answering system (the "Help Command"). In generating this documentation goal has been to produce a true glossary, to be used for the most part as a dictionary. We imagine readers who are studying other NLS documentation, trying to recall what they have learned in classes or from co-workers, or are working online and want to supplement the Help command. NLS is a new medium with extensive new terminology. We explain terms peculiar to NLS, and in some cases explain terms familiar to some computer users but strange to the increasing number coming to NLS without computer background. It is possible to learn about NLS by browsing in this glossary, as it is possible to learn about English by browsing in a dictionary, but only in a somewhat haphazard way.

The source of the material and the small size of the vocabulary (in comparison to the number of words in a natural language) limited us in certain ways. One limitation is the size of loops. As in the case of any dictionary, definitions of terms lead to definitions of other terms which in the end lead back to the first term. The size of these loops has been taken as the measure of the power of a dictionary. Because of the limited size, the

highly cross-referenced source material, and limitations of time, the loops are sometimes rather short in this glossary.

Those familiar with the hierarchical arrangements characteristic of NLS will understand that it was difficult to level our information out to form an alphabetic list. The location of command is a case in point. Should the command "Delete word" be indexed under word? under Delete? or under Base, since it is part of the Base Subsystem? In the end we alphabetized all commands under their first word, and added lists of commands under the names of the various subsystems. Because commands to Delete exist in several subsystems, it was necessary to add (BASE) after the reference to Delete to guide the reader in selecting among several entries.

A similar problem appears in the names given to variables that appear in only one or a few commands. For example in the "Show Directory" and "Copy Directory" commands a user may optionally choose to see several secondary facts about the file. The choices are called collectively DIROPT in the command syntax. Where should DIROPT appear in the glossary? Since DIROPT appears in the the syntax of several commands, it appears alphabetically under D.

Some descriptions have references such as "pointing: See pointing". Descriptions cited in this way will be found in alphabetic order (under P in the case of "pointing"). Unless otherwise noted, a command description refers to a command in the BASE subsystem.

Comparison of the content of definitions in the Glossary with those read online with the Help command will sometimes reveal differences. In most cases it is because the online version is more up-to-date.

This experiment in generating usable offline documentation from a source optimally formatted for online viewing will be repeated in the future. We welcome suggestions and corrections. Please let us know the forms and media best suited to provide the information you need to learn and use NLS.

DEFINITIONS AND CONVENTIONS IN COMMAND SYNTAX

Terms to be defined are in Newsgothic type, as are TNLS examples. Definitions are in Times Roman, the type face of the body of this introduction. Each commandword begins with a capital letter, and the rest is lower case. Words in all upper case are variables, that stand for certain alternatives which are defined either below or in the body of the glossary. Citations to other parts of the glossary are in slanted type. Paragraphs that are subordinate to higher-level definitions are indented and in smaller type.

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

/ means or

SUBSYSTEM = Base / Programs / Sendmail / Calculator / Useroptions
(These are commandwords)

STRING = Character / Word / Visible / Invisible / Number
/ Link / Text
(These are commandwords)

STRUCTURE = Statement / Group / Branch / Plex
(These are commandwords)

ADDRESS:
a FILEADDRESS and/or an INFILEADDRESS ending with an OK (or just an OK in TNLS for prior location). FILEADDRESS if used must come first. Elements of an INFILEADDRESS, if more than one are used, must be separated by <SP>.

DESTINATION:
In TNLS: DESTINATION = ADDRESS.
In DNLS: DESTINATION = BUG / ADDRESS
When referring to Group or Text, two BUGS or two ADDRESSES are needed.

SOURCE:
In TNLS: SOURCE = ADDRESS / OPTION TYPEIN
In DNLS: SOURCE = BUG / ADDRESS / OPTION TYPEIN
When referring to Group or Text, two BUGS or two ADDRESSES are needed.

CONTENT:
In TNLS: CONTENT = TYPEIN / OPTION ADDRESS
In DNLS: CONTENT = BUG / TYPEIN / OPTION ADDRESS
When referring to Group or Text, two BUGS or two ADDRESSES are needed.

TYPEIN = a string of characters from the keyboard, ending with an OK.

TYPEIN has a special form when a FILEADDRESS or Link or Ident is called for. (You can tell from the noise words.)

OPTION = the <CTRL-U> character

LEVEL-ADJUST:
a lowercase d (for down) or one or more lowercase u's (for up), optionally terminated by a <SP> or OK; if you ignore the LEVEL-ADJUST and start typing the level will be the same.

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.

ANSWER: Type y for yes or n for no

You may usually type OK here. The command will be immediately executed.

OK: CA / OKINSERT / OKREPEAT

CA: Command Accept: confirms a command or terminates a field within a command.

DNLS default special character: CA/<CTRL-D>

TNLS default special character: CR/<CTRL-D>

OKINSERT: At the end of a command in Base subsystem only, executes the command and starts "Insert Statement" command, defaulting current location. Then you do: LEVEL-ADJUST CONTENT OK. INSERT mode continues until you type CD. In all other cases, OKINSERT has no special meaning; it is equivalent to Command Accept.

default special character: <CTRL-E>

OKREPEAT: At the end of any command, executes it and repeats it from the beginning, defaulting each command-word until reaching the first field not a commandword that you can specify. Then you take over the command. REPEAT mode continues until you type CD. Used elsewhere, OKINSERT has no special meaning; it is equivalent to Command Accept.

DNLS default special character: <CTRL-B>

CD: Command Delete. It aborts a command immediately and will also take you out of INSERT or REPEAT mode.

default special character: <CTRL-X>

A

- a Viewspec: show one level less: "Show one less level than was previously shown." This viewspec will change or modify viewspecs w and c (counting back from the deepest level), x and d (you won't see anything), e (one less than the level of the statement you are currently at) and b (each a cancels out one b).

1
1a

- A Viewspec: level indenting on: "Indent each level more than the last level." The number of spaces each level is indented is usually 3, but you can specify it with the Useroptions command Printoptions Indenting. This viewspec changes viewspec B and Q. This is a default viewspec. See also: Level, Capital-B, Capital-Q, Printoptions (USEROPTIONS).

1b

- A-colon: A: ADDRESS: See address.

1c

- Accept Connect (from terminal number) (for) CONTENT OK: The command "Accept Connect (from terminal number)" allows someone at the terminal number you specify for CONTENT to control your job as if he were you. Use the TENEX WHERE command to learn the terminal (TTY) number.

1d

- TNLS example:
 BASE C: Accept C: Connect (from terminal number) T/[A]: 5(for) C:
 Output (Only) OK:
 BASE C:

1d1

- access:

1e

- to files: see accessing,

1e1

- to ARC: See entering,

1e2

- accessing files: going to a file to read it or write on it. Wherever an ADDRESS is prompted by A: you can go to a particular file whose FILEADDRESS you know--type it in. You can also use the Load File command to open a file for read or write access. By pointing to a link you can access the file it specifies. A record of the files you have been in during your current NLS session is remembered, and the past 10 files can be accessed with the Jump File Return command, or File Return ring for a maximum of 25 files. The file-return ring provides another method of accessing those files easily with the Jump File Return command. When you use the Create File command in NLS, the new file is immediately loaded for you. Access to files may be protected.

1f

- Load File command in Base: See Load, 1f1
- Jump to Link command: See Jump Link, 1f2
- file-return ring: See Return, 1f3
- privacy provisions: See Privacy, 1f4
-
- accesslist: See Set NLS Private, 1g
- account: an assigned number or string to which your work is charged. You accept a default account number by responding with a carriage return when "(ACCOUNT)" is requested during the login process, 1h
- accumulator: Accumulators contain a number representing a calculated value such as a total. You may keep several running totals in separate accumulators. The Clear command clears an accumulator. The Use command specifies an accumulator other than your current accumulator. The Insert command inserts the value in the accumulator at the DESTINATION you specify. The Replace command replaces the number at the DESTINATION you specify with the value in the accumulator. The Evaluate command allows you to use the value in an accumulator by typing that accumulator's number preceded by a number sign thus: #1. 1i
- The Calculator Use command: See use (CALCULATOR), 111
- The Calculator Insert command: See insert (CALCULATOR), 112
- The Calculator Replace command: See replace (CALCULATOR), 113
- The Calculator Evaluate command: See evaluate (CALCULATOR), 114
-
- Add CONTENT OK: The Calculator subsystem command "Add" adds the number you specify for CONTENT to the accumulator. Then the accumulated total is ready for the next operation. See also: operators, accumulator, CONTENT, OK, 1j
- ADDRESS: prompted by A, asks you to specify a point in a file. It can be a sequence (ending with your CA) of one or more elements separated by spaces. Each element moves you to a new position relative to your prior position. If any of the elements are incorrect, the entire address fails. In TNLS, you can specify your current location by giving your CA when prompted for an ADDRESS. A link is an ADDRESS written in a file. In appropriate commands, you can point to the link instead of writing out the address. See also: pointing, INFILEADDRESS, 1k
- FILEADDRESS: SITE, DIRECTORY, FILENAME, altmode, escape. See FILEADDRESS, 1k1
-
- addressing: See pointing, 1l

A

AHI: Acronym for Augmentation of Human Intellect, a former name for ARC. 1m

AKW: Augmented Knowledge Workshop. 1n

allocation: file space allocation: the fixed amount of disk pages for each directory. When there are not enough pages, the message: "File space allocation exceeded" will appear. At this time, the user must Trim, or Delete, and Expunge files. 1o

Showing your disk status: See show disk (BASE). 1o1

expunging: See Expunge. 1o2

alpha-numeric: See character. 1p

alphanumeric: See character. 1q

alt: See esc. 1r

alternatives: when it is possible to do one of several things for a specific part of a command. In prompts, alternatives are always separated by slashes (/). For example, when you use the command Update File, you are prompted with OK/C: This shows you have two alternative commands available to you. Do not confuse alternatives with options. Options are parts of a command that you must type <CTRL-U> to use. 1s

altmode: See <ESC>. 1t

Ampersand: &: a character used for various special functions: 1u

setting the distribution of journal items for groups: See restricted (SENDMAIL). 1u1

using an externalname in an ADDRESS: See externalname. 1u2

address files on filereturn rings changed to ,fr: See fr. 1u3

Anglebrackets: 1v

to delimit links: See link. 1v1

typing the key "<" shows your previous subsystems: See lessthan. 1v2

typing the key ">" shows your current subsystem: See greaterthan. 1v3

to represent invisible characters: See Invisible. 1v4

ANSWER: The part of a command when NLS wants a yes or no answer. Type a "y" or an OK for "yes" or an "n" for "no." "Yes" proceeds

through the command; "no" cycles you back through part of the command. If prompting is on NLS prompts you "Y/N: ". 1w

Anticipatory: a recognition mode where each commandword will be completed after you type enough letters to uniquely define it. You may NOT type more than the minimum number of letters, since the commandword will have been recognized and the extra characters will go into the next field. Example: "Se" is enough to recognize the command Set. If you type "Set, " the "t" would be read as the next part of the command. The command would be interpreted as Set TENEX. 1x

Append Statement (at) SOURCE (to) DESTINATION (join with) CONTENT OK: The command "Append" attaches one statement to another. The appended statement is added to the end of the receiving statement. You may only append statements. Any substructure under the statement to be appended will appear before any substructure under the receiving statement. The characters you specify to "join with" for CONTENT will be inserted between the two statements (if you're in TNLS and don't want anything inserted, just give a Command Accept for CONTENT; for DNLS use <CTRL-N>). After execution you are at the last character of the receiving statement (the character preceding the appended material). 1y

TNLS example:

BASE C: Append C: Statement (at) A/[T]: 1b11(to) A: 1b10(join with) T/[A]: and furthermore 1y1
BASE C:

APR: Acronym for the Arithmetic Processor of the PDP-10. 1z

ARC: acronym for Augmentation Research Center: ARC is a laboratory within SRI located at 333 Ravenswood Avenue, Menlo park Calif., 94025 (415) 326-6200 Extension 3660. See also: Augmentation. 1a0

Architect: The person assigned to Augmented Knowledge (AKW) Workshop user communities responsible for matching the tools of the AKW with the needs of that user community. 1aa

Archive File CONTENT [(opt:)ARCHIVEOPT] OK: The command "Archive File" permits you to store files on tape to save disk space. With this command, you can mark the file you specify for CONTENT to be archived tonight or never to be archived. Retrieval takes 15 minutes to half an hour. Files unread for a few weeks are archived automatically. Check with your computer's operator to determine the exact date.

ARCHIVEOPT = 1ab

Delete (after archiving Finished?) ANSWER: The Archive File command option "Delete" undoes the Prevent option. This is the default case. Another ARCHIVEOPT is expected if you type "n" for ANSWER. 1ab1

Prevent (deletion after archiving Finished?) ANSWER: The Archive

A

File command option "Prevent" will mark the file you specified to be archived but leave it online after it is archived. This command will not affect a file that has already been archived or that has just been retrieved from archive. You must create a new version for this command to have effect. Another ARCHIVEOPT is expected if you type "n" for ANSWER,

1ab2

Not (allowed Finished?) ANSWER: The Archive File command option "Not" will prevent the file you specified from being copied onto tape if it is not read after several weeks. This command will not affect a file that has already been archived or that has just been retrieved from archive. You must create a new version for this command to have effect. Another ARCHIVEOPT is expected if you type "n" for ANSWER,

1ab3

Deferred (Finished?) ANSWER: The Archive File command option "Deferred" will mark the file you specify for CONTENT to be copied onto tape if it is not read after several weeks. Another ARCHIVEOPT is expected if you type "n" for ANSWER,

1ab4

Immediate (Finished?) ANSWER: The Archive File command option "Immediate" will mark the file you specify for CONTENT to be copied onto tape tonight. Another ARCHIVEOPT is expected if you type "n" for ANSWER,

1ab5

Reset (request status Finished?) ANSWER: The Archive File command option "Reset" will mark the file to be archived and deleted if it is not read for several weeks,

1ab6

Archived file: a file that has been copied off of the disk onto tape via the Archive system,

1ac

Retrieve command: See Retrieve,

1ac1

Archive command: See Archive,

1ac2

archiving-commands:

1ad

Archive File: See Archive,

1ad1

Reset Archive (request for file): See Reset archive,

1ad2

Undelete: See Undelete,

1ad3

arithmetic operations: The calculator works on the value in the current accumulator. An arithmetic operation requires as input an operator (+, -, x, or /) followed by a signed or unsigned number or an accumulator designated with the Use command. The number may be entered directly from the keyboard or indirectly as a simple arithmetic expression (e.g.: 1+5-6/15), or by a BUG or ADDRESS. If you omit the operator, the system adds the number to the accumulator. See also: accumulator, Use, BUG, ADDRESS,

1ae

- input is handled as follows: See Input, 1ae1
- numbers recognizable to the Calculator: See Numbers, 1ae2
- expressions: arithmetic expressions: See Evaluate, 1ae3
- Arithmetic-Processor: The central processing unit of the PDP-10, 1af
- ARPA: Acronym for the Advanced Research Projects Agency of the Department of Defense. It is also called DARPA which stands for Defense Advanced Research Projects Agency, 1ag
- ARPANET: Official acronym for the ARPA Computer Network, 1ah
- Server computer: See Server, 1ah1
- User computer: See User, 1ah2
- ARPA: Acronym for the Advanced Research Projects ... See ARPA, 1ah3
- Packet: strings of bits bounded by routing ... See Packet, 1ah4
- Subnet: The array of IMPs, TIPS and communication ... See Subnet, 1ah5
- asterisks: See Stars, 1ai
- Attach Subsystem SUBSYSTEM OK: The Programs' subsystem command "Attach" makes the SUBSYSTEM you specify available to you. Before you can attach, the program must be loaded. Attaching is done automatically when you load a program formatted to run as a subsystem. See loading (PROGRAMS), Detach, Append, 1aj
- subsystems already loaded but not usually attached: See Attachable, 1aj1
- TNLS example:
PROG C; Attach C; Subsystem C; Calculator OK;
PROG C: 1aj2
- Attachable subsystems already loaded: Use the programs subsystem command "Attach Subsystem" to make one of these subsystems available if it is not already. If you want a userprogram or subsystem always automatically available to you when you enter NLS, use the Useroptions subsystem command "Include", 1ak
- Supervisor: See Universal, 1ak1
- Syntax (generator): This subsystem allows you to generate lists of NLS command syntax. Use programs subsystem's Attach command to make it available. See also: Attach, Syntax, 1ak2

A

Base: See Base, 1ak3
 Sendmail: See Sendmail, 1ak4
 Useroptions: See Useroptions, 1ak5
 Calculator: See Calculator, 1ak6
 Programs: See Programs, 1ak7
 xxx: (for Wheels and Operators only, not documented here) See
 xxx, 1ak8

Augmentation: a term to describe extension, improvement, or
 amplification of human intellectual and organizational capabilities
 by means of close interaction with computer aids and by use of
 special procedural and organization techniques designed to support
 and exploit this interaction, For Augmentation Reserach Center,
 See also: ARC, 1al

Author: The Author of a document or message distributed via the
 sendmail subsystem is usually specified by the IDENT of the person
 logged in to distribute the mail. If you use "Interrogate" the
 author will be you unless you specify otherwise. Other IDENTs can
 be substituted or added with sendmail's Authors command. After you
 have mailed an item that you authored, a citation to it will appear
 in your INITIAL file under a branch with the STATEMENTNAME author.
 This is your automatic bibliography of all the items you "published"
 in the Journal via the sendmail subsystem, 1am

Sendmail's authors command: See authors (SENDMAIL), 1am1

Authors CONTENT OK: The sendmail subsystem command "Authors" lets
 you name the author(s) of a sendmail item. If you don't use this
 command, the ident under which you are logged in will be the author.
 Specify the IDENTs of the author(s) of the item for CONTENT, 1an

Sendmail's authors command: See authors (SENDMAIL), 1ao

B

b Viewspec: show one level more: "Show one more level than previously specified." This code is often combined with codes x, d, and e; each b in the string adds one more level. Each Viewspec b cancels out one Viewspec a. 2
2a

B Viewspec: level indenting off: "Don't indent the levels; print all statements at left margin." This turns off viewspec A or Q. See also: Level, Capital-A, Capital-B. 2b

B-colon: B: BUG: See Bug. 2c

back: the statement immediately preceding the statement where you are regardless of level or of source. In the illustration, 1b3 is back from statement 2. Next is the opposite of back. Typing the Uparrow (^) key will print the statement that is back from where you are. See also: illustration. 2d

backarrow: _: In TNLS backarrow _ usually appears when <CTRL-W> has been hit to indicate backspaced word (BW). See also: help, BC. 2e

backend: part of a software system that performs functions you specify during your interactions with a frontend system. 2f

backslash: \: prints the statement you are in: Typing the key \ prints the entire statement you are in. You may place the backslash among the elements in an ADDRESS. After you terminate the ADDRESS, you will see printed the entire statement pointed to by the element preceding the backslash in the address. In TNLS at the herald of a subsystem, the entire statement you are in prints immediately when backslash is typed. COMPARE address, slash, period. 2g

TNLS example:

BASE C: \

2d Dolphins are very intelligent mammals.

BASE C: 2g1

Backspace (in commands): erases parts of your command. You can backspace single characters and words you have typed in, and you can backspace previous commandwords and operands. Backspace all of the command with CD. You cannot backspace the effect of an editing command after it has been executed except by deleting all of the modifications since your last update. (You can copy things from an old version of a file if it still has what you want.) Define your own backspace control characters with the Control command in the Useroptions subsystem. See also: control (USEROPTIONS), resetting. 2h

B

character: Backspace Character: (BC) See Character, 2h1
 word: Backspace Word: (BW) See Word, 2h2
 Commands: backspacing at a prompt. See Commands, 2h3

BASE subsystem: The BASE subsystem is the major subsystem of NLS. It has commands that allow you to name, read, and write information online and output it to hardcopy. When you enter NLS, you begin in the BASE subsystem, 2i

How to use the BASE subsystem: See how, 2i1

commands in the BASE subsystem: See also: Command, HOW, SUBSYSTEM, 2i2

systems-commands: See Universal, 2i2a

Insert: add, duplicate, create information. See Insert, 2i2b

Show: see the status of special things. See Show, 2i2c

Set: See Set, 2i2d

Reset: See Reset, 2i2e

modifying-commands: Replace, Copy, Transpose, etc. See modifying-commands, 2i2f

viewing-commands: jumping, printing, reading, etc. See Viewing-commands, 2i2g

file-handling: See file-handling, 2i2h

archiving-commands: See archiving-commands, 2i2i

terminal-commands: See terminal-commands, 2i2j

display-commands only: See display-commands, 2i2k

recording, marking characters: See recording, 2i2l

BBN: Bolt Beranek and Newman Inc. 50 Moulton St., Cambridge, Mass. 021388 A commercial research and development organization under contract to ARPA for services to the ARPA Network, and under other contracts that lead to frequent interaction with ARC. BBN is responsible for the development of TENEX, 2j

BC: Backspace Character: See Character, 2k

Bells: If the system rings the bell on your terminal (or prints "ding-a-ling" on terminals that lack bells) either someone is trying

to connect (or link) to you, or you have asked the system to complete a command before giving it enough information, or you have mistyped a command character. Usually you can go on by typing the next logical character, or <CTRL-A> and the next character. See also: connect.

21

binding:

2m

hardcopy binding: ask FEEDBACK for information specific to you about binding documents.

2m1

Binding Precedence: Order of Operator Execution: The order of performing individual operations within an equation is determined by the heirarchy of operator execution (or binding precedence) and the use of parentheses. Operations of the same heirarchy are performed from left to right in an expression. Operations in parentheses are performed before operations not in parentheses. The order of execution of operators (from first to last) is as follows:

2m2

unary -, unary +: minus or plus sign in front of a number not addition or subtraction.

2m2a

.A Arithmetic AND: a . A b = bit pattern which has ones wherever both a and b had ones, and zero elsewhere.

2m2b

.V, . X Arithmetic OR: a . V b = bit pattern which has 1's wherever either an a or b had a 1 and 0 elsewhere.

a . X b = bit pattern which has 1's wherever either an a had a 1 and b had a 0, or a had a 0 and b had a 1, and 0 elsewhere.

2m2c

*, /, MOD (multiplication, dvision, remainder): * = multiplication

a MOD b gives the remainder of a / b.

2m2d

+, -: addition, subtraction.

2m2e

relational tests (e.g., >=, <=, >, <, =, #, IN, OUT)

2m2f

NOT Relational tests (e.g., NOT >)

2m2g

NOT,

2m2h

AND,

2m2i

OR,

2m2j

BLAP \blap\n[bla=bla=bla] 1a: appropriate data, b: information specified by context, c: redundant data not worth verbalizing in this context, 2: bullshit.

2n

Bootstrapping: A name for the research strategy of the ARC. By "bootstrapping" we mean taking advantage of the feedback in

B

recursive development of systems. That is, we try to test ways of augmenting intelligence by their usefulness in developing new systems to augment intelligence, through the use of the new system features by (mainly) the developers of the system. 2o

bracket: 2p

Angle brackets: See anglebrackets. 2p1

Square brackets in Content-analyzer Patterns: See Square-brackets. 2p2

Branch: a statement plus all its substatements with all of their substatements, and so on to the end. In the illustration, the branch defined (and addressed) by statement 1 consists of 1, 1a, 1b, 1b1, 1b2, 1b3; branch 3c consists of 3c, 3c1, 3c1a; branch 2 consists of statement 2. Branch 0, (the branch defined by the origin statement) in any file, consists of the entire file. 2q

end: See End, Statement. 2q1

illustration of file structure: See Illustration. 2q2

Branch (at) SOURCE OK: The Sendmail subsystem command "Branch" allows you to send an NLS branch. Specify the Branch to be mailed as the SOURCE. VIEWSPECS do not matter. 2r

BRANCHNAME: !statementname (preceded by exclamation !): an address element that restricts the search for a statementname to the branch whose source is the statement where you are (the location pointed to by the previous element in a multiple element address). The statementname of the source of your branch is the first statement tested in the search. You are placed at the first character of the appropriately named statement. For example, typing: pigs !chauvinist would take you to the statement named chauvinist in the branch named pigs. 2s

Break Statement (at) DESTINATION LEVEL-ADJUST OK: The command "Break" divides one statement into two statements. It will break immediately after the next visible following the DESTINATION you point to. You may specify the level of the second statement relative to the first one. 2t

TNLS example:
BASE C: Break C: Statement at A: jackal ^,
L: d
BASE C: 2t1

Effects: The second statement will begin with the next visible following the one you specified in the command. The invisible which was between the two visibles will disappear. If you want the second statement to be at the same level as the first

statement, just give a Command Accept for LEVEL-ADJUST. After execution you are at the first character of the second statement. 2t2

buffers: the computer memory space available for you to add programs. Loading a program that requires more program buffer space than you have, should automatically increase your program buffer space but will not delete it when you delete the program. You can see how much program space you are currently using with the Programs' Show Status command. You can control it using Programs' Set Buffer (space) command. Your user programs share buffer space with files you are using. Increasing the size of your program buffer space decreases the amount of space available for your files with a possible slowdown in response. 100 pages are available total. 2u

Programs' Show Status command: See Show (PROGRAMS). 2u1

Programs' Set Buffer size command: See Set Buffer (PROGRAMS). 2u2

Programs' Reset Buffer size command: See Reset (PROGRAMS). 2u3

bug: 2v

Report something that does not work as documented. See reporting. 2v1

A DNLS addressing feature (prompted by B). 2v2

BUG: To BUG in DNLS: To bug (prompted by B in DNLS) means to point to something on your screen. To BUG something, hold down on the rightmost button of the mouse until the traveling mark on the screen (the cursor) is positioned under the place you wish to point to. Then let up on the button. A bugmark (such as a blot-out, circle, underline, or inversion of a character on your screen) will indicate which character has been marked. The cursor is the traveling mark on the DNLS screen which you control with the hand-held mouse. See also: MOUSE. 2w

buttons: See Mouse. 2x

BW: Backspace Word: See Word. 2y

C

C

C Viewspec: show all levels: "Show all levels." Example: if you were previously looking at all lines of 2 levels only, viewspecs string ct would show you one line of all levels. This code releases any previous level truncation.

3

3a

C Viewspec: show statement names: "Show statement names." Statement names are shown enclosed in name delimiters at the beginning of named statements. Viewspec D turns off statement names. This is a default viewspec. See also: Statementname, Capital-D.

3b

C=colon: C: Commandword: a prompt in NLS that asks for a command word. If prompting is on, you will see a "C: ". Command words, normally a verb or a noun, tell NLS what to do. If the system prints a questionmark (in DNLS), or you hear a bell (in TNLS), you have typed a character that is not part of a command word that is possible at that point. See also: verb-nominal, prompts.

3c

CA: Command Accept: The key you type to carry out a command and make NLS ready for the next command to be specified. This is the key most often used when prompted by "OK: ". The control character for CA is <CTRL-D> and by default in TNLS <CR> (carriage return) acts as CA. The right-most button on the mouse also specifies command accept. See also: OKINSERT, OKREPEAT, CD.

3d

Making some other key work like <CTRL-D>: See control (USEROPTIONS).

3d1

CA is also used for content-analyzer filename extensions: See CA (PROGRAMS).

3d2

CA=colon: CA: Command Accept <CTRL-D>: See CA.

3e

.CA; content-analyzer Program: A filename with this extension points to a compiled L10 content-analyzer program. The Load Program command in the Programs subsystem will place it in your buffer and automatically institute it as your content-analyzer replacing any other that might be there. See Content-analyzer.

3f

Calculator subsystem: allows you to do arithmetic in a way integrated with the rest of NLS. Say Goto Calculator and type a number (NUM) followed by OK and then an arithmetic operator (Add, +, Subtract, -, etc.) followed by a number. Terminate numbers with an OK. If you have a column of numbers in a file, you can add the column by pointing to the numbers. You can Insert or Replace the result in any NLS file. The Format command specifies how the result

will appear. All work is held in a special Calculator file created for you. You may keep several running totals in up to ten accumulators and enter simple arithmetic expressions as if they were numbers.

	3g
file: Calculator file: See File.	3g1
arithmetic operations: See Arithmetic.	3g2
commands in the Calculator:	3g3
Add CONTENT OK: See Add (CALCULATOR).	3g3a
Clear: See Clear (CALCULATOR).	3g3b
Divide CONTENT OK: See Divide (CALCULATOR).	3g3c
Execute (command in) SUBSYSTEM: See Execute.	3g3d
Evaluate CONTENT OPERATOR OK: See Evaluate (CALCULATOR).	3g3e
Format: See Format (CALCULATOR).	3g3f
Goto (subsystem) SUBSYSTEM OK: See Goto.	3g3g
Insert (accum following) STRING/STRUCTURE: See Insert (CALCULATOR).	3g3h
Multiply CONTENT OK: see Multiply (CALCULATOR).	3g3i
NUM: See NUM (CALCULATOR).	3g3j
OKREPEAT <CTRL-B>: See OKREPEAT.	3g3k
Quit: See quit.	3g3l
Replace STRING/STRUCTURE (at) DESTINATION (by accumulator) OK: See Replace (CALCULATOR).	3g3m
Show: See Show (CALCULATOR).	3g3n
subtract CONTENT OK: see subtract (CALCULATOR).	3g3o
Total OK: See Total (CALCULATOR).	3g3p
Use: See Use (CALCULATOR).	3g3q
Write (new) file CONTENT OK: See Write (CALCULATOR).	3g3r
X: x command: See Multiply.	3g3s
star command: *: See Multiply.	3g3t
plus command: +: See Add.	3g3u

C

minus command: -: See Subtract, 3g3v
 slash command: /: See Divide, 3g3w
 semicolon command: ; : See Semicolon, 3g3x

Capital-A viewspec: level indenting on: "Indent each level more than the last level." The number of spaces each level is indented is usually 3, but you can specify it with the Useroptions command Printoptions Indenting. This viewspec changes viewspec B and Q. This is a default viewspec. See also: Level, Capital-B, Capital-Q, Printoptions (USEROPTIONS), 3h

Capital-B viewspec: level indenting off: "Don't indent the levels; print all statements at left margin." This turns off viewspec A or Q. See also: Level, Capital-A, B Viewspec, 3i

Capital-C viewspec: show statement names: "Show statement names." Statement names are shown enclosed in name delimiters at the beginning of named statements. Viewspec D turns off statement names. This is a default viewspec. See also: Statementname, Capital-D, 3j

Capital-D viewspec: don't show statement names: "Don't show statement names." If the first word of any statement is enclosed in the name delimiters defined for that statement, it will not be shown when the statement is output or viewed. To show statement names, use Viewspec C. See also: Statementname, Capital-C, 3k

Capital-E viewspec: .paginate when printing (TNLS only): "Paginate when printing." TNLS will format your text into pages--numbered, separated by a cutting line consisting of ---'s, and with margins--when printing at the terminal via any Print command. This is a default viewspec. See also: Capital-F, 3l

Capital-F viewspec: TNLS: no paging/DNLS: recreate display: TNLS output by Print commands at your terminal will not be separated by pages. To turn pagination on, use Viewspec E. See also: Paginate, print, Capital-E. In DNLS use capital-F to be sure your screen recreates. See also: f, 3m

Capital-G viewspec: statement numbers/SIDs right: "Place statement identification at the right margin." If viewspec m is on, and you turn G on, whichever type of identification is currently on (viewspec I--SIDs or J--statement numbers) will appear at the right margin after each statement. Viewspec H turns G off and shows identification at the left of statements. Example: the string mGJ will show statement numbers at the right margin. See also: Statementnumber, SIDs, m, Capital-I, Capital-J, Capital-H, 3n

Capital-H viewspec: statement numbers/SIDs left: "Place statement identification at the left of each statement." This viewspec takes effect when viewspec m is on. Whichever type of identification is currently on (I--SIDs or J--statement numbers) will appear at the

beginning of each statement. Example: if you have SIDs on at the right and want to change to statement numbers at the left, use the string HJ. This is a default viewspec. See also: Statementnumber, SIDs, m, Capital-I, Capital-J, Capital-G.

3o

Capital-I viewspec: show SIDs, not statement numbers: "Use SIDs for statement identification." If viewspec m is on, turning I on will show each statement's SID. Viewspec J shows statement numbers instead. The viewspecs G (right margin) and H (left of statement) determine where the statement numbers will appear. Example: the string mIG will make SIDs appear at the right margin after each statement. See also: Statementnumber, SID, m, Capital-J, Capital-H, Capital-G.

3p

Capital-J viewspec: show statement numbers, not SIDs: "Use statement numbers for statement identification." This viewspec takes effect when viewspec m is on. It is also used to change I (show SIDs). The viewspecs G (right margin) and H (left of statement) determine where the statement numbers will appear. Example: if you have SIDs on at the right and want to change to statement numbers at the left, use the string HJ. This is a default viewspec. See also: Statementnumber, SID, m, Capital-I, Capital-H, Capital-G.

3q

Capital-K viewspec: statement signatures on: "Show statement signatures after each statement." Viewspec L suppresses statement signatures; K switches them on. Statement signatures contain the ident of the person who last edited that statement and the date and time of the last edit. See also: IDENT, Capital-L.

3r

Capital-L viewspec: statement signatures off: "Don't show statement signatures." L switches off K (show statement signatures). This is a default viewspec. See also: Statement, Signatures, Capital-K.

3s

Capital-O viewspec: user sequence generator on: "Turn on user-written sequence generator." Viewspec P employs the system's standard sequence generator in lining up statements for output. It is possible (but only knowing advanced L10 programming) to write your own sequence generator program. Viewspec O, if turned on, would then use yours instead of the standard one. See also: Sequence, Capital-P.

3t

Capital-P viewspec: user sequence generator off: "Do not use user-written sequence generator program." This viewspec returns control to the system's standard sequence generator in lining up statements for output. Viewspec O switches to a user-written sequence generator program (writing one requires knowing advanced L10 programming). This is a default viewspec. See also: sequence, Capital-O.

3u

carriagereturn: See cr.

3v

CASEMODE: Upper, Lower, or First (letter upper): "Upper" sets all alphabetic characters to upper case. "Lower" sets all alphabetic characters to lower case. "First (letter upper)" sets the first

C

alphabetic character only of all words to uppercase. [Side-effect: if you Force Text in first letter upper and the text starts in the middle of a word, the first character of the text (in the word it begins in) will be capitalized.] See also: word, 3w

catalogs and indexes: online and offline sources for finding items recorded in the NLS journal and XDOC collections. There are three kinds of Journal indexes. Author, Number, and Title-word. Jump (to) Link <userguides, locator, > to access the indexes. 3x

categories of command lists: The BASE subsystem is the subsystem in which you are placed when you enter NLS and which has many capabilities such as File handling, viewing, and printing. Universal commands are commands available in most subsystems. Any of the other subsystems listed below are available via the Goto subsystem command in all subsystems. See also: SUBSYSTEM. 3y

Universal (supervisor) subsystem: See Universal. 3y1

Base: See Commands (BASE). 3y2

Help: See Commands. 3y3

questionmark (?): See Questionmark. 3y3a

Identification: See identification. 3y4

Sendmail: See Commands (SENDMAIL). 3y5

insert journal submission form (Base command): See insert sendmailform. 3y5a

Programs: See Commands (PROGRAMS). 3y6

Useroptions: See useroptions. 3y7

Calculator: See calculator. 3y8

CD: Command Delete: The key you type to abort a command at any time before the final confirm. Typing CD leaves you ready to specify another command. The control character for CD is <CTRL-X>, and by default in TNLS acts as CD. The middle button on the mouse also specifies command delete. You can make another character stand for CD by using the Control Character command in the Useroptions subsystem. See also: Backspace, Ctrl-character, Resetting. 3z

centerdot: changed to OKREPEAT: See OKREPEAT. 3ae

changing: ways of changing viewspecs: altering how a file will be presented. You can change the viewspec codes in effect in the following ways: using the BASE subsystem's Set Viewspecs command to enter new codes (which change previous ones), entering codes while

holding down the two rightmost buttons on the mouse in DNLS, using the BASE Reset Viewspecs command which sets them back to your default, and by entering codes in some NLS commands, namely when prompted with "V:". When you enter viewspecs, they remain in effect until you change them again. 3aa

The BASE Set Viewspecs command: See Set Viewspecs. 3aa1

The BASE Reset Viewspecs: See Reset Viewspecs. 3aa2

The BASE Show Viewspecs (status) command: See Show Viewspecs (BASE). 3aa3

The USEROPTIONS Viewspecs Default command: See Viewspecs (USEROPTIONS). 3aa4

The USEROPTIONS Show Viewspecs command: See Show Viewspecs (USEROPTIONS). 3aa5

Character: single elements that can be visible or invisible such as letters, numbers, punctuation marks, spaces, carriage returns and control characters. Each character is represented in the TENEX/PDP-10 system by at least 7 bits. 3ab

non-printing characters (invisible): See Invisible. 3ab1

printing characters (visible): See Printing. 3ab2

numbers: See Number. 3ab3

CTRL-character: <CTRL- >: See CTRL-character. 3ab4

<UKC>: Unknown Character: See UKC. 3ab5

Character: Backspace Character: BC: The key you type to erase the last character you typed. In TNLS, BC or <CTRL-A> will echo both a slash and the character it has deleted. You may backspace as many times as you like. In DNLS, the BC key on the keyboard, the left mouse button and, <CTRL-A> all specify backspace character. In DNLS, the backspaced character(s) will simply disappear. When you use BC in a commandword specification, it will erase the whole word. See also: Ctrl-character, Backspace. 3ac

CHARACTERADDRESS: ('CHARACTER preceded by single quote): where CHARACTER = a single character ; an address element that moves you 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. See also: Character, Statement, Hierarchy, TAB-command. 3ad

Specialeffects: CHARACTERADDRESS may be followed by the equal

C

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.

3ad1

citation: See initial.

3ae

class-I: See Userprograms.

3af

Class-II and III user-programs: in Directory XPROGRAMS: ARC places
 user-programs into class I, II, and III. Help descriptions are
 provided only for class I which contains user-programs approved by
 both of the ARC assistant directors and the ARC user development
 coordinator. These are maintained by ARC across system changes.
 Class II contains user-programs not officially maintained by ARC but
 which use procedures guaranteed by ARC not to change. For a list of
 these procedures, see procedures. Class III contains user-programs
 with no guarantee by ARC to run across system changes. A list of
 some class II and III user-programs made available by their authors
 resides in directory "xprograms". Jump to Link <xprograms, library,
 >. Unlike Class-I programs, you must place the directory name
 "xprograms, " in front of a Class-II and III program name in order
 to load it.

3ag

Clear (TTY Window) OK: This DNLS command clears your TTY-simulation
 window. See also: TTY-simulation.

3ah

Clear: Use the Calculator subsystem command "Clear" to erase your
 calculator file or set your current accumulator to zero. See also:
 file (CALCULATOR), accumulator.

3ai

Accumulator: Clear Accumulator OK: Use the Calculator subsystem
 command "Clear Accumulator" to set your current accumulator to
 zero. See also: Accumulator, Use.

3ai1

File: Clear File OK: Use the Calculator subsystem command "Clear
 File" to erase your calculator file. See also: File
 (CALCULATOR).

3ai2

clipping viewspecs: cut off lines or levels: Levels: d, b, a, c,
 w, x, e

Lines: t, r, q, s, w, x.

3aj

d Viewspec: show first level only. See d.

3aj1

e Viewspec: level of referenced statement. See e.

3aj2

b Viewspec: show one level more. See b.

3aj3

a Viewspec: show one level less. See a, 3aj4
c Viewspec: show all levels. See c, 3aj5
t Viewspec: show first lines only. See t, 3aj6
r Viewspec: show one line more. See r, 3aj7
q Viewspec: show one line less. See q, 3aj8
s Viewspec: show all lines. See s, 3aj9
x Viewspec: show one line and one level only. See x, 3aj10
w viewspec: show all lines and all levels. See w, 3aj11

CM: Control Marker: A Control Marker (CM) is always pointing to a character within a statement in a file. When you load a file, the CM moves to the first character position in the origin statement. Whenever you point in a command, the CM moves, usually in relation to your current location. See also: Pointing, Character, Statement, File, Load, Origin, Locating. In DNLS, you can move the CM around by BUGGING with the mouse. See: Viewing, BUG, 3ak

CML: Command Meta Language: a formal language developed at ARC for describing the command language and interaction of a subsystem (or an application program) with its human user. A program written in CML is compiled by the CML compiler and the data structure produced is called a grammar. A filename with extension . CML; points to a compiled subsystem grammar. The Load Program command will make the subsystem available. In order to load simultaneously the CML front end and the L10 supporting programs, the L10 program file must have the same name but with extension ,SUBSYS; . The current CML userguide is <Journal document--19149, >, 3al

interpreter: CML interpreter: See interpreter. 3al1

code: See Software, 3am

collaboration: See Dialog, 3an

COM: an acronym for Computer Output to Microfilm: The NLS Output Processor can create files suitable for printing via COM. The film may be used to make plates for printing. COM allows various graphic arts quality type faces, type sizes, proportional spacing, and one-to four-column justification. Read the Output Processor User's guide through <userguides, locator, > for more information. The printed version of the guide shows examples of type face, etc, 3ao

output COM command: See Output COM, 3ao1

combinations of numbers, u's and d's: A string of lowercase u's and

C

d's, optionally preceded by integers, terminated by a SPACE or CA; the difference between the number of u's and d's is taken as a level adjustment value. The value locates the STRUCTURE so many levels "up" or "down" relative to your present location. See also: Level, Leveladjust (USEROPTIONS), Prompts, STRUCTURE, Statement, CA. 3ap

Command language Parameters: NLS has a rich and powerful command language divided into SUBSYSTEMs for moving around in and modifying information. To use a command, you must get NLS to recognize Commandword operators which are then followed by operands. To understand any of the NLS command descriptions, you must understand the notation conventions. Noisewords and prompts help describe what is happening. 3aq

notation for command syntax: See Notation. 3aq1

SUBSYSTEM: See SUBSYSTEM. 3aq2

Commandword operators: See Commandword. 3aq3

Operands: See Operands. 3aq4

prompts: See prompts. 3aq5

(noiseword): See Noiseword. 3aq6

OK: command confirmation: See OK. 3aq7

Backspace in commands: See Backspace. 3aq8

categories of command lists: See Categories. 3aq9

Command-Accept: See CA. 3ar

Command-Delete: See CD. 3as

Commandnominal: See Nominals. 3at

Commands: backspacing at a prompt: You can backspace out of commandwords using both BC <CTRL-A> and BW <CTRL-W>. In TNLS this shows up as _ . It takes you back to your previous command parameter and prompts that, or it will show up as / to represent a deleted character. When you type BC or BW at a prompt, you will be backed up to the previous prompt. In TNLS this is represented by _ and repeating a prompt. See also: BC, BW. 3au

certain command fields where backspacing doesn't work: Using BW or BC to back up through commandwords and operands will trip up in commands using perform loops. If feedback and prompts start looking mixed up while you're backspacing through a command, you should give a CD and start the command over. Examples of commands that trip up on Backspace are Substitute and the option loop in the directory commands. 3au1

commands in most NLS subsystems: See Universal.	3av
commands in the BASE subsystem: See also: Command, HOW, SUBSYSTEM.	3aw
systems-commands: See Universal.	3aw1
Insert: add, duplicate, create information. See Insert.	3aw2
Show: see the status of special things. See Show.	3aw3
Set: See Set.	3aw4
Reset: See Reset.	3aw5
modifying-commands: Replace, Copy, Transpose, etc. See modifying-commands.	3aw6
viewing-commands: jumping, printing, reading, etc. See Viewing-commands.	3aw7
file-handling: See file-handling.	3aw8
archiving-commands: See archiving-commands.	3aw9
terminal-commands: See terminal-commands.	3aw10
display-commands only: See display-commands.	3aw11
recording, marking characters: See recording.	3aw12
 commands in the Calculator: See Calculator subsystem.	 3ax
commands in the Sendmail subsystem:	3ay
Authors CONTENT OK: See Authors (SENDMAIL).	3ay1
Branch (at) SOURCE OK: See Branch (SENDMAIL).	3ay2
Comment CONTENT OK: See Comment (SENDMAIL).	3ay3
Distribute (for) CATEGORY (to) CONTENT OK: See Distribute (SENDMAIL).	3ay4
Execute (command in) SUBSYSTEM: See Execute.	3ay5
Expedite OK: See Expedite (SENDMAIL).	3ay6
File: DESTINATION OK: See File (SENDMAIL).	3ay7
Forward (item number) CONTENT (for) ACTION/INFO (only): See Forward (SENDMAIL).	3ay8
Goto SUBSYSTEM OK: See goto.	3ay9

C

Group (from) SOURCE OK: See Group (SENDMAIL), 3ay10

Offline (item--located at) CONTENT OK: See Offline (SENDMAIL), 3ay11

OKREPEAT <CTRL-B>: See OKREPEAT, 3ay12

Initialize (specifications) OK: See Initialize (SENDMAIL), 3ay13

Insert: See Insert (SENDMAIL), 3ay14

Interrogate OK: See Interrogate (SENDMAIL), 3ay15

Keywords CONTENT OK: See Keywords (SENDMAIL), 3ay16

Message CONTENT OK: See Message (SENDMAIL), 3ay17

Number Assign/Previously : See Number (SENDMAIL), 3ay18

Obsoletes (item number(s)) CONTENT OK: See Obsoletes (SENDMAIL), 3ay19

Plex (at) SOURCE OK: See Plex (SENDMAIL), 3ay20

Private OK: See Private (SENDMAIL), 3ay21

Process (sendmail form at) DESTINATION OK: See Process (SENDMAIL), 3ay22

Public: See Public (SENDMAIL), 3ay23

Quit OK: See quit, 3ay24

RFC (number) CONTENT OK: See RFC (SENDMAIL), 3ay25

Reserve: See Reserve (SENDMAIL), 3ay26

Send (the mail) OK: See send (SENDMAIL), 3ay27

Show Status/Record: See Show (SENDMAIL), 3ay28

Statement (at) CONTENT OK: See Statement (SENDMAIL), 3ay29

Subcollections CONTENT OK: See Subcollections (SENDMAIL), 3ay30

Title CONTENT OK: See Title (SENDMAIL), 3ay31

Unrecorded ANSWER: See Unrecorded (SENDMAIL), 3ay32

Update (to item number(s)) CONTENT OK: See Update (SENDMAIL), 3ay33

commands in the Useroptions subsystem: See useroptions, 3az

commands limited to DNLS: See display-commands, 3b@

commands: list of Base file-handling commands: See file-handling, 3ba

- commands: See directory-commands, 3bb
- commands: See modifying-commands, 3bc
- commands for viewing: See viewing-commands, 3bd
- Commandword operators: Those parts of a command, usually a verb followed by a nominal, which you specify and which must be recognized by the system according to your recognition mode. Some examples are "Insert Character" and "Delete Branch." Commandword operators are followed by the command operands. A commandword is prompted by C: . In command descriptions, command words are capitalized (not all caps). You must understand your recognition mode before you can use NLS. See also: NOTATION, Recognition, Verb-nominal, 3be
- Limit commandword feedback in TNLS: See Limit, 3be1
- categories of commands: See categories, 3be2
- Comment CONTENT OK: The Sendmail Subsystem command "Comments" allows you to enter a comment as part of your journal item. It will be attached to the citation you send. The comment appears as page one of the hardcopy item and is the last thing in its online header. You can also enter comments for specific IDENTs as described in the Distribute command, 3bf
- CONTENT: See content, 3bf1
- Header: See header, 3bf2
- citation: See citation, 3bf3
- The Send command: See send, 3bf4
- communication: See Sendmail subsystem, 3bg
- Compile: The Programs' subsystem command Compile translates programming instruction language using the compiler you specify. In most cases, it only compiles those instructions which pass the viewspecs you currently have in effect, 3bh
- Assembler: Compile Assembler (file at) DESTINATION (using) CONTENT (to file) CONTENT OK: The Programs Subsystem command "Compile Assembler" allows you to create a compiled file at a new file address. DESTINATION wants you to specify an NLS file containing the code to be assembled by the assembler. The first CONTENT wants the FILEADDRESS of the assembler and the second CONTENT wants the FILEADDRESS of the new file, 3bh1
- TNLS example:
PROG C: Compile C: Assembler (at) A: 1

C

(using) T: FAIL
(to file) T: prog
Assembler in Progress
PROG C:

3bh1a

Effects: A file will be created with the FILENAME you give it.
If you don't specify the extension, it will default to REL.

3bh1b

Content: Compile Content (pattern) CONTENT OK: The Programs subsystem command "Compile Content (pattern)" allows you to type in or point to a content-analyzer pattern. It then compiles the pattern and makes it your current content-analyzer. After you specify the content-analyzer pattern, its effect is turned off and on using the viewspecs i, j, and k. When pointing to a pattern instead of typing it in, you must point to the first character of the entire pattern and it must have a semicolon following it. This is a duplicate of the BASE subsystem command "Set Content (pattern) To". Content-analyzer programs already compiled into a program file, can be loaded using the Programs subsystem command "Load Program".

3bh2

content-analyzers: See content-analyzer.

3bh2a

content-analysis viewspecs: See content-analysis.

3bh2b

The Programs subsystem Load Program command: see load (PROGRAMS).

3bh2c

File: Compile File (at) DESTINATION (using) CONTENT (to file) CONTENT OK: The Program's subsystem command "Compile File " allows you to create a compiled file at a new file address. DESTINATION wants you to specify the NLS file containing the code to be compiled. The first CONTENT wants the FILEADDRESS of the compiler and the second CONTENT wants the FILEADDRESS of the new file.

3bh3

TNLS example:
PROG C: Compile C: File (at) A: 1
(using) T: L10
(to file) T: prog
PROG C:

3bh3a

Effects: compiles a program into a file with the extension REL (unless otherwise specified). The FILENAME must be the same as the program name. L10 compilations must begin at a "FILE" statement and will stop at the "FINISH" statement. The compiled file can then be loaded into your programs buffer by the Load Program command in the Programs subsystem. It goes away when you delete it from your buffer or when you end your session. It must be recompiled the next time you want to run it.

3bh3b

REL file: See REL, 3bh3b1

Load Program command: See load (PROGRAMS), 3bh3b2

L10: Compile L10 (user program at) DESTINATION OK: The Program's subsystem command "Compile L10" compiles an L10 user program at the DESTINATION you specify into the user program buffer and enters its name onto the stack. It does not create a file for, nor institute, that program. See also: file, institute, 3bh4

Effects: L10 compilations must begin at a "PROGRAM" statement and will stop at the "FINISH" statement. If any errors are found in the program, they will print and the program will not compile. After the program has been compiled, you may institute or run it, 3bh4a

Institute command: See institute, 3bh4a1

Run command: See run, 3bh4a2

TNLS example:
PROG C: L10
PROG C: Compile C: L10 (user program at) A: 1
PROG C: 3bh4b

Procedure: Compile Procedure (at) DESTINATION OK: The Program's subsystem command "Compile Procedure" compiles the procedure at the DESTINATION you specify (using the viewspecs you currently have in effect) and replaces the procedure with the same name. See also: proc-rep, 3bh5

Compiler: a program which translates a programming language. Compilers for the following languages are available from NLS, 3bi

L10: See L10, 3bi1

CML: See CML, 3bi2

compiling user programs: translating user-readable "source" code into machine-executable instructions. Once a program has been written as an NLS file, it may be compiled, either directly into your programs buffer, or into a file which may be subsequently loaded into the buffer. The Compile command in the Programs subsystem allows text to be compiled to a file, to the buffer, or as a content-analyzer, 3bj

Assembling: See Assembling, 3bj1

C

Complaints: Report your difficulties with NLS to FEEDBACK, and someone will listen to you and answer you. See reporting, 3bk

Computers: See site. 3bl

CONCEPTS: See how. 3bm

confirm: See ok. 3bn

Connect (to) Directory/Display/TTY ... : 3bo

Directory: Connect (to) Directory CONTENT (Password) PASSWORD OK: The command "Connect to" allows you to use most NLS and TENEX files as if you had logged in under the directory you specify. If you already have access to the directory you specify for CONTENT, you can just hit CA instead of typing the PASSWORD. See also: CONTENT, PASSWORD, CA, OPTION, ADDRESS, file, directory. Ask your computer's operator about directory groups. 3bo1

TNLS example:
 BASE C: Connect to C: Directory T: guest
 Password T:
 BASE C: 3bo1a

Effects: Modification files, which contain the changes you have made, will appear in the directory where you logged in until you update the modified file. 3bo1b

Display: [DNLS only] Connect (to) Display (number) CONTENT (for) Input/Output: Output (only) mode does not allow you to do anything except watch. Input (and output) mode is for cooperative work. For TENEX-type linking, use the Connect to TTY command for Output (only). See Connect TTY Output. 3bo2

Output: connect (to) display (number) CONTENT (for) Output (only) OK: The DNLS command "Connect (to) Display (number)" allows you to watch another Display terminal. That terminal must issue the "Accept Connection (for) Output (only)" command giving your TTY number. Use instead Input (and Output) mode for collaboration with a shared view of the same file. See also: Connect Display Input, Connect TTY output. Terminate the Connection by hitting <CTRL-P> twice. 3bo2a

Input: Connect (to) Display (number) CONTENT (for) Input (and Output) OK: The DNLS command "Connect (to) Display (number)" allows you to collaborate with another person by viewing the same image of a file after issuing this command. The person at the terminal with the number you specify for CONTENT has one minute to issue the "Accept Connections (from) YOUR TTY NUMBER (for) Input (and Output)" command. Terminate the Connection by hitting <CTRL-P> twice. See also: Connect TTY

Output.

3bo2b

TTY: Connect (to) TTY (number) CONTENT (for) Input/Output ...
Output (only) mode is like the TENEX LINK command. Input (and
output) mode works like the TENEX ADVISE command.

3bo3

Output: Connect (to) TTY (number) CONTENT (for) Output (only)
OK: The command "Connect (to) TTY (number)" makes what you
type appear at the other terminal and visa versa. To find
someone's terminal number, use the WHERE or SYSTAT commands in
TENEX. Follow the "Connect" command with the semicolon
command. <CTRL-P>, <CTRL-O> or the Disconnect command will
break the connection.

3bo3a

DNLS usage: The DNLS user may communicate with TNLS users
and other DNLS users with Base's Connect to TTY command.
Once connected, use the TTY window to see what the other
user is doing, or go to the TENEX level. You will be able
to see anything a TNLS user is doing while you are linked
to him. The only actions of another DNLS user you will see
is whatever would appear in his TTY window or at his TENEX
level. This is enough if you intend just to comment
(Semicolon command). To see everything a DNLS user does,
i.e., share viewing a file with her/him (but not cursors),
use Base's Connect to Display command. See also:
Connecting, Connect TTY, Connect Display, TTY-window,
cursor, semicolon.

3bo3a1

TNLS example:
BASE C: Connect (to) C: TTY (Number) T: 27
C: Input and Output OK:
BASE C:

3bo3a2

linking: See connecting.

3bo3a3

CONTENT wants the user's TTY number: (this is the number
the system assigns to each terminal). Warning: Connecting
TTY's might affect the other user's job if she is in NDNLS,
OUTPRC, L10, or other special subsystems; EXEC (TENEX),
TNLS, NTNLS, or DNLS are usually safe. Use the WHERE
command in TENEX for all this information about another
user. See also: CONTENT, TENEX, WHERE.

3bo3a4

See also: semicolon, Disconnect, Terminals.

3bo3a5

Input: [TNLS only] Connect (to) TTY (Number) CONTENT (for)
Input (and Output) OK: If you specify the Input (and Output)
mode, you will be advising the job at the terminal number you
specify for CONTENT. This means the person to whom you are
connecting must issue the "Accept Connection" command and any
commands you give will occur to the person you are linked to

C

and not to yourself. For conversation, use the Output (only) mode. Do not use this command in DNLS, use the Connect (to) Display command instead. To find someone's terminal number, use the WHERE or SYSTAT commands in TENEX. <CTRL-P> or the Disconnect command will break the connection. See also: semicolon, Disconnect, Terminals.

3bo3b

TNLS example:

BASE C: Connect (to) C: TTY (Number) T/[A]: 5(for) C:

Output (Only) OK:

BASE C:

3bo3b1

linking: See connecting.

3bo3b2

Connected terminals for DNLS users: See connect display.

3bp

Connecting - used in two senses:

3bq

connecting to directories: See connect directory.

3bq1

connecting terminals: [linking]: Connecting terminals enables a user to communicate with another user who is currently logged into ARC. A DNLS or TNLS user may connect, or "link", her terminal with any other by specifying the Connect to TTY command. To communicate, linked users first type a semicolon before each new comment so that their typed input is not taken as commands. Everything else done in TNLS or TENEX also appears on both terminals. It is best to respond in turn to each other; simultaneous typing by both users causes characters to interleave. There is a special Connect to Display version of linking for DNLS users to share the same views of the same file. Either user may break the connection with the Disconnect command.

3bq2

Connect to TTY command in Base: [This is Linking for both TNLS and DNLS users]. See connect TTY.

3bq2a

Disconnect Terminal command in Base: See disconnect.

3bq2b

connected terminals for DNLS users: See connect display.

3bq2c

Where command in TENEX: See Where.

3bq2d

connection: See terminals.

3br

Connections: The Lineprocessor must be connected to a source of computer service. It may be wired permanently to a computer or to a TIP with access to the ARPANET, or it may be connected to a telephone through a box called a modem with or without an acoustic coupler that cradles the receiver.

3bs

Console: See DNLS.

3bt

- content search: "TYPEIN": A string of text enclosed in double quotes causes a search for all of the Users, Groups, or Organizations (in that order) that have that text in their name. <CTRL-O> stops the search of the Users to begin the search of the Groups and stops the search of the Groups to begin the search of Organizations. 3bu
- content-analysis and sequence generator viewspecs: i, k, j, O, P. See also: content-analyzer. 3bv
 - i Viewspec: analyze the content of statements: See i. 3bv1
 - j Viewspec: don't filter statements: See j. 3bv2
 - k Viewspec: show next filtered statement: See k. 3bv3
 - semicolons: set off content-analyzer patterns in links: See semicolons. 3bv4
 - Capital-O viewspec: user sequence generator on: See Capital-O. 3bv5
 - Capital-P Viewspec: user sequence generator off: See Capital-P. 3bv6
- content-analyzer: a process that checks the characters in each statement. It "passes" the statement so it can be viewed and/or modifies the statement depending on the content-analyzer being used. It is evoked by the use of content-analysis viewspecs: i or k. You choose content-analyzers by specifying a content-analyzer pattern, or a content-analyzer program. 3bw
 - content-analysis viewspecs: See content-analysis. 3bw1
 - pattern: content-analyzer pattern: See pattern. 3bw2
 - program: content-analyzer program: See program. 3bw3
 - steps in using a content-analyzer: See steps. 3bw4
- Content-analyzers: See Class-II. See also: content-analyzer. 3bx
- content-pattern: See content-analyzer. 3by
- content-search: See contentaddress. 3bz
- content: 3c@
 - content-analyzer patterns and programs: See content-analyzer. 3c@1
 - CONTENT: the part of a command asking you to TYPEIN characters. You may also give an ADDRESS for the CONTENT if you precede the ADDRESS with <CTRL-U>. In TNLS, CONTENT asks for a TYPEIN or OPTION ADDRESS and is prompted by T/[A]:. See also: CHARACTERS, FILEADDRESS, pointing, prompts, TNLS. 3c@2

C

ADDRESS is an OPTIONAL alternative; Type an OPTION character <CTRL-U> to give an ADDRESS. See also: OPTION. See address, 3c@2a

In DNLS, you can also BUG the CONTENT (prompted by B/T/[A]:), See BUG, 3c@2b

CONTENTADDRESS: "TYPEIN"=2w3s (surrounded by quotes): an address element that allows you to search for a specific content that you specify for TYPEIN. This may be followed by "=" and a Number N and a "w", indicating the Nth occurrence of TYPEIN as a word. It may be further followed by a Number N and an "s" meaning to search only within N statements. A "c" for content can be used instead of a "w" to mean the Nth occurrence of TYPEIN as any string. If no numbers or letters are specified it will be taken to be one content (1c): search all the following statements in the file for the next occurrence of TYPEIN as any string. You may not search for any string bounded by quotes. EXAMPLE: ", P" will be a content search for ", P"

3c@3

word-search: "word"=w See word-search, 3c@3a

control-characters: See CTRL-character, 3ca

Control characters: The Useroptions subsystem command "Control" allows you to assign certain Command Control Functions (like Command Accept, Repeat, etc.) to any special characters you choose. You can write one set of definitions for each kind of terminal you use, 3cb

Syntax: 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, 3cb1

Effects: Users often change NLS control characters to avoid characters that mean something else on their local system. Some Control Functions have standard unalterable characters. All have other default assignments which will be overridden by any other special characters you define with this command. When it asks you "character(s)" you may type as many keys for each character as you like. Repeat the command to set definitions for other terminals and other control functions. This command will take effect immediately and for all future NLS sessions until you return to the defaults with the Reset Control command. You may see your current list of definitions with the Show Control command, 3cb2

What "echo as" wants: Specify the character that will print when the function is used, 3cb3

Note on DEVICES: NVT means "Network Virtual Terminal". Specifying Tasker, Imlac, or Lineprocessor will set up definitions only for the use of DNLS from that terminal. All others set up definitions for TNLS. When you run TNLS from EXEC on one of those display terminals, you'll get the character set for TI; going into TNLS via Simulate command gets you the set for the terminal you specify.

3cb4

Command control functions: See controlfunctions.

3cb5

See also: CTRL-characters, Terminals, Useroptions Reset Control, Useroptions Show Control.

3cb6

Copy: The command "Copy" allows you to reproduce a SOURCE you specify at the DESTINATION you specify. See also: SOURCE, DESTINATION,

3cc

STRING: Copy STRING (from) SOURCE (to follow) DESTINATION OK: This group of "Copy" commands reproduces a STRING at another location.

3cc1

TNLS example:

BASE C: Copy C: Word (from) A: 02 +2w
(to follow) A: 05 +1w
BASE C:

3cc1a

Effects: SOURCE also provides you the choice of TYPEIN, that is, you can "insert" a new STRING, instead of "copying" one, into the new location with this command. After execution, you are at the last character of the new STRING.

3cc1b

STRING: Character, Text, Word, Visible, Invisible, Number, or Link See String.

3cc1c

STRUCTURE: Copy STRUCTURE (from) SOURCE (to follow) DESTINATION [(Filtered:) FILTER] LEVEL-ADJUST OK: This group of "Copy" commands reproduces the STRUCTURE at another location.

3cc2

TNLS example:

BASE C: Copy C: Branch (from) A: 5d
(to follow) A: 1c
L:
BASE C:

3cc2a

Effects: SOURCE also provides you the choice of TYPEIN, i.e., you can "insert" a new statement, instead of "copying" one, into the new location with this command. After execution the same STRUCTURE exists in two places, and you are at the first character of the new STRUCTURE. Note--Copy does not pay attention to the viewspecs you have on (i.e., it works throughout the STRUCTURE you point to whether all of it's visible to you or not), unless you specify VIEWSPECS in the

C

FILTER option, which pays attention to level, content analyzer, and sequence generator Viewspeccs. You cannot limit the effects to certain lines (like first lines only) with this command. 3cc2b

STRUCTURE: Statement, Branch, Plex, or Group: See Structure: 3cc2c

Directory: Copy Directory (of) CONTENT (to follow) DESTINATION LEVEL-ADJUST [DIROPT] OK:

The command "Copy Directory" copies any directory as a plex following the address you specify for DESTINATION. CONTENT lets you type or point to the name of the directory. After execution, you are at the first character of the first statement of the copied directory. 3cc3

TNLS example:

BASE C: Copy C: Directory (of) OK/T: MaBell
(to follow) A: 3d
L: d
BASE C:

3cc3a

DIROPT option: See diropt.

3cc3b

File: Copy File (from) CONTENT (to) CONTENT OK: The command "Copy File" copies the file from the FILEADDRESS you specify to the new name at the second FILEADDRESS you specify. It will not work when the file to be copied is loaded. See also: MODIFICATION, FILEADDRESS, CONTENT, CREATING. 3cc4

TNLS example:

BASE C: Copy C: File (from) T/[A]: pooh(to) T/[A]: tiger
Copied Files Are:
< WEINBERG, POOH,NLS;61, > [and PC] to < WEINBERG,
TIGER,NLS;61, > [and PC]
< WEINBERG, POOH,NLS;60, > to < WEINBERG, TIGER,NLS;60, >
BASE C:

3cc4a

Effects: It will not work when the file to be copied is loaded. You must go to another file and use the copy command from there. If you are modifying the file, it also creates a modification file with the new filename. Copy file obeys the rules of privacy and protection: you can copy only files you can read, only into directories where you can write. Copy File fails to rewrite the origin statement. See also: file, privacy, protection, directory, write, modification, username. 3cc4b

Sequential: Copy Sequential (file from) CONTENT (to follow) DESTINATION LEVEL-ADJUST (using) SEQTYPE: The command "Copy Sequential" copies the text from the sequential file at the FILEADDRESS you specify (for CONTENT) into the NLS file at the DESTINATION you specify.

SEQTYPE =

3cc5

One (<CR> to end statement) OK: Each line of the sequential file will be a statement, its level determined by the number of spaces or tabs at the beginning of the line. Blank lines will show up as separate statements containing one space. We recommend you use Two <CR>'s to end the statements.

3cc5a

Two (<CR>s ends statement) Justified/OK: A new statement will occur after two successive carriage returns. Single carriage returns which occur after 62 characters will be changed into spaces. The statement level is taken from the lesser indentation of the first two lines of the statement.

3cc5b

Justified (delete extra <SP>) OK: this Copy Sequential (file) command will remove multiple spaces from lines which have been right justified in the source file. It will only remove multiple spaces from lines longer than 62 characters.

3cc5b1

Assembler OK: This is for Assembler Programs.

3cc5c

See also: Programs message copy.

3cc5d

correcting errors: To escape from a command you have started, type <CTRL-X>. To backspace and delete one character in a TYPEIN, type <CTRL-A>. To backspace and delete back to the previous word, type <CTRL-W>. The commands people use most often to correct errors in text that is already online are Substitute and Replace. Use the Delete Modifications command to erase modifications you have made since your last "Update".

3cd

The Delete Modifications command: See Delete modifications.

3cd1

common error messages and what to do about them: See Error.

3cd2

<CR>: the typewriter key that is used for a carriage return. The notation <CR> represents carriage return. Carriage return is the default character in TNLS for a CA. See also: CA, notation.

3ce

Create File CONTENT OK: The command "Create File" makes a new file in a directory. It will give the new file the name you specify for CONTENT, load the file, and insert the origin statement. You will be at the first character of the origin statement. A new file or version can also be created whenever you update, move, output, or copy a file. See also: file, directory, origin, statement, loading, FILEADDRESS, CONTENT.

3cf

TNLS example:

BASE C: Create C: File T: bebop

BASE C:

3cf1

C

The Insert Statement Command: See insert statement. 3cf2

Other commands that can create new files or new versions of files: 3cf3

Update File: See Update. 3cf3a

Copy File: See Copy file. 3cf3b

Output commands: There are options that create new files in the following Output commands: 3cf3c

Output Com: See output com. 3cf3c1

Output Journal: See output journal. 3cf3c2

Output Printer: See output printer. 3cf3c3

Output Quickprint: See output quickprint. 3cf3c4

creating files: See create. 3cg

crt: acronym for Cathode Ray Tube: See Display. 3ch

CTRL: The control shift key on the keyboard: See CTRL-character. 3ci

<CTRL-A>: Backspace Character (BC): See Character (backspace). 3cj

<CTRL-B>: OKREPEAT: See OKREPEAT. See also: OK. 3ck

<CTRL-C> TENEX ATTENTION: Typing the character <CTRL-C>, gets the attention of the timesharing system, TENEX. It interrupts your NLS session and forgets any characters you typed ahead. If you want to return to NLS, by typing "con," you can only execute simple TENEX commands and you may not call other subsystems such as Telnet. It is best to use the Quit NLS command instead of <CTRL-C>. To return to NLS, type "con" at the herald and strike carriage return. (For TNLS, the system will in no way signal your return, since you continue at the exact point of departure.) 3cl

Quit command: See Quit. 3cl1

CTRL-character: <CTRL- >: By holding down the control key (CTRL on most terminals) while typing a specified letter, you can produce special characters called control characters. <CTRL-(some letter)> is the notation used to represent control characters. Control characters have specific functions (listed below) and ordinarily do not print. If they are printed in text, they will show up as a string of four characters (i.e., <^L>) that act as if they were a single character. You can allocate the functions of control characters to other characters by using the useroptions subsystem. See also: invisible, control (USEROPTIONS). 3cm

- <CTRL-D>: Command Accept (CA): See CA. 3cn
- <CTRL-E>: OKINSERT: See OKINSERT. 3co
- <CTRL-F>: filename recognition: See ESC. 3cp
- <CTRL-G>: ring bell: Typing the character <CTRL-G>, when you are connected to another user, will ring a bell, or you will see a visual equivalent. See also: connect. 3cq
- <CTRL-H>: Program interrupt for NDDT: Typing <CTRL-H> can usually be used for BC. See also: NLS-DDT. 3cr
- <CTRL-I>: TAB: See tab. 3cs
- <CTRL-J>: Linefeed <LF>: See lf. 3ct
- <CTRL-K>: not used in NLS. 3cu
- <CTRL-L>: form feed: See formfeed. 3cv
- <CTRL-M>: carriage return: See cr. 3cw
- <CTRL-N>: <NULL>: See null. 3cx
- <CTRL-O>: stop process: Typing the character <CTRL-O> any time stops the process you are doing such as printing or searching. One time is enough, but it sometimes takes a while to take effect. Be patient. See also: Print. 3cy
- <CTRL-P>: Disconnect connected jobs: See connect display input. 3cz
- <CTRL-Q>: HELP signal: Typing the character <CTRL-Q> at any point in a command provides a description about what you were doing and places you in the Help command which allows you to ask for the meanings of other terms. See also: Help. COMPARE: questionmark. 3d@
- <CTRL-R>: Reprint line so far: Typing the character <CTRL-R> in the middle of inserting will show you a clean line of what you have done. This is handy if you have been doing a lot of backspacing. See also: control, insert. 3da
- <CTRL-S>: Show this command's syntax. See notation. 3db
- <CTRL-T>: TIME and LOAD: Typing the character <CTRL-T> will print the current date, time, your computer status, the system load average, and how much CPU time you have used and how much real time you have used. It does all this without disturbing anything you are doing even if you are in the middle of a command. If it says "IO WAIT", then usually it is waiting for you to do something. If it says "RUNNING" then you are waiting for it (though you can type ahead until the bell rings). 3dc
- <CTRL-U>: OPTION character: See Optional. 3dd

C

- <CTRL-V>: Literal Escape: See Literal. 3de
- <CTRL-W>: Backspace Word BW: See word. 3df
- <CTRL-X>: Command Delete CD: See CD. 3dg
- <CTRL-Y>: Not used in NLS. 3dh
- <CTRL-Z>: TELNET RECOGNITION: Typing the character <CTRL-Z> gets the attention of TELNET. It is also used at the end of a TENEX SENDMESSAGE. See also: network. 3di
- Currentcontext (length) NUMBER OK: The Useroptions subsystem command "Currentcontext" changes the NUMBER of characters that surround the character you are located at as shown in response to typing a slash. The default value is 7 characters. See Slash. 3dj
 - To see the number of characters presently established: See Show currentcontext (USEROPTIONS). 3dj1
 - To reset the currentcontext length back to 7: See Reset currentcontext (USEROPTIONS). 3dj2
- cursor: See BUG. 3dk

D

- d Viewspec: show first level only: "Show first level only."
 Normally, all levels are shown (standard viewspecs w and c);
 viewspec d changes your view to show only highest level statements.
 Unlike x (one line, one level) it does not affect number of lines
 shown. It changes viewspecs w, e, c, b, and a. Example: to show
 only three levels use the string dbb. See also: level, w, c, b, e,
 a, x.

4
4a
- D Viewspec: don't show statement names: "Don't show statement
 names." If the first word of any statement is enclosed in the name
 delimiters defined for that statement, it will not be shown when the
 statement is output or viewed. To show statement names, use
 Viewspec C. See also: Statementname, Capital-C.

4b
- DAE: Dynamic Address Expression: See address.

4c
- DARPA: See ARPA.

4d
- Dash: See: Link, Stringposition, Number.

4e
- data base: See Software.

4f
- DDT: Acronym for Dynamic Debugging Tool, a program useful for
 establishing at what point in another program a problem occurred.
 See NLS-DDT.

4g
- DEC: Acronym for Digital Equipment Corporation.

4h
- Decisions concerning future items to be implemented: See reporting.

4i
- default: That which occurs unless you specify otherwise. For
 example, in TNLS, the carriage return key is automatically (by
 default) the same as command accept unless you chose to make another
 key be command accept.

4j
- filename recognition defaults: See recognition.

4j1
- default viewspecs: See viewspecs (USEROPTIONS).

4j2
- default directory for links: See defaults.

4j3
- default subsystems and programs: See show default (USEROPTIONS).

4j4
- defaults: The default directory for links imbedded in a statement 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

D

directory is specified. The default ADDRESS is the current location of the link. The default viewspecs or filter are the current ones in effect. When typing in an address, the default directory is the directory to which you are connected. See also: default, 4k

Exceptions for journal and program files: See Exceptions, 4k1

Set (directory) Link default for file command: See Set Link, 4k2

Deinstitute PROGTYPE (program) OK: The Programs' subsystem command "Deinstitute PROGTYPE" deinstitutes the type of program you specify in PROGTYPE as one of the commandwords listed below. Does not remove the program from the stack or buffer. It may be reinstated at any time without re-loading or re-compiling. See also: instituting, PROGTYPE wants one of the following commandwords: 4l

Content (analyzer): See content (PROGRAMS), 4l1

Sequence (generator): See sequence, 4l2

Sort (key extractor): See sort (PROGRAMS), 4l3

DEL: See CD, 4m

Delete: The command "Delete" erases something you specify such as a character, word, statement, etc. from the DESTINATION you specify. See also: DESTINATION, 4n

STRING: Delete STRING (at) DESTINATION OK: This group of "Delete" commands erases the type of STRING you specify from a statement, 4n1

TNLS example:
BASE C: delete C: Character (at) A: 1 OK:
BASE C: 4n1a

Effects: After execution, you are at the first character following the deleted STRING (or at the new last character if the deletion included the end of the statement), 4n1b

STRING: Character, Text, Word, Visible, Invisible, Number,
Link: See string, 4n1c

STRUCTURE: Delete STRUCTURE (at) DESTINATION [(Filtered:) FILTER] OK:
This group of "Delete" commands erases the type of STRUCTURE you specify from a file, 4n2

TNLS example:
BASE C: Delete C: Branch (at) A: 2
OK:
BASE C: 4n2a

Effects: You may not use Delete Statement if the statement has substructure (instead, try Delete Branch with a FILTER of Viewspec e; See also: FILTER). After execution, you are at the first character of the next statement following the deleted STRUCTURE (or the new last statement if you deleted the last statement in the file). Note--Delete works throughout the STRUCTURE you point to whether all of it's visible to you or not, unless you specify VIEWSPECS in the FILTER option.

4n2b

FILTER option: enter VIEWSPECS: This option selects statements to be deleted by certain viewspecs you can specify as a string of character codes. Type the OPTION character, <CTRL-U>, first and then enter any combination of the following Viewspects: for level--a, b, c, d, e, w, x, for content analyzer--i, j, k, for sequence generator--O, P. Statements which are left somewhere without a source, because the source passed the FILTER (and thereby got deleted) although they didn't, will be promoted up in level.

4n2c

See also: substructure, next, viewspecs, source, level, LEVEL-ADJUST,

4n2d

STRUCTURE: Statement, Branch, Plex, or Group: See structure:

4n2e

All: Delete All (markers) OK: The command "Delete All" (markers) erases all the markers in the file you have loaded.

4n3

TNLS example:
BASE C: delete C: All (markers) OK:
BASE C:

4n3a

Effects: If you want to delete only one marker, use the Delete Marker command. To see a list of the markers in your file use the command Show File Marker list.

4n3b

See also: markers, Mark, Delete Marker, Show File Marker.

4n3c

Edge: Delete Edge (at) BUG OK: The command "Delete Edge" erases a window created by the Insert Edge command. It will keep the window in which the cursor is residing when you hit OK. Once a window has been deleted, it cannot be retrieved. See also: Edges, Insert Edge, Move Edge,

4n4

File: Delete File CONTENT OK: The command "Delete File" removes the file named for CONTENT from normal use. If you do not name a directory, Delete assumes you mean a file in your own. Expunge erases forever all deleted files in that directory. Undelete recalls a file that has not been expunged. Deleted files risk being expunged periodically by the system. Showing deleted files is an option in the BASE subsystem Show Directory command. See also: FILEADDRESS,

4n5

D

TNLS example:
 BASE C: Delete C: File T/[A]: tiger OK:
 Deleted Files Are:
 < WEINBERG, TIGER,NLS;61, > and its partial copy
 < WEINBERG, TIGER,NLS;60, >
 BASE C:

4n5a

deletion: Deleting a file makes it disappear from the directory list. Until it has been expunged it can be undeleted. Occasionally your deleted files will be expunged automatically. The second oldest version of every file is automatically deleted when you create a new version. You may see files in your directory with the extension "PC". Don't delete them. They will be deleted automatically when you use the Update or Delete Modifications commands.

4n5b

Delete File command: See Delete File.

4n5b1

Delete Modifications command: See Delete Modifications.

4n5b2

Expunge Directory command: See Expunge Directory.

4n5b3

Modification file: See Modification.

4n5b4

Undelete File command: See Undelete File.

4n5b5

expunging deleted files: See Expunge.

4n5c

Effect on File Return Ring: If a file is on your File Return Ring and is Deleted, it will continue to be echoed as a choice on your return ring, but you will not be able load the file. If you use the Undelete command before the file is expunged, you will then be able to load it again as if you never deleted it. See also: Return,

4n5d

Marker: Delete Marker (named) CONTENT OK: The command "Delete Marker" erases one marker from the file you have loaded.

4n6

TNLS example:
 BASE C: Delete C: Marker (named) T/[A]: tagitOK:
 BASE C:

4n6a

Effects: Do not include a pound sign (#) in your CONTENT specification (unless you made it part of the marker itself when you gave the Mark command). If you want to delete all the markers in a file, use the Delete All markers command. To see a list of the markers in your file use the command Show Marker list,

4n6b

See also: markers, Mark, Delete All, Show File Marker.

4n6c

Modifications: Delete Modifications (to file) OK: The command

"Delete Modifications" discards all changes you have made on a file since the last update. The file will return to its state after the last Update. When you edit a file, the changes build a set of modifications. The Update command fixes the changes permanently in the file. See also: file.

4n7

The Update File command: See update.

4n7a

TNLS example:

BASE C: Delete C: Modifications (to file) OK: (really?) OK:

BASE C:

4n7b

Delete: The Programs' subsystem command "Delete" clears your buffer space. See also: buffer.

4o

All: Delete All (programs in buffer) OK: The programs subsystem command "Delete All" clears your program stack, deinstutes all programs, empties the buffer, sets your buffer size back to the default.

4o1

TNLS example:

PROG C: Delete C: All (programs in buffer) OK:

PROG C:

4o1a

Last: Delete Last (program in buffer) OK: The programs subsystem command "Delete Last" deletes the most recent program put on your stack, deinstutes it, and frees its space in the buffer. Does not affect other programs or your buffer size setting.

4o2

TNLS example:

PROG C: delete C: Last (program in buffer) OK:

PROG C:

4o2a

deleted file: See delete file.

4p

deleting: See delete.

4q

delimiters:

4r

statement name delimiters: See name-delimiters.

4r1

link delimiters: See link.

4r2

Demand: a recognition mode where each commandword will be recognized after you've typed enough characters to define the commandword uniquely (three are enough except in TENEX). If you are set for Demand recognition, you force a word's recognition by typing either <ALT> [Alt Mode or Escape character] or a space--<SP>. It won't take off into the next field until you do this.

4s

DESTINATION: prompted by A: (in TNLS) or B/A: (in DNLS) wants you

D

to POINT to something to indicate where something is supposed to happen. In TNLS, DESTINATION equals ADDRESS. In DNLS you can also BUG. See also: pointing, prompts. 4t

DEX: acronym for Deferred Execution. A system for creating or editing an NLS file offline, on paper or magnetic tape. 4u

Dialog Support Systems (DSS): NLS supports two kinds of aids to communication: terminal-to-terminal linking and mail handling. In teletype linking, if you type a character, it also appears on any terminals linked to you and vice versa. If you have the proper terminals you may also link two-dimensional display screens and operate on files both parties witness. Mail handlings includes filing and cataloging as well as dissemination; it uses either the NLS sendmail system or the TENEX Sendmessage system and interconnects them. 4v

SNDMSG: TENEX sndmsg subsystem: See SNDMSG. 4v1

Sendmail subsystem of NLS: See sendmail subsystem. 4v2

linking between terminals: See connecting. 4v3

shared screens: See connect display. 4v4

digit: See number. 4w

Ding-a-ling: See bells. 4x

Directive: See directives. 4y

directives: instructions imbedded in the text of a file that control the format of a file when printed. They are interpreted by the Output Processor. Directives take the form: ",XXX=N;" where XXX is a mnemonic such as "LBS" for lines between statements and N is a number. So, ,LBS=4; would mean put four lines between each statement. For basic information, read Xprint among the Exercise files described in <userguides, locator, >; for more information read the Output Processor User's guide. 4z

The Output Processor User's guide: A formatted paper copy of this is available via FEEDBACK. See userguides, op-guide. 4z1

directory of interest to users: 4a@

printer: See printer. 4a@1

programs: See userprograms. 4a@2

userguides: See userguides. 4a@3

directory-commands: , 4aa

Connect (to) Directory/Display/TTY ... : See Connect. 4aa1
Expunge: See Expunge. 4aa2
Reset Link Default: Reset: see reset link. 4aa3
Set Link Default: Set: see set link. 4aa4
Show File Default (directory for links): Show File: see show
file default (BASE). 4aa5
Show Disk (space status) command: See show disk (BASE). 4aa6
Trim Directory (No, versions to keep) CONTENT OK (really?) OK:
See Trim. 4aa7

Directory: a place where files are located. All directories have a
fixed amount of computer (disk) storage space. The user controls
the files in his directory to keep from going over the allocated
disk space. The name of the directory is also called the
"username." To find out what files are in your directory, use the
Show Directory command. In order to write on a file in someone
else's directory, use the Connect to Directory command. 4ab

pages on the disk: See pages. 4ab1
allocation: file space allocation: See allocation. 4ab2
archiving: See archiving. 4ab3
username: See directory. 4ab4
connecting to directories: See connect directory. 4ab5
Password: See Password. 4ab6
commands: See directory-commands. 4ab7
directories of interest to users: See directories. 4ab8

DIROPT: = the options available to you when you use the Show
Directory command. Typing the OPTION character <CTRL-U>, when
prompted by OPT: allows you to use the options listed below to make
a special format for the directory you copy. Added information to
be printed about each file can be specified by these series of
options. [After each one you enter, you will be asked (Finished?).
If you answer Y(es) or OK, the option will be terminated; if you
answer N(o), you may then enter another option command-word.] 4ac

Deleted (files only): lists data for files deleted but not
expunged. 4ac1

D

- Undeleted (files only): lists data for undeleted files; this is the default. 4ac2
- All (files): lists data for both deleted and undeleted files. 4ac3
- For (file) CONTENT: lists only file or files associated with one name (affected by action of star convention and Altmode). 4ac4
- Everything: everything printable about each file. 4ac5
- Verbose: lists size, last writer, last write date, and last read date for each file. 4ac6
- Account: account number to which file storage is being charged. 4ac7
- Protection: protection status of file. 4ac8
- Last (writer): user who last wrote on file. 4ac9
- Number (of) Accesses: number of times file has been written and read. 4ac10
- Number (of) Versions (to keep): lists the number of versions of each file now being kept. 4ac11
- Dump (tape number): tape number of last dump. 4ac12
- Archive Status: one of the following (See Archive): already archived; don't delete after archiving; archive not allowed, archive pending; no special status. 4ac13
- Archive Tape (numbers): lists tape numbers this file is archived on. 4ac14
- Length (and bytesize): size in bytes; then byte length in parentheses. 4ac15
- Size (in pages): size in disk pages. 4ac16
- Miscellaneous: information such as whether it's a "long file" or permanent file. 4ac17
- Date (of) Archiving: date the file was archived (if at all). 4ac18
- Date (of) Creation: date this version was created. 4ac19
- Date (of) Last (dump): date this version of the file was last dumped on tape. 4ac20
- Date (of) Original (version creation): date first version of this file was created. 4ac21
- Date (of) Read: date file was last opened for read access. 4ac22
- Date (of) Write: date file was last written on. 4ac23

- Time (and date of) Archiving: time and date the file was archived (if at all), 4ac24
- Time (and date of) Creation: time and date this version was created, 4ac25
- Time (and date of) Last (dump): time and date this version of the file was last dumped on tape, 4ac26
- Time (and date of) Original (version creation): time and date first version of this file was created, 4ac27
- Time (and date of) Read: time and date file was last opened for read access, 4ac28
- Time (and date of) Write: time and date file was last written on, 4ac29
- (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, 4ac30
- Group (group by) NULL/Reverse No (grouping): 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, 4ac31
- Group (group by) NULL/Reverse Account: Files charged to the same account number will be grouped together, with groups sorted highest number first for Reverse, 4ac32
- Group (group by) NULL/Reverse Archive Date: Files archived on the same date will be grouped together, with groups sorted most recent date first for Reverse, 4ac33
- Group (group by) NULL/Reverse Archive Status: Files with the same archive status will be grouped together, 4ac34
- Group (group by) NULL/Reverse Archive Tape: Files stored on the same archive tape will be grouped together, with groups sorted highest tape number first for Reverse, 4ac35
- Group (group by) NULL/Reverse Creation (date): Versions created on the same date will be grouped together, with groups sorted most recent date first for Reverse, 4ac36
- Group (group by) NULL/Reverse Deletion (status): Separates deleted from Undeleted files if you also ask for All (files), with deleted files first for Reverse, 4ac37
- Group (group by) NULL/Reverse Dump Date: Files last dumped on tape on the same date will be grouped together, with groups sorted most recent date first for Reverse, 4ac38
- Group (group by) NULL/Reverse Dump Tape: Files dumped on the same

D

- tape will be grouped together, with groups sorted highest tape number first for Reverse. 4ac39
- Group (group by) NULL/Reverse Last (writer): Files with the same last writer will be grouped together. 4ac40
- Group (group by) NULL/Reverse Number (of versions to keep): Files with the same number of versions being kept will be grouped together, with groups sorted highest number first for Reverse. 4ac41
- Group (group by) NULL/Reverse Original (version creation): Files whose original versions were created on the same date will be grouped together, with groups sorted most recent date first for Reverse. 4ac42
- Group (group by) NULL/Reverse Protection: Files with the same protection status will be grouped together. 4ac43
- Group (group by) NULL/Reverse Read (date): Files with the same date of last read will be grouped together, with groups sorted most recent date first for Reverse. 4ac44
- Group (group by) NULL/Reverse Write (date): Files with the same date of last write will be grouped together, with groups sorted most recent date first for Reverse. 4ac45
- Sort (sort by) NULL/Reverse Account: 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. 4ac46
- Sort (sort by) NULL/Reverse Alphabetical: 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. 4ac47
- Sort (sort by) NULL/Reverse Archive Status: Sort WITHIN groups (or sort the whole list if it hasn't been grouped) by files with the same archive status. 4ac48
- Sort (sort by) NULL/Reverse Archive Tape: 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. 4ac49
- Sort (sort by) NULL/Reverse Archive Time (and date): Sort WITHIN groups (or sort the whole list if it hasn't been grouped) by time archived, most recent first for Reverse. 4ac50
- Sort (sort by) NULL/Reverse Bytesize: Sort WITHIN groups (or sort the whole list if it hasn't been grouped) by size of bytes, largest bytesize first for Reverse. 4ac51
- Sort (sort by) NULL/Reverse Creation (time and date): 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. 4ac52

- Sort (sort by) NULL/Reverse Deletion (status): Sort WITHIN groups (or sort the whole list if it hasn't been grouped) by files with the same deletion status. 4ac53
- Sort (sort by) NULL/Reverse Dump Tape: 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. 4ac54
- Sort (sort by) NULL/Reverse Dump Time (and date): Sort WITHIN groups (or sort the whole list if it hasn't been grouped) by time of last dump, most recent first for Reverse. 4ac55
- Sort (sort by) NULL/Reverse Last (writer): Sort WITHIN groups (or sort the whole list if it hasn't been grouped) by name of last writer. 4ac56
- Sort (sort by) NULL/Reverse Length (in bytes): 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. 4ac57
- Sort (sort by) NULL/Reverse Number (of) Accesses. 4ac58
- 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. 4ac59
- Sort (sort by) NULL/Reverse Number (of) Reads: Sort WITHIN groups (or sort the whole list if it hasn't been grouped) by number of times read, highest number first for Reverse. 4ac60
- Sort (sort by) NULL/Reverse Number (of) Versions (to keep): 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. 4ac61
- Sort (sort by) NULL/Reverse Number (of) Writes: Sort WITHIN groups (or sort the whole list if it hasn't been grouped) by number of times written, highest number first for Reverse. 4ac62
- Sort (sort by) NULL/Reverse Original (version creation): 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. 4ac63
- Sort (sort by) NULL/Reverse Read (time and date): Sort WITHIN groups (or sort the whole list if it hasn't been grouped) by time last read, most recently read first for Reverse. 4ac64
- Sort (sort by) NULL/Reverse Size (in pages): 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. 4ac65
- Sort (sort by) NULL/Reverse Write (time and date): Sort WITHIN groups (or sort the whole list if it hasn't been grouped) by time last written, most recently written first for Reverse. 4ac66

D

- disaster: See emergencies, 4ad
- disc: See pages, 4ae
- Disconnect Terminal OK: The command "Disconnect Terminal" breaks a connection with another terminal that either user has established with the "Connect Display" command or by the "Connect TTY" command. The "Disconnect Terminal" command must be followed by <CTRL-P> to restore the screens of both terminals. 4af
- TNLS example:
- BASE C: Disconnect C: Terminal OK:
- BASE C: 4af1
- See also: linking, Connect Display, Connect TTY, 4af2
- disk: See pages, 4ag
- display screen: (window): a television-like screen that displays your working text (part of the contents of some file). There are also various feedback areas occupying the top 6 or 8 lines of the screen. See also: terminals, 4ah
- file display area of the screen-- 4ah1
- TYPEIN feedback area: the area of the screen where the user sees the new text as she types it in. The top of the working text area is cleared as needed. When the string of new text is completed and the display is re-created, the new text is placed in the file where you indicated. See also: TYPEIN, 4ah2
- edges: See edges, 4ah3
- reading contents of files on DNLS screen: See viewing, 4ah4
- feedback areas-- 4ah5
- command feedback line: the area that stretches across your screen from the left side, just above the display area. This displays the command in process, along with prompts, noisewords, etc., if they're on. You can control your command feedback by using the Feedback and Prompt commands in the Useroptions subsystem. See also: Feedback (USEROPTIONS), Prompt (USEROPTIONS), 4ah6
- viewspec feedback area: the two lines in the upper corner that indicate the current status of certain viewspecs whose states are not obvious from the appearance of the text in the display area. Most of the time these are subdued, but they are highlighted when viewspecs are changed by entering codes, 4ah7
- TTY-simulation window: See TTY-simulation, 4ah8
- current subsystem display: The name of the subsystem you're

currently in is usually displayed in an upper corner of the screen. See also: Subsystem. 4ah9

display-commands only: 4ai

Accept Connect: See accept. 4ai1

Clear (TTY Window) OK: See Clear. 4ai2

Connect to Display: See connect display. 4ai3

Delete Edge: See delete edge. 4ai4

Freeze Statement (at) DESTINATION VIEWSPECS OK: See Freeze. 4ai5

Insert Edge: See insert edge. 4ai6

Jump commands in all subsystems: See jump. 4ai7

Move Edge: See move edge. 4ai8

Release: See Release. 4ai9

Reset Character size: See reset character. 4ai10

Reset TTY window: See reset TTY. 4ai11

Set Character size: See set character. 4ai12

Set TTY window: See set TTY. 4ai13

<LINEFEED> for DNLS: See DNLS. 4ai14

display-control viewspecs: DNLS only: u, v, f, o, p. See also: BUTTONS. 4aj

f viewspec: recreate window if necessary (DNLS only): See f. 4aj1

o Viewspec: frozen statements on (DNLS only): See o. 4aj2

p Viewspec: frozen statements off (DNLS only): See p. 4aj3

u Viewspec: recreate display after each change: See u. 4aj4

v Viewspec: defer recreating display: See v. 4aj5

Distribute (for) CATEGORY (to) CONTENT OK: The Sendmail subsystem command "Distribute" allows you to specify to whom your mail will be sent and whether it will be sent for action or for information only. CATEGORY wants the commandword "Action" or "Information (only)". CONTENT wants a list of IDENTs separated by commas to show who will

D

receive copies of your message or copies of a citation with a link (if a document). See ident. 4ak

Effects: An expression in parenthesis typed immediately after an ident (that is with no spaces) will serve as a brief message to that recipient only. You may not use a period (.) within the parenthesis. The default sendlist for a group may be overridden to limit it to the coordinator or expand it to the whole group by preceding the IDENT with & or ~, respectively. For more effects, see: Initial, distribution, IDENT. 4ak1

distribution: The list of people (their IDENTs) to which Sendmail items are sent via Sendmail's Distribute command. Secondary distribution (to people not on the original IDENTLIST) is done with Sendmail's Forward command. 4al

Restricted Distribution: See Restricted. 4al1

Expanded distribution: See Expanded. 4al2

Sendmail's Forward command: See forward (SENDMAIL). 4al3

Sendmail's Distribute command: See distribute. 4al4

Divide CONTENT OK: The calculator subsystem command "Divide" divides the value of the accumulator by the number you specify for CONTENT. See also: operators, accumulator, CONTENT, OK. 4am

DNLS: (Display NLS:) ARC's Online System for use with a terminal that displays text two dimensionally. It also includes the use of a keyboard, a "mouse," and optionally a "keyset." You must understand how to BUG in order to use DNLS. 4an

To-get-DNLS: If you have told TENEX you are using an Imlac or Lineprocessor by the Terminal type command after logging into TENEX, to get into NLS type NLS after the TENEX herald. See also: login, entering-NLS. 4an1

Lineprocessor: See Lineprocessor. 4an2

display screen (window): See display. 4an3

viewing contents of files on DNLS screen: See viewing. 4an4

TNLS simulation: See simulation. 4an5

error messages: See error. 4an6

BUG: To BUG in DNLS: See BUG. 4an7

commands limited to DNLS: See display-commands. 4an8

Document: any item over 1000 characters long in the Journal or Sendmail subsystem. It is stored as a file in the Journal directory that has as its FILENAME its journal number. See also: message (SENDMAIL). 4ao

Documentation: information about NLS. Documentation for NLS takes three forms: hardcopy guides, online versions of the hardcopy guides, and a central depository of information about NLS queried online through the Help command. You are now reading either <documentation, help, > or a hardcopy glossary derived from it. Online guides may be found via the file <userguides, locator, > and reside mostly in the directory <userguides>. Hardcopy documentation is available. Ask your architect, address requests to the Ident Feedback, or write to Augmentation Research Center, SRI, Menlo Park, Calif, 94025 (415)326-6200 ext 3630. 4ap

done: depending on what you are doing, there are several ways to complete or be "done" with an NLS task. 4aq

send: when you are ready to send a journal item. See send. 4aq1

OK: when you are ready to have a command take place. See OK. 4aq2

Quit: when you want to leave the subsystem you are in. See quit. 4aq3

Logout: when you no longer want to work with the computer. See logout. 4aq4

Command Delete: to erase a command not yet confirmed. See CD. 4aq5

dot: See period. 4ar

down: The statement one level lower than and following a given statement (i.e., the top substatement). In the illustration (see illustration), statement 1 is one down from the statement 0; 1a is two down; the down statement from 1a would be 1a itself (because it has no substatement). See also: illustration. 4as

DSEL: Destination SElection: See destination. 4at

DSS: acronym for Dialog Support System: See dialog. 4au

E

E

e Viewspec: level of referenced statement: "Show all statements at the same level as where you are and all higher level statements. Do not show any lower level statements." If you are at a third level statement, three levels would be shown. Viewspec is often combined with b to add levels.

5

5a

E Viewspec: paginate when printing (TNLS only): "Paginate when printing," TNLS will format your text into pages--numbered, separated by a cutting line consisting of ---'s, and with margins--when printing at the terminal via any Print command. This is a default viewspec, See also: Capital-F,

5b

echo: A response from the system to something you typed.

5c

edges: imaginary lines that can divide your display window into as many as 8 parts so you can view something different in each part. You can add to the number of views you can have of the same and/or different files by inserting edges with the BASE subsystem's Insert Edge command. To get more windows, insert another edge. To change the relative shape or size of adjacent windows, use the Move Edge command. To get rid of a window, use the Delete Edge command. Subsequent operations in NLS will take place in one of these windows at a time, whichever one contains your cursor when you give the final OK.

5d

See also: Insert Edge, Move Edge, Delete Edge, cursor.

5d1

Emptying windows: See Emptying.

5d2

edit: See writing.

5e

Edit: Edit Statement (at) DESTINATION EDITSTRING OK: The command "Edit Statement" (in TNLS only) allows you to move through a statement character by character, changing as you go by means of a set of special editing characters. (It resembles QED and TECO.)

5f

TNLS example:

BASE C: Edit C: Statement (at) A: 035

T:exa<new>mple edit

BASE C:

5f1

Effects: See command. At confirmation, the remainder of the old statement copies to the new one; the new one then replaces the old.

5f2

EDITSTRING: any combination of the following control-characters: 5f3

<CTRL-F>: copies one character, 5f3a

<CTRL-U>: copies through end of old statement, 5f3b

<CTRL-Z>c: copies characters up to and including c: the next occurrence of the typed-in character following it, 5f3c

<CTRL-O>c: copies characters up to but not including c: the next occurrence of the typed-in character following <CTRL-O>, 5f3d

<CTRL-S>: you skip one character, 5f3e

<CTRL-G>c: skips characters up to and including c: the next occurrence of the typed-in character following <CTRL-G>, 5f3f

<CTRL-P>c: skips characters up to but not including c: the next occurrence of the typed-in character following <CTRL-P>, 5f3g

<CTRL-E>TYPEIN<CTRL-E>: Enters into the new statement; the character string (TYPEIN) between the two <CTRL-E>s without affecting where you are in the old statement, 5f3h

<CTRL-H>: backspaces (deletes) one character: in the new without affecting where you were in the old statement, 5f3i

<CTRL-W>: backspaces (deletes) one word: in the new without affecting where you were in the old statement, 5f3j

<CTRL-Q>: All editing prior to pressing this key is voided, moves you to the beginning of the statement, 5f3k

<CTRL-N>: one-character "restorative" backspace: it deletes the last character in the new and moves you back one character in the old statement, 5f3l

<CTRL-R>: reprints the existing part of the new statement, 5f3m

See also: editing, control (for control characters), 5f4

editing commands: See commands (BASE), 5g

Editing: See writing, 5h

editor: the old name of a NLS subsystem changed to Base: See base, 5i

Effects: The note under the entry for many commands describing special side-effects or after-effects of that command. To see just the description of effects of a command you know, type the command words followed by the word "effects" in the Help command, 5j

Emptying windows: describes a window display that has nothing in it

E

except the word "empty." The window will remain this way until you put something there by loading a file, or by using any of the Jump commands from an old window to the new one (have your cursor located in the destination window when you confirm the command). To empty a full window (get rid of its file contents and have it display "empty"), use the Clear window command. See also: Load, Clear Window, Jump.

5k

end: The last statement in the branch with a given statement as its source. The end from statement 0 is always the last statement in the file. In the illustration, the end from statement 3 is 3cia; the end from 1b is 1b3. See also: illustration.

5l

Entering DNLS: See to-get-DNLS.

5m

entering-NLS: (How to get NLS): NLS runs as a subsystem of TENEX. When TENEX is ready for commands, you will see an at sign "@" at the margin. Type "NLS" followed by carriage return. When you first enter NLS, the system loads for you a special file called your initial file and you are in the BASE subsystem. Unless you have altered your user options, the herald of the BASE subsystem, "BASE," will appear at the left margin. Then you may read or write on files. See also: Login, username, USEROPTIONS, reading, writing.

5n

initial file: see initial.

5n1

Herald: See heralds.

5n2

For terminals with the Display NLS capability: See DNLS.

5n3

If you're not on a TI (upper/lower case) or TTY-35 or local tasker: See terminal-type.

5n4

entering systems--a general orientation: See systems.

5o

Entry Subsystem/Program ...: The Useroptions' subsystem command "Entry" allows you to specify the subsystem or program you will be using when you enter NLS. see also: Include (USEROPTIONS), Show Default (USEROPTIONS), programs, subsystem.

5p

Subsystem: Entry Subsystem SUBSYSTEM OK: The subsystem (see SUBSYSTEM) you specify will be the one you are in when you enter NLS. Specify a different subsystem to change your current entry subsystem. Use the useroptions' Show Subsystems command to see your current default subsystem and program status. See also: Entry Program (USEROPTIONS), include (USEROPTIONS).

5p1

Program: Entry Program CONTENT OK: The program at the FILEADDRESS you specify for CONTENT will be the one you are in when you enter NLS. Use the useroptions' Exclude command to get rid of subsystems and programs. Use the useroptions' Show Default command to see your current default subsystem and program status. See also: Entry subsystem (USEROPTIONS), Include (USEROPTIONS).

5p2

- <EOL>: end of line: This is one character which is equivalent to a <CR> followed by an <LF>. 5q
- erase: See delete, <CTRL-A>, <CTRL-W>. 5r
- error messages: messages that appear while you are executing a process. They usually indicate a software bug. 5s
 - NLS display error: This by itself can usually be solved by creating a new window using the Insert Edge command. If there are other problems, see emergencies. 5s1
 - Reporting bugs: See reporting. 5s2
 - Sendmail errors: See error (SENDMAIL). 5s3
 - error messages in the Sendmail subsystem: See initialize. 5s4
- <ESC>: Escape and <CTRL-F>: The keys that automatically finish typing a filename or directory when you have typed enough characters to make the name unique. Also called <ALT>. If you have not typed enough characters to make the name unique or the file does not exist, "<ESC>" will echo. Escape always calls the highest version number. You may use \$ followed by SPACE in a link to represent Escape. <CTRL-F> works as Escape in a filename for a single part only; you then continue with the next part. See also: fileaddress. 5t
- escape: See <ESC>. 5u
- Evaluate CONTENT OPERATOR OK: The Calculator subsystem command "Evaluate" will evaluate the number you specify in CONTENT and type the total. In addition, you can specify an OPERATOR (see arithmetic operators) or skip it by hitting CA when prompted by OK/C: . If you specify an operator, the accumulator will then be correspondingly operated on in relation to the total and the result will replace the previous accumulator value. The total followed by an asterisk will be entered in the Calculator file. See also: operators, accumulator, file (CALCULATOR), CONTENT, OK. 5v
- example: Examples have been written for some TNLS commands. Online in the Help command you may see a TNLS example by typing the command name followed by the word TNLS. 5w
- Exceptions for journal and program files: If you give a filename containing nothing but a number and it is not found in your current directory, then it is assumed to be a Journal file and the Journal is searched.
 - If you are using the Programs subsystem command "Load program", then if the program is not found in your CONNECTED (not login) directory, then the directory "PROGRAMS" is searched for the program. See loading (PROGRAMS). 5x
- Exclude Subsystem/Program ... : The Useroptions subsystem command "Exclude Subsystem/Program" allows you to delete subsystems and

E

programs that are available to you when you enter NLS. See also:
 Include (USEROPTIONS), Show Default (USEROPTIONS). 5y

Subsystem: Exclude Subsystem SUBSYSTEM OK: The subsystem (see
 SUBSYSTEM) you specify will not be automatically loaded when you
 login. Use the Useroptions Include command to add to subsystems
 and programs available when you login. Use the Useroptions Show
 Default command to see your current default subsystem and program
 status. See also: Exclude (USEROPTIONS), Include Program
 (USEROPTIONS). 5y1

Program: Exclude Program CONTENT OK: The program at the
 FILEADDRESS you specify for CONTENT will NOT be automatically
 loaded when you login. Use the Useroptions Include command to
 add to subsystems and programs available when you login. Use the
 Useroptions Show Default command to see your current default
 subsystem and program status. See also: Exclude Subsystem
 (USEROPTIONS), Include (USEROPTIONS). 5y2

Execute (command in) SUBSYSTEM: The command "Execute" allows you to
 give one command in a different subsystem and immediately returns
 you to the subsystem you were in. 5z

TNLS example:

```
BASE C: Execute (command in) C: Useroptions
USER C: Show C: Viewspecs OK:
Viewspecs: levels: ALL, lines: ALL, hjnpuzACEHJLP prompting: ON
BASE C: 5z1
```

Effects: After typing "Execute" and a subsystem name, no OK is
 required. You can immediately begin the subsystem command. You
 can use OKINSERT or OKREPEAT to OK the command and you will
 remain in the subsystem you have gone to. As soon as you have
 CONFIRMED with Command Accept (or given a Command Delete), you
 will be returned to the subsystem you were in. 5z2

To go to another subsystem and stay there, See: Goto. See also:
 Quit. 5z3

executing program files: See running (PROGRAMS). 5a@

Expanded distribution: In using the Sendmail subsystem, when an
 ident belongs to a group, the group may by default have restricted
 distribution. That is, items sent to or from it are sent only to
 the co-ordinator. In either case you may distribute an item to the
 whole group by putting an uparrow (^) before the ident. 5aa

Restricted distribution: See restricted (SENDMAIL). 5aa1

Expedite OK: The Sendmail subsystem command "Expedite" marks
 expedite on an item, but at present nothing in NLS reads that mark. 5ab

expressions: arithmetic expressions: See evaluate. 5ac

Expunge: to completely erase deleted files from the running system. Deleted files must be expunged before their disk pages are free. After files have been expunged they cannot be undeleted or retrieved, unless you try to expunge the file in which your current marker resides. Occasionally if the entire system is low on disk pages, it will automatically expunge your deleted files. See also: undelete. 5ad

Directory: Expunge Directory OK: The command "Expunge Directory" permanently erases from the system all deleted files in the directory you logged in under or subsequently connected to (unless the files are being held open by someone using them). See Expunge. 5ad1

TNLS example:
BASE C: Expunge C: Directory OK: 5ad1a
BASE C:

Connect to Directory command: See Connect Directory. 5ad1b

Delete File command: See Delete File. 5ad1c

.EXTENSION; The characters that follow the NAME of a file to signify to you and the system how to handle the file. The extension may contain up to 39 letters, digits, dashes, and a few other special characters. It must be immediately preceded by a period and immediately followed by a semicolon. The FILENAME EXTENSION is followed by the FILENAME VERSION. The filename's extension field for an NLS file is .NLS; Other extensions listed below denote other functions. 5ae

.PC; designates: this file is a modification file: See modification. 5ae1

.TXT; represents: a sequential file unloadable in NLS. See sequential. 5ae2

user programs extensions: See loading. 5ae3

External (names link file address) CONTENT OK: This useroptions subsystem command wants the ADDRESS of a file containing named statements containing links. NLS can then go there searching for an externalname. See: externalname. 5af

EXTERNALNAME: &statementname (preceded by ampersand): Whenever an external name is specified in an address or via the Jump to Name External command, it will first Jump to Name Any on the file in which you are located; if it is not found, will go to the external name file defined with the Base Set External command; if it finds the name there, it will jump to the link following the name. If no external name file has been defined for the file you are searching,

E

the system will look in the file you specify in the Useroptions
External (names ...) command. See also: JUMP NAME, SET EXTERNAL,
External (USEROPTIONS), STATEMENTNAME, ADDRESS.

5ag

F

- f Viewspec: recreate window if necessary (DNLS only): "Re-create display screen immediately." Viewspec f is often used when viewspec v, which suppresses the normal re-creation of display, has been set. Viewspec f has only a one-time effect. After its use, whichever of codes u or v was previously in force remains so. Viewspec u re-creates the display whenever the view or contents of the file(s) change. Use this to see the new view after typing viewspecs with mouse buttons. See also: u, v, viewing, re-creating, capital-F. 6a
- F Viewspec: TNLS: no paging/DNLS: recreate display: TNLS output by Print commands at your terminal will not be separated by pages. To turn pagination on, use Viewspec E. See also: paginate, Print, Capital-E. In DNLS use capital-F to be sure your screen recreates. See also: f. 6b
- FDBK: See reporting. 6c
- FEED: See feedback. 6d
- feed: line feed: See lf. 6e
- FEEDBACK, used in two senses: 6f
- Feedback command in the Useroptions subsystem: to control what the system types back as you use commands. See feedback (USEROPTIONS). 6f1
- Feedback mechanism for Users to report bugs, complaints, and recommendations to the people who maintain NLS. They will answer you. See reporting. 6f2
- Feedback FEEDSPECS OK: The Useroptions command "Feedback" turns noisewords off and on. For your TNLS sessions, you can specify how many letters of the commandwords and noisewords appear, or indent the beginning of each command specification. 6g
- TNLS example:
USER C: Feedback C: Terse OK:
USER C: Goto C: Base OK:
EDIT C: Append C: Statement A: 2
A: 1
T: and
EDIT C: 6g1
- FEEDSPECS: prompted by C: asks you to type in Terse, Verbose, Length CONTENT or, Indenting CONTENT, Verbose, which is the

F

default, gives you noise words, and Terse, shuts off noise words.

6g2

Affects TNLS only - Length CONTENT, Indenting CONTENT: To limit both noise words (if they're on) and completion of command words upon recognition (independently), use Length and give the number of characters you want for each; otherwise, all characters up to 50 will appear. To indent the beginning of each command, use Indenting and give the number of spaces to be indented; otherwise commands will not be indented. CONTENT wants you to give a number either by TYPEIN or pointing.

6g2a

See also: command, command recognition, command word, noise word, TNLS, pointing, TYPEIN, CONTENT, Useroptions Reset Feedback, Useroptions Show Feedback,

6g3

ff: See formfeed.

6h

field: a portion of a STRING of CHARACTERS that has a special meaning defined by its format and/or location. Such as:

6i

Link fields: See link.

6i1

or,

6i2

FILEADDRESS fields: See fileaddress.

6i3

File: The basic unit in a directory. An NLS file is made of one or more statements that can be arranged at different levels in an outline or tree form. This structure is called "hierarchy" and the interrelations between statements are called Structural Relationships. Type the word "illustration" for a picture of file structure. Create an empty file with the Create File command in the BASE subsystem. Existing files can be accessed with a FILEADDRESS wherever A: appears. View different levels of structure using viewspec clipping. See also: privacy, handling, STRUCTURE.

6j

illustration of file structure: See illustration.

6j1

structural relationships within files: See structural.

6j2

Files, types of: See Files.

6j3

return ring for files: See return.

6j4

size limits: See size.

6j5

sendmail subsystems File command: See file (SENDMAIL).

6j6

FILE as part of a command: See fileaddress.

6j7

- file-handling: See also: commands(archiving), commands(modifying), commands under each subsystem, copy file, delete file, delete modifications, undelete file, undelete modifications, move file. 6k
- handling whole files: NLS provides many commands that deal with whole files allowing you to make changes, erase changes made, send files to people, delete them, and transfer files from one directory or site to another, and return to recent files you have accessed. 6k1
- Copy Sequential File: Copy See copy sequential. 6k2
- Create File CONTENT OK: See Create. 6k3
- Load File: See load. 6k4
- Output Assembler file: Output See output assembler. 6k5
- Output Sequential file: Output See output sequential. 6k6
- Show File Modification Status: See Show File modification (BASE). 6k7
- Show File Status: See show file status (BASE). 6k8
- Set Temporary Modifications: See Set Temporary. 6k9
- Renumber SIDS (in file) OK: See Renumber. 6k10
- Reset Temporary Modifications: See Reset Temporary. 6k11
- Update File: See Update. 6k12
- Verify File OK: See Verify. 6k13
- file-return ring: See return. 6l
- file: Calculator file: When you first enter the Calculator, it finds or creates a file named "CALC-IDENT, NLS" in your directory. After creation, this file is loaded whenever you enter the Calculator. This file records the history of your work like the tape of an adding machine. It saves each arithmetic operation and records subtotals and totals. All items are first level statements. A line of asterisks marks the beginning of each session. The Calculator file is a standard NLS file and may be printed like any other NLS file. The Calculator file should not be edited outside the Calculator subsystem. with the write command, it may be copied to another NLS file which you may freely edit. 6m
- File: DESTINATION OK: The Sendmail subsystem command "File" allows you to specify a file as the material to send. Any recorded piece of mail over a certain length is kept in the Journal in a file with the sendmail number as the FILENAME. The contents of Journal files are never changed. In both TNLS and DNLS, hitting CA will send the

F

file in which you are currently located. Alternatively, you can type the address of any file.

6n

Workfile: SENDMAIL Workfile: a file that is ordinarily invisible and that contains the current status of your sendmail item. If you have completed sending an item, this file is empty. To clear it out, use the initialize command in the sendmail subsystem. See also: SENDMAIL, initialize (SENDMAIL).

6n1

FILEADDRESS: SITE, DIRECTORY, FILENAME,; a string of names that identifies a specific file in a specific directory at a specific site. A filename may be preceded by the name of a directory which may be preceded by the name of a site as shown above. If you use FILEADDRESS as part of an ADDRESS, it must come first and be followed by a comma as above. A comma is unnecessary after the FILENAME in those instances when only a FILEADDRESS is called for, not a whole ADDRESS, such as in the Load File command. FILEADDRESS may include stars or Alt Mode (ALT/ESC) for automatic recognition. See also: link, ADDRESS, pointing, return, altmode, site, directory, FILENAME,

6o

recognition and defaults: See recognition,

6o1

FILELINK: See fileaddress,

6p

FILENAME: Each file in the system has a FILENAME which is divided into parts. A period (.) and a semi colon (;) divide the parts like this: name.extension; version. In most cases, you need not specify the extension or the version. Each part except the version can be up to 39 characters. When you have typed enough characters to make a single part unique, <CTRL-F> will complete that part, <ALT> will complete all parts. NLS files always have the extension "NLS". Version numbers go up when you update. See also: stars, defaults, PROTECTION,

6q

.EXTENSION: See EXTENSION,

6q1

filenames in TENEX: TENEX filename fields are different from NLS FILEADDRESSES in that the directory is delimited by angle-brackets instead of commas. See also: FILEADDRESS, filename,

6r

Filereturn (ring entries) CONTENT OK: The Useroptions' subsystem command "Filereturn" allows you to change the maximum size of your File Return Ring. The default is 10. The maximum allowed is 25. CONTENT wants the Number of entries for the ring. Each location remembered on your ring takes up space and too many could slow you down or cause problems. For this reason we recommend no more than 10 except for special cases,

6s

Effects: The commands won't take effect until you create a new window in DNLS or until your next NLS session. They will remain

in effect for subsequent sessions until you change the size again. 6s1

See also: statement return, file-return, CONTENT, Useroptions Show Jump, Useroptions Reset Jump. 6s2

- Files: types of, See also: file, 6t
- Archived file: See Archived. 6t1
- bad file: See bad, 6t2
- deleted file: See delete file, 6t3
- expunged file: See expunge, 6t4
- initial (IDENT) file: See initial, 6t5
- MESSAGE.TXT; TENEX file: See MESSAGE, 6t6
- modified file: See modification, 6t7
- RSEXEC file: See RSEXEC, 6t8
- sequential file: See sequential, 6t9
- SENDMAIL file: See file (SENDMAIL), 6t10

FILTER (viewspecs:) pick certain statements to be operated on. The FILTER part of a command must sometimes be preceded by <CTRL-U> and followed by LEVELADJUST. Enter any combination of the following Viewspecs: for level--a, b, c, d, e, w, x, for content-analysis--i, j, k, or for sequence generator--O, P. For instance, if a STRUCTURE to be copied is a branch and you "FILTER" it through viewspecs e and b, only the top statement and one more level of the branch will be copied. When a filter doesn't pass a statement, the substatements move up a level. Line clipping viewspecs currently do not have effect in FILTERS. 6u

content-analysis and sequence generator viewspecs: See content-analysis. 6u1

commands that use FILTERS: The Print and Jump commands are always affected by level-clipping viewspecs and the currently set content-analyzer when viewspecs i or k are on. The following commands can optionally make use of filtering by viewspecs for the execution of that command only. See also: CLIPPING, viewspecs, i, k, 6u2

Copy STRUCTURE: See copy structure. 6u2a

Delete STRUCTURE: See delete structure. 6u2b

F

Move STRUCTURE: See move structure, 6u2c

Substitute: See substitute, 6u2d

Transpose STRUCTURE: See transpose structure, 6u2e

find: 6v

searching for places in files: See search, 6v1

the L10 "FIND" construct: See L10, 6v2

Fixed: a recognition mode where all commandwords will be recognized after you type the first three letters. You may NOT type more letters, because they will go into the next field. 6w

Force (Case): The command "Force" allows you to capitalize or decapitalize or make first letter capitals in the situations listed below. You can also switch from the default which capitalizes everything to a different mode. See also: force, 6x

Mode: Force (case) Mode CASEMODE OK: CASEMODE = Upper or Lower or First (letter upper). With the Force (case) Mode command you may choose whether subsequent Force STRING and Force STRUCTURE commands make all letters lower case, capitalize all letters, or capitalize only the first letter of every word, 6x1

Effects: The Force case STRING and Force case STRUCTURE commands will work in the CASEMODE you choose here (unless they're overridden with the optional temporary CASEMODE in that command) until this command or Reset Case mode is used again, 6x1a

CASEMODE: Upper, Lower, or First (letter upper): Upper sets all alphabetic characters to upper case. Lower sets all alphabetic characters to lower case. First (letter upper) sets the first alphabetic character only of all words to uppercase. [Side-effect: if you Force Text in First letter upper and the text starts in the middle of a word, the first character of the text (in the word it begins in) will be capitalized.] See also: Word, 6x1b

See also: Force, Reset Case, 6x1c

STRING: Force (Case) STRING (at) DESTINATION [CASEMODE] OK: CASEMODE = Upper or Lower or First (letter upper)
 This group of Force case commands changes the case of characters in the chosen STRING according to the case mode currently in effect, 6x2

Effects: The mode has been set by default to "upper" (all

characters capitalized), or by the user with the Reset Case Mode command (to Upper) or Force case Mode command (to Upper or Lower or First letter upper). The most recently set mode determines the result of this command unless you use the [CASEMODE] option to temporarily override it. You can also change the case of letters in a whole statement or branch, etc., with the Force case STRUCTURE commands. 6x2a

[CASEMODE]: precede by the OPTION character <CTRL-U>: See casemode. 6x2b

\$See also:@Face=5 Force Mode, Reset Case, Force STRUCTURE. 6x2c

STRING: Character, Text, word, Visible, Invisible, Number, or Link. See string. 6x2d

STRUCTURE: Force (Case) STRUCTURE (at) DESTINATION [CASEMODE] OK: CASEMODE = Upper or Lower or First (letter upper)
This group of Force case commands changes the case of characters in the chosen STRUCTURE according to the case mode currently in effect. 6x3

Effects: The mode has been set by default to "upper" (all characters capitalized), or by the user with the Reset Case Mode command (to Upper) or Force case Mode command (to Upper or Lower or First letter upper). The most recently set mode determines the result of this command unless you use the [CASEMODE] option to temporarily override it. You can also set the case of parts of statements with the set Case STRING commands. 6x3a

[CASEMODE]: precede by the OPTION character <CTRL-U>: See casemode. 6x3b

See also: Force Mode, Reset Case, Force STRING. 6x3c

STRUCTURE: Statement, Branch, Plex, or Group: See structure. 6x3d

form: 6y

form feed--a special character used in printing: See formfeed. 6y1

formatting--NLS conventions for arranging a page: See format. 6y2

format conventions: the way NLS arranges a printed page unless the user specifies otherwise. By default, when you print using the output command, or the TNLS command "Print", NLS formats your output into pages with text 65 characters wide, and 55 lines high, with statements indented 3 spaces for each level and certain other conventions. Directives may reset these values in the Output Printer Command. The Useroptions subsystem will reset them in Output Quickprint and Print commands. The user-subsystem "Format"

F

- helps format files for the Output Printer command. See also: formatting, Format (CALCULATOR). 6z
- directives: See directives. 6z1
- Format user-subsystem: See format. 6z2
- Output Processor: See output. 6z3
- Output Quickprint: See quickprint. 6z4
- Print command: See print. 6z5
- Useroptions subsystem: See useroptions. 6z6

Format: The Calculator subsystem command "Format" allows you to specify the format of numbers stored in your Calculator file and accumulator values stored in other NLS files. The default number format is right-justification, 2 digits to right of the decimal and up to 9 on the left, no commas, and no dollar sign. See also: file (CALCULATOR). 6a@

Commas: Format Commas ANSWER OK: If you type y or CA for "Yes" commas will be placed as so: 999,999,999.9999. If you type n for "No", no comma will be inserted. 6a@1

Dollar: Format Dollar (signs) ANSWER OK: If you type y or CA for "Yes", dollar signs \$ will be placed in front of each number. If you type n for "No", they will not be inserted. 6a@2

Left: Format Left (justify) OK: After using this command, numbers will appear with no spaces preceding them. See also: Right (CALCULATOR). 6a@3

Places: Format Places (to the) Right/Left CONTENT OK: The total number of printing digits allowed in a number is 11. Within this limit only 5 can follow the decimal. If the user attempts to enter a number containing more digits to the left of the decimal point than the current format specifies or, if the current accumulator rises above the current format specification, an error message is printed, the operation is not performed, and the Places is changed back to the default of two following the decimal. 6a@4

Right: Format Right (justify) OK: After using this command, numbers will appear with enough spaces precedeing them for billions in places. See also: Left (CALCULATOR). 6a@5

Format: The user-subsystem "Format" provides tools to help you work with Output Processor directives. See the "Output Processor Users Guide" available by request to FEEDBACK for a complete listing of

directives. Format contains the following commands. See also:
output, directives.

6aa

Delete (directives in) STRUCTURE (at) DESTINATION OK: The Format user-subsystem command "Delete" removes all of the Output Processor directives in the STRUCTURE you specify.

6aa1

Delimiters alternative: If you previously changed them: If directives in the structure you are working on use delimiters other than period and semicolon because you had changed the delimiters in a statement preceding the specified structure, (e.g.: DLD=... DRD= ...) you must type the "Delimiters" commandword before you type OK.

Delete (directives in) STRUCTURE (at) DESTINATION Delimiters (left) CONTENT (right) CONTENT OK

Type in or point to the characters which you wish the system to search for as left and right directive delimiters. If the delimiters are changed in the file, the program will understand and search for the new delimiters.

6aa1a

Insert Format (at) DESTINATION (using Format #) CONTENT: (Title:) CONTENT

(Author Ident(s):) CONTENT

(Journal Number:) CONTENT (Formatting File)

> The Format user-subsystem command "Insert" adds directives and any necessary special characters to a file according to a given predesigned format. You must first point to the file. It then lists your choice of formats. Printed samples of all the formats are available through FEEDBACK. You type the number of the desired format.

6aa2

Effects: Unless the file to be formatted is a Journal file, it asks you to type the title of the document, a list of author identents (which may include organization and group identents), and finally the Journal number (in case you have a preassigned number that you wish put on the file). To skip any of these fields in TNLS type CA, in DNLS type <CTRL-N>. The command will insert the directives necessary to produce the format you chose. It may insert directives in the origin statement, in every level one statement, and in some cases in the statement back from every level one statement. It also creates a title page as the last level-one branch in the file. The title, authors, and Journal number appear in the title page and in some cases in header or footer directives in the origin statement.

6aa2a

modifying the formatted file: The program only inserts text in the file. You may edit any of it as you see fit. For example, if one of the authors does not have an ident, you may add his/her name to the title page afterwards. Or you may edit the directives to modify the format. (You should feel fairly confident of your understanding of the Output

F

Processor before you attempt to edit the more complex of these formats!) See directives, 6aa2a1

Formats designed for COM: Most of the formats were designed for Computer Output to Microfilm (COM). The intent is to make it very easy for users less experienced with the Output Processor to take advantage of COM's capabilities. 6aa2b

How to have your format and read it too!: To be safe you should use the "Format" command on files which previously have no directives in them. Since directives can get in the way of online reading, you may want to:

- Update File
- Execute (command in) Format Insert Format
- Output COM or Output Printer
- Delete Modifications

This last command undoes what the Insert Format command did. You are then left with a clean file. You must repeat the "Insert Format" command to prepare it for "Output" a second time. See output printer file. 6aa2c

Set Directive (Filter) OK: The Format user-subsystem command "Set Directive" sets your current content-analyzer filter to one which only shows statements with Output Processor directives in them. You may then use viewspec i to turn the filter on, and viewspec j to turn it off (show everything). 6aa3

Delimiters alternative: If directives in the file you are working on use delimiters other than period and semicolon (because you changed the delimiters in a preceding statement), you must use the command:

Set Directive (Filter) Delimiters (Left) CONTENT (Right)
CONTENT OK:

Type in or point to the left and right directive delimiter characters which you wish the program to use. Each new view of the file (a Jump or Print) through this filter begins with the assumption that the directive delimiters are these new characters. Changes in the delimiters by subsequent directives in the view, will not keep them from being viewed. 6aa3a

Reset Directive (filter) OK: The Format user-subsystem command "Reset Directive" sets your current content-analyzer filter to what it was before the Set Directive (filter) command. This only works for one window in DNLS (be careful if you have inserted an edge to split your window). 6aa4

formatting viewspecs: change layout: y, z, A, B, g, l, h, m, n, C, D, G, H, I, J, K, L. Compare hardcopy format. 6ab

y viewspec: blank line between statement on See y. 6ab1

z viewspec: blank line between statement off See z. 6ab2

g viewspec: show branch only See g. 6ab3

l viewspec: show plex only See l. 6ab4

h viewspec: show all branches See h. 6ab5

m viewspec: statement numbers/SIDs on See m. 6ab6

n viewspec: statement numbers/SIDs off See n. 6ab7

A viewspec: level indenting on See A Viewspec. 6ab8

B viewspec: level indenting off See B Viewspec. 6ab9

C viewspec: show statement names See C Viewspec. 6ab10

D viewspec: don't show statement names See D Viewspec. 6ab11

E viewspec: paginate when printing (TNLS only) See E Viewspec. 6ab12

F viewspec: TNLS: no paging/DNLS: recreate display See F Viewspec. 6ab13

G viewspec: statement numbers/SIDs right see G viewspec. 6ab14

H viewspec: statement numbers/SIDs left See H Viewspec. 6ab15

I viewspec: show SIDs, not statement numbers See I Viewspec. 6ab16

J viewspec: show statement numbers, not SIDs See J Viewspec. 6ab17

K viewspec: statement signatures on See K Viewspec. 6ab18

L viewspec: statement signatures off See L Viewspec. 6ab19

formfeed: a special character that causes the equivalent of a printing device to position the first character after the form feed character to be at the top of a new page. The character <CTRL-L> is often used as the special form feed character. 6ac

Forward (item number) CONTENT (for) ACT/INFO (only to) CONTENT OK:
The Sendmail subsystem command "forward" allows you to re-send a journal item with the NUMBER you specify for the first CONTENT to the IDENTs you specify for the second CONTENT. ACT/INFO wants either the Command-Word Action or Information. See also: number (SENDMAIL). 6ad

F

The Send command: See send,

6ad1

,fr file return: an address element that allows access to a previous file in your file return ring. A ".fr" means the same as Jump to File Return. A ".fr" in an ADDRESS moves you back through the ring. You can precede the f with a number to jump back more than one position. EXAMPLE: the element .2fr moves back 2 positions (from the current one) in the file return ring. The final viewspecs in effect there are also restored. Try this after commanding "Jump". See also: VIEWSPECS,

6ae

Effects: to copy a branch from the last file you had loaded to your presently loaded file, use ,fr in the SOURCE part of the Copy command,

6ae1

Freeze Statement (at) DESTINATION VIEWSPECS OK: The DNLS command "Freeze" keeps the statement at the DESTINATION you specify on the upper part of the screen (when viewspec 0 is on). You may continue to use other NLS commands in the lower part of your screen. The VIEWSPECS field in this command wants formatting viewspecs to define the format of the frozen statement. It does NOT allow turning viewspec 0 on; you must do that separately. If you freeze more than one statement, they all will show when you turn viewspec 0 on. The Release command "thaws" frozen statements. See also: o, Release, DISPLAY-CONTROL, Compare SPLIT:

6af

frontend: part of a software system the user interacts with. It dispatches the users' requests to the appropriate backend tool.

6ag

G

7

g Viewspec: show branch only: "Show only the branch of the statement you are at." Only the addressed branch will appear. In TNLS, this affects the operation of Output and Print commands. Viewspec h does NOT limit operation to one branch. To show one plex only, use l.

7a

G Viewspec: statement numbers/SIDs right: "Place statement identification at the right margin." If viewspec m is on, and you turn G on, whichever type of identification is currently on (Viewspec I--SIDs or J--statement numbers) will appear at the right margin after each statement. Viewspec H turns G off and shows identification at the left of statements. Example: the string mGJ will show statement numbers at the right margin. See also: Statementnumber, SIDs, m, Capital-I, Capital-J, Capital-H.

7b

Getting a number: Using Sendmail's Reserve command gets you a preassigned number, which can then be used at a later time. Using the Number command gets you the number for the item you are currently sending in the Sendmail Subsystem. See also: number (SENDMAIL), reserve (SENDMAIL).

7c

Getting Help: 1) strike ? at any point in an NLS command for a list of alternatives currently available to you.
> 2) hold down the <CTRL> button and hit q, at any point, for an explanation of your current alternatives.
Method 2 puts you into the Help command repeat mode until you hit CD (Command Delete <CTRL-X>) See also: help.

7d

questionmark: See questionmark.

7d1

<CTRL-Q>: See <CTRL-Q>.

7d2

Getting just the syntax of a command <CTRL-S>: If you hold down the CTRL key and type s, you will get the command syntax for the command which you are currently using.

7d3

When help fails: Novices should feel free to connect to experienced users and ask questions. Keeney, Kelley, van Nouhuys, Beck, and Bair are particularly open to connecting. Also, sendmail to ident FEEDBACK and explain what went wrong.

7d4

connecting: See connecting.

7d4a

sending mail: See sendmail.

7d4b

Goto (subsystem) SUBSYSTEM OK: The command "Goto" puts you into a

G

different subsystem where you can proceed to specify commands in that subsystem. After the OK, you will get the herald of the new subsystem. The Goto commands adds the subsystem to your subsystem stack. If you only want to execute one command in another subsystem, use the Execute command. The Quit command takes you back in turn to each previous subsystem. You can use the "Quit To" command to specify a specific subsystem in your stack that you want to return to. See SUBSYSTEM.

7e

TNLS example:

BASE C: Goto (subsystem) C: Programs OK;
 PROG C:

7e1

grammar: a tree structured data structure that represents allowed user interactions. See CML.

7f

Graphic: a picture drawn using the marking capabilities of a work-station.

7g

greaterthan symbol: > current subsystem. See also: SUBSYSTEM, anglebrackets.

7h

Group (from) SOURCE OK: The sendmail subsystem command "Group" allows you to send a Group of branches or statements. Specify the Group to be mailed by pointing to the first and last statement for SOURCE. VIEWSPECS do not matter.

7i

Definition of a Group: See group.

7i1

GROUP-IDENT: A group IDENT is a shorthand way of specifying many users' IDENTs. Several users who are working together may form a group that has one single IDENT. Messages sent to the GROUP-IDENT will then go to all the members.

7j

Group: a series of consecutive statements (including all their substructure) at the same level. In the illustration, the group defined by 3b and 3c consists of branches 3b and 3c (i.e., statements 3b, 3c, 3c1, and 3c1a). After pointing to the beginning of a group, an ADDRESS is needed to point to the end of the group.

7k

Group-Text: pointing: Two points are required to specify a group or a text, one at its beginning and another at its end. After the first point has been specified NLS will expect the second. If you make a mistake, you will be told "invalid text selection" or "illegal group" and you must respecify the points. See also: pointing, group, text.

7k1

illustration of file structure: See illustration.

7k2

H

- h Viewspec: show all branches: "Show all branches." Normally, when you Print or Output a file, or display something in DNLS, all branches of the file appear. Viewspec h is used to turn off viewspec g (show branch only) and l (show plex only). This is a default viewspec.

8
8a
- H Viewspec: statement numbers/SIDs left: "Place statement identification at the left of each statement." This viewspec takes effect when viewspec m is on. Whichever type of identification is currently on (I--SIDs or J--statement numbers) will appear at the beginning of each statement. Example: if you have SIDs on at the right and want to change to statement numbers at the left, use the string HJ. This is a default viewspec. See also: Statementnumber, SIDs, m, Capital-I, Capital-J, Capital-G,

8b
- Handbook: A complete reference work of all systems and activity at the Augmentation Research Center at a given time.

8c
- handling whole files: NLS provides many commands that deal with whole files allowing you to make changes, erase changes made, send files to people, delete them, and transfer files from one directory or site to another, and return to recent files you have accessed,

8d
- creating files: See create.

8d1
- return ring among files: See file=return.

8d2
- status: The Show File Status command See status.

8d3
- name: Fileaddressing: See fileaddress.

8d4
- modification file: See modification.

8d5
- commands: list of Base file-handling commands: See file-handling.

8d6
- Hardcopy printing and formatting: You may print your NLS files at your terminal, at a line printer at ARC, at a printer at your site if it is available, or through COM (Computer Output to Microfilm). COM offers offset with graphic arts quality type. A set of directives you put in your text allows you to design various formats. See also: offline (SENDMAIL),

8e
- printing on your terminal: See printing.

8e1
- printer: printing on your computer's line printer See printer.

8e2

H

format conventions: See format, 8e3

publish subsystem: See publish (PROGRAMS), 8e4

format subsystem: See format (PROGRAMS), 8e5

Hardware: 8f

IMP: acronym for Interface Message Processor ... See IMP, 8f1

Multiline Controller: See Multiline, 8f2

TIP: Terminal IMP See TIP, 8f3

Hardware: machinery, That which transmits or stores information as opposed to software which is the information transmitted or stored, See also: software, terminals, 8g

Computers: See site, 8g1

Network: See hardware, 8g2

head: The first statement at the same level as the statement you specify, In the illustration, statement 1 is the head of statements 1, 2, and 3; 1a is the head of 1b and 1a, The origin statement is its own head, The "head" is the first statement in a plex, Compare: tail, See also: source, illustration, origin, 8h

header: The text that is automatically created at the beginning of each recorded item sent via Sendmail, This header contains the SENDLIST, the AccessList (if any), and many output processor directives followed by the Origin Statement of the source if the item was an entire file, See also: List, statement, 8i

header: See header (SENDMAIL), 8j

Getting Help: 1) Strike ? at any point in an NLS command for a list of alternatives currently available to you, 2) Hold down the <CTRL> button and hit q, at any point, for an explanation of your current alternatives, Note: Method 2 puts you into the Help command repeat mode until you hit CD (Command Delete <CTRL-X>), See also: help, 8k

Help TYPEIN/OK: The command "Help" provides the most complete information about all aspects of NLS, After you type in (TYPEIN) any term and hit the Command Accept (CA) key (<CTRL-D>), you will see the description and the Help command will be ready for another TYPEIN, TYPEIN any term you wish or the number of a "menu" followed by CA, Any time after the first description prints, you can type _ followed by y (for yes) to see the previous view indicated or n (for no) to choose a view before that, Hit the Command Delete (CD) key <CTRL-X> to end the Help command, 8l

menu: A numbered list of related subjects that may follow an explanation in the Help command. This list is called a menu. Typing a number followed by <CA> will show the explanation named. 811

commands: how to see command descriptions: After a command verb type <CTRL-S> for a short description or <CTRL-Q> for a longer description.

In the Help command, to get the description for any Base command, type the verb. For example, type: Set <CA> for a description of the command Set.

To see the description of any command not in the BASE subsystem, precede the commandword(s) with the name of the SUBSYSTEM. For example, in the Help command, type: Sendmail Interrogate <CA> for a description of the command Interrogate in the Sendmail subsystem.

To see all of the commands in any subsystem, type the SUBSYSTEM name followed by the word "commands". For example, type: Base commands.

Capitalization does not matter when using words in the Help command.

812

uparrow: ^ going up (for advanced users): if you use ^ instead of -, you will go "up" instead of "back". Going up lets you "see your surroundings." Because of the "random access" nature of Help, it is sometimes the same but can be quite different from going back. This is just a convenience, it is not necessary for using the Help command. 813

getting help in NLS: See NLS. 814

How to use NLS: See NLS. 815

TNLS example:

BASE C: Help OK/T:

BASE subsystem:

The BASE subsystem is the major subsystem of NLS. It has commands that allow you to name, read, and write information online and output it to hardcopy. When you enter NLS, you begin in the BASE subsystem.

1. How to use the BASE subsystem
2. commands in the BASE subsystem:

(Help) -/T: T: ^

NLS: Online System

NLS is a system for using computers to help in knowledge work based on textual information. With NLS you may read, write, publish, mail, collaborate, calculate, and program, among other things, in an integrated way augmented by the computer. The command language allows moving around in and modifying the information hierarchy. NLS groups commands into subsystems for

H

related tasks. To find out how to do a task in NLS, see: HOW (Help) _/T:

816

TNLS peculiarities: Typing <CTRL-O> will stop the current process. This will have bad side-effects especially the first time using the Help command until this bug is fixed. To skip the introductory message each time and go directly to the subject you are looking for, type the word in the Help command the first time before hitting CA. After you start to type something in the Help command, the prompt T/[A]: will appear. Please ignore it. See also: <CTRL-O>, prompt,

817

emergencies: In the case of system error messages type <CTRL-C> (hold down the CTRL key and hit c). When you see the at-sign @ type "NLS" and a carriage return. This should totally clean everything out and start over in NLS. See also: BAD, <CTRL-O>, <CTRL-X>, <CTRL-C>.

818

heralds: The identifying character(s) each SUBSYSTEM prints at the left margin for each command when you use NLS through teletype-like terminals. The herald is usually the first few letters of the subsystem's name. You may adjust the length of these heralds, or have only a star * print at the margin for every subsystem, in the Useroptions subsystem.

8m

Herald [affects TNLS only]: HERALDSPECS OK: The Useroptions subsystem command "Herald" allows you to specify the number of characters of each subsystem name that will print as a TNLS herald, or to choose to have a star * print as the herald for every subsystem. See also: heralds, subsystem,

8m1

HERALDSPECS: Terse, Verbose, Length: for HERALDSPECS, you may choose terse which makes the herald for every subsystem a star *. Verbose (the default) which makes the herald the first few characters of the current subsystem name. If Length is left to default, four letters (such as BASE when in USEROPTIONS) will print. For Length, you may specify the number of letters of the name to be printed when Verbose is the chosen HERALDSPECS,

8m1a

See also these related commands: Useroptions Reset Herald, Useroptions Show Herald,

8m1b

Useroptions Herald command: See herald (USEROPTIONS),

8m2

exception for TENEX as a subsystem of NLS: TENEX's herald is always atsign @

8m3

heralds in DNLS: in DNLS, the herald or the name of your current subsystem shows in the upper left corner of the display.

8m4

hierarchy: See file,	8n
Host Site: See server,	8o
How to use NLS: you use NLS by typing in commands. Commands begin with verbs such as "Insert" or "Substitute", or "Delete". Commands tell the computer what you want to do. With commands, you can locate, transform, or disseminate text from the computer. To use NLS, you must understand commanding. See also: NLS.	8p
Systems: entering and leaving See Systems,	8p1
Getting Help: See Getting,	8p2
Commanding: See command,	8p3
Pointing to information: addressing and bugging See Pointing,	8p4
Reading and viewing information: See Reading,	8p5
Writing, creating and modifying information: See Writing,	8p6
Hardcopy printing and formatting: See Hardcopy,	8p7
Profile defining: the useroptions subsystem: See useroptions,	8p8
Programming for users: See programs,	8p9

I

I

9

i Viewspec: analyze the content of statements: "Show only those statements that satisfy the content-analyzer." If you have specified a content-analyzer and have viewspec i on, every statement is checked for the pattern; if it passes you will be able to view or edit it. Viewspec j turns the content-analyzer off. If there is no content-analyzer written, compiled, loaded, and instituted, viewpec i has no effect. Viewpecs i, j, and k are mutually exclusive. You can turn on viewspec i using the BASE subsystem command "Set Content (pattern) On",

9a

I Viewspec: show SIDs, not statement numbers: "Use SIDs for statement identification." If viewspec m is on, turning I on will show each statement's SID. Viewspec J shows statement numbers instead. The viewspecs G (right margin) and H (left of statement) determine where the statement numbers will appear. Example: the string MIG will make SIDs appear at the right margin after each statement. See also: Statementnumber, SID, m, Capital-J, Capital-H, Capital-G,

9b

id: See ident,

9c

IDENT: a string of 2-5 characters that identifies you to NLS and is recorded with your address in a master file. It is often your initials and can be the same as your TENEX password, but they are keys to different systems. IDENTs designate Journal authorship and distribution. Whenever an IDENT is expected in a command, and you don't know the IDENT, you can use one of the following. See also: initial,

9d

last-name search: ,lastname, .last... See last-name,

9d1

content search: "TYPEIN": See content,

9d2

GROUP-IDENT: See GROUP-IDENT,

9d3

IDENTLIST: See IDENTLIST,

9d4

If you have no ident or if your ident information needs updating, send your request via sendmail or sndmsg to the IDENT or USERNAME FEEDBACK (at office=1). See also: show record (SENDMAIL),

9d5

Identification subsystem: This is a protected subsystem for which there is no Help description. To enter or modify any IDENT information, sndmsg or sendmail to FEEDBACK describing your modification. Use the Sendmail subsystem's Show Record (for ident) command to see address, phone, etc.,

9e

Sendmail's show record command: See show record (SENDMAIL), 9e1

IDENTLIST: a list of IDENTs separated by commas. In Sendmail distributions, an IDENT may be immediately followed (no spaces) by a parenthetical comment which will only go to that IDENT, i.e., IDENT(comment). The parenthetical comment may not include a period, 9f

The distribute command: See distribute (SENDMAIL), 9f1

IDENTS: See identlist, 9g

illustration of file structure:

```
0 ...
1 ...
  1a ...
  1b ...
    1b1 ...
    1b2 ...
    1b3 ...
2 ...
3 ...
  3a ...
  3b ...
  3c ...
    3c1 ...
      3cia ...
```

NOTE: Each group of 3 dots above represents a statement in the structure of the file. The statement numbers (e.g., "1b1" and its following space) are not part of the statement; they serve only to identify the location of the statement, 9h

File: See file, 9h1

IMLAC: The manufacturer of a display console used experimentally with NLS, 9i

IMP: acronym for Interface Message Processor - A specially modified Honeywell 316 or 516 processor which serves as the communications computer in the ARPANET. See BBN (for documentation), 9j

Include Subsystem/Program ... : The Useroptions subsystem command "Include" allows you to choose what subsystems or programs are automatically available to you when you enter NLS. The programs directory contains standard NLS user programs. It does not take effect until you re-enter NLS anew. Use the useroptions' "Exclude" command to delete subsystems and programs from your list of inclusions. Use the useroptions' Show Default command to see your current default subsystem and program status. See also: Entry (USEROPTIONS), 9k

syntax--

I

Include Subsystem SUBSYSTEM OK:	
Include Program CONTENT OK:	9k1
The USEROPTIONS Exclude Subsystem/Program ... command: See exclude (USEROPTIONS).	9k2
The USEROPTIONS Show Default (subsystems and programs) command: See show default (USEROPTIONS).	9k3
The USEROPTIONS Entry Subsystem/Program ... command: See entry (USEROPTIONS).	9k4
includable subsystems: See attachable.	9k5
programs library: See library (PROGRAMS).	9k6
 indenting:	9l
For level-indenting: See level.	9l1
To control indenting of levels of NLS hierarchical structure: See printoptions indenting (USEROPTIONS).	9l2
To control indenting of commands from left margin of TNLS printout, use the Useroptions Feedback Indenting Command: See feedback indenting (USEROPTIONS).	9l3
To set tabstops: See tab (USEROPTIONS).	9l4
 index: See publish (PROGRAMS).	9m
indexes: See catalogs.	9n
Inferior Exec: [TENEX as a subsystem of NLS]: NLS's Goto TENEX command gives you a second copy of TENEX (called "inferior exec") identical in most respects to the copy you got when you logged in. By using the Goto TENEX command, you preserve your copy of NLS and can return to it if you wish by using the Exec's "Quit" command. If you Quit to TENEX, you risk the chance of losing your copy of NLS when you call another subsystem in TENEX. From inferior exec you may not log out; from superior exec you may not Quit. (From inferior exec you may call a second copy of NLS, and from it a second inferior exec, and so on if you care to.) The programs command "Run" allows you to use a TENEX subsystem interactively from NLS. See also: Programs, Run.	9o
infile-return: See return.	9p
INFILEADDRESS:	9q
POSITION: See POSITION.	9q1
STRINGPOSITION: See STRINGPOSITION.	9q2

SID: Statement Identifier: See SID.	9q3
STATEMENTNUMBER: See STATEMENTNUMBER.	9q4
STATEMENTNAME: See STATEMENTNAME.	9q5
NEXTNAME: See NEXTNAME.	9q6
BRANCHNAME: See BRANCHNAME.	9q7
EXTERNALNAME: See EXTERNALNAME.	9q8
CHARACTERADDRESS: *CHARACTER See CHARACTERADDRESS.	9q9
CONTENTADDRESS: See CONTENTADDRESS.	9q10
MARKER: See MARKER.	9q11
slash / : See Slant=Off\$slash.	9q12
backslash \ : prints the statement you are on See backslash.	9q13

Information hierarchy: Computers store information on tape, and on random access devices called disks. Computers may also be connected together in networks. A Network TENEX site's computer (disk) storage is divided into directories, one for each "user". Each directory may hold a number of files. NLS files can be arranged in a hierarchical STRUCTURE of titles and paragraphs called Statements which are made up of character STRINGS. Your location in NLS information hierarchy refers to the character at which you are presently located.

9r

Character: See character.	9r1
Statement STRING: See Statement.	9r2
File STRUCTURE: See File.	9r3
Directory: See Directory.	9r4
Site, Computer: See Site.	9r5
Network: See Network.	9r6

initial (IDENT) file: The file that is automatically loaded for you when you enter NLS. If you have no initial file, NLS creates one. Its name is your ident. It contains a branch named "journal" where sendmail citations are delivered to you automatically, and a similar branch "author" where items you send are recorded. You may add anything else to your initial file (See also: writing). When you first enter NLS you are in the BASE subsystem, and you are at the first character of the origin statement in your initial file. See: citation.

9s

I

Initialize (specifications) OK: The Sendmail subsystem command "Initialize Item" resets all of the Sendmail commands. It places your IDENT as author and deletes everything from the other commands. Use this command if you receive error messages while using Sendmail. This is done automatically every time you enter the Sendmail Subsystem,

9t

Author: The Author of a document or message distributed via the sendmail subsystem is usually specified by the IDENT of the person logged in to distribute the mail. If you use "Interrogate," the author will be you unless you specify otherwise. Other IDENTs can be substituted or added with Sendmail's Authors command. After you have mailed an item that you authored, a citation to it will appear in your INITIAL file under a branch with the STATEMENTNAME author. This is your automatic bibliography of all the items you "published" in the Journal via the Sendmail subsystem,

9t1

Sendmail's authors command: See authors (SENDMAIL).

9t1a

IDENT: See ident,

9t2

Sendmail commands: See sendmail.

9t3

input is handled as follows: The number is reformatted according to the current format specifications. See also: format. The number and its operator (if any) is entered into the Calculator file. The designated arithmetic operation is performed on the value stored in the accumulator. The resulting calculation replaces the old accumulator value. The reformatted number, the operator, and the new accumulator value are printed at the terminal,

9u

Input: use the insert command. See insert.

9v

Insert: add, duplicate, create information: The command "Insert" allows you to add, duplicate or create information in a file,

9w

Character: Insert Character (to follow) DESTINATION CONTENT OK: The command "Insert Character" adds the character(s) you specify for CONTENT after the character in an existing statement that you point to for the DESTINATION. Afterwards, you are located at the last character you inserted. See also: CONTENT, DESTINATION, character, Insert,

9w1

Date: Insert Date (to follow) DESTINATION OK: The command "Insert Date" adds the current date into your file after the visible you point to for the DESTINATION. Type <CTRL-T> to see the current date and time,

9w2

Edge: [DNLS only] Insert Edge (perpendicular to) DIRECTION OK: The command "Insert Edge" divides your display window. You may Bug the margin where you want the edge to be or specify the commandword "Center (of) BUG" for DIRECTION. The location of

your cursor when you type OK determines which side of the edge will contain the information in your old window. All of your file and statement return memories are located in your old window. New windows start over. The new window will say "Empty". The Jump command puts things in the window containing the cursor. Use the Delete Edge command to get rid of windows. Once an edge has been deleted, it cannot be retrieved. See also: Edges, Window, cursor, Move Edge, Delete Edge.

9w3

Invisible: Insert Invisible (to follow) DESTINATION CONTENT OK: The command "Insert Invisible" adds the character(s) you specify for CONTENT after the character in an existing statement that you point to for the DESTINATION. Afterwards, you are located at the last character you inserted. See also: Invisible, CONTENT, DESTINATION, Character, Insert.

9w4

Link: Insert Link (to follow) DESTINATION CONTENT OK: The command "Insert Link" adds the character(s) you specify for CONTENT after the visible in an existing statement that you point to for the DESTINATION. Necessary spaces and link delimiters (angle-brackets) are added automatically. Afterwards, you are located at the last character you inserted.

9w5

Number: Insert Number (to follow) DESTINATION CONTENT OK: The command "Insert Number" adds the character(s) you specify for CONTENT after the visible in an existing statement that you point to for the DESTINATION. Necessary spaces are added automatically. Afterwards, you are located at the last character you inserted. See also: Visible, CONTENT, DESTINATION, Character, Insert.

9w6

Sendmailform: Insert Sendmail (form to follow) DESTINATION LEVEL-ADJUST OK: The command "Insert Sendmailform" inserts a form listing Sendmail commands into a file as a statement. Use NLS text-editing commands to fill out this form. The system fills in the IDENT of the logged-in user for the Author, but you may change it. Commands you leave blank will be ignored. Use the Process (command form) command in the Sendmail SUBSYSTEM to automatically execute the commands in the form. After insertion you are at the first character of the list of commands.

9w7

sendmailforms for all commands: a single STATEMENT with a list of sendmail commands. Each command ends with a carriage return in the form statement except the SEND command which must appear at the end and be terminated by a period. Do not use a carriage return in the text of a MESSAGE in the sendmail form as any carriage return means "end of the message". This means you may not use <CTRL-V>CR either. Any of the following commands can be in a sendmail form. Any commands misspelled, containing lower case letters, or not listed below will be ignored. Many prudent users delete "SEND" (but not the preceding carriage return), and send the item manually after viewing it by using the Show Status command to check their input. See also: process.

9w7a

I

TITLE: TYPEIN a title: See title, 9w7a1
 COMMENT: See comment (SENDMAIL), 9w7a2
 AUTHOR(S): IDENTLIST: See authors (SENDMAIL), 9w7a3
 NUMBER: See number (SENDMAIL), 9w7a4
 DISTRIBUTE FOR ACTION TO: IDENTLIST: See distribute (SENDMAIL), 9w7a5
 DISTRIBUTE FOR INFO-ONLY TO: IDENTLIST: See distribute (SENDMAIL), 9w7a6
 SUBCOLLECTION(S): IDENTLIST: See subcollections (SENDMAIL), 9w7a7
 KEYWORD(S): TYPEIN: See keywords (SENDMAIL), 9w7a8
 HANDLING INSTRUCTION: See expedite (SENDMAIL), 9w7a9
 RECORDING INSTRUCTION: See unrecorded (SENDMAIL), 9w7a10
 OFFLINE ITEM -- LOCATED AT: TYPEIN: See offline (SENDMAIL), 9w7a11
 RFC NUMBER: See RFC (SENDMAIL), 9w7a12
 OBSOLETES ITEM NUMBER(S): See obsoletes (SENDMAIL), 9w7a13
 ACCESS STATUS: See private (SENDMAIL), 9w7a14
 UPDATE TO ITEM NUMBER(S): See update (SENDMAIL), 9w7a15
 INSERT LINK TO FOLLOW: see insert link (SENDMAIL), 9w7a16
 FORWARD ITEM NUMBER: See forward (SENDMAIL), 9w7a17
 MESSAGE: TYPEIN: See message (SENDMAIL), 9w7a18
 STATEMENT AT: <LINK>: See statement (SENDMAIL), 9w7a19
 BRANCH AT: <LINK>: See branch (SENDMAIL), 9w7a20
 PLEX AT: <LINK>: See plex (SENDMAIL), 9w7a21
 GROUP AT: <LINK>: See group (SENDMAIL), 9w7a22
 FILE: <LINK> 9w7a23
 SEND THE MAIL: See SEND, 9w7a24

Sendmail's Process (command form) command: See process (SENDMAIL), 9w7b

Sendmail: See sendmail, 9w7c

DESTINATION: See destination, 9w7d

LEVEL-ADJUST: See level-adjust, 9w7e

OK: See OK, 9w7f

NLS text-editing commands: See modifying-commands, 9w7g

IDENT: See ident, 9w7h

Statement: See Statement, 9w7i

Statement: Insert Statement (to follow) DESTINATION LEVEL-ADJUST
 CONTENT OK: The command "Insert Statement" allows you to
 create new statements in your file. To TYPEIN many statements in
 a row, use OKINSERT <CTRL-E>. CONTENT allows the specification
 of a DESTINATION, i.e. you can "copy" an existing Statement,
 instead of "inserting" a new one, with this command. After
 execution, you are at first character of the newly inserted
 Statement.

9w8

OKINSERT: See OKINSERT,

9w8a

Text: Insert Text (to follow) DESTINATION CONTENT OK: adds the
 character(s) you specify for CONTENT after the character in an
 existing statement that you point to for the DESTINATION.
 Afterwards, you are located at the last character you inserted.
 See also: Invisible, Insert Character,

9w9

Time: Insert Time (and Date to follow) DESTINATION OK: Inserts
 the current time and date after the character in an existing
 statement that you point to for DESTINATION. To see the current
 time, type control-t <CTRL-T>.

9w10

Visible: Insert Visible (to follow) DESTINATION CONTENT OK: adds
 the character(s) you specify for CONTENT after the visible in an
 existing statement that you point to for the DESTINATION.
 Necessary spaces are added automatically. Afterwards, you are
 located at the last character you inserted. See also: Visible,
 CONTENT, DESTINATION, Character, Insert,

9w11

TNLS example:

BASE C: Insert C: Visible (to follow) A: 03 "9:30"

T: p.m,

BASE C:

9w11a

Word: Insert Word (to follow) DESTINATION CONTENT OK: adds the
 character(s) you specify for CONTENT after the word in an
 existing statement that you point to for the DESTINATION,

I

Necessary spaces are added automatically. Afterwards, you are located at the last character you inserted, 9w12

STRING: Insert STRING (to follow) DESTINATION CONTENT OK: This group of commands allows a new STRING to be entered in an existing statement. See also: Substitute. 9w13

Effects: CONTENT provides you the choice of DESTINATION, that is, you can "copy" an existing STRING, instead of "inserting" a new one, with this command. After execution, you are at the last character of the inserted text. If you insert a link, NLS will automatically supply angle-bracket delimiters if you do not supply the delimiters. See also: link. 9w13a

STRING = Character, Text, Word, Visible, Invisible, Number, Link: See string. 9w13b

STRUCTURE: Insert STRUCTURE (to follow) DESTINATION LEVEL-ADJUST CONTENT OK: This group of "Insert" commands allows you to create new statements in your file. To TYPEIN many statements in a row, use OKINSERT <CTRL-E>. CONTENT allows the specification of a DESTINATION, i.e., you can "copy" an existing Statement or Branch or Plex or Group, instead of "inserting" a new one, with this command. If you choose TYPEIN with Branch or Plex or Group, it acts as Insert Statement. After execution, you are at the first character of the newly inserted STRUCTURE. 9w14

STRUCTURE = Statement, Branch, Plex, or Group: See structure. 9w14a

TNLS example:
BASE C: Insert C: Statement (to follow) A: 2b3
L: d
T: I love you,
BASE C: 9w14b

OKINSERT: See OKINSERT. 9w14c

Insert: 9x

Status: Insert Status (form to follow) DESTINATION LEVEL-ADJUST OK: The Sendmail subsystem command "Insert Status" will insert a statement containing the current status of your Sendmail item at the DESTINATION you specify. You can modify this statement to contain the Sendmail commands appropriate for your Sendmail item. When this form is edited to your satisfaction, use the Process (command form) command in the SENDMAIL subsystem to automatically execute every command in the form. To insert a complete empty command form, use the BASE subsystem's Insert Sendmail (form) command. 9x1

Effects: If you Quit out of the Sendmail Subsystem sometime

before you go to Sendmail and Process your status form, you must re-specify the source of your item. 9x1a

Sendmail item: See item (SENDMAIL). 9x1b

editing: See writing. 9x1c

the form for each command: See sendmailforms. 9x1d

The SENDMAIL Process (sendmail form) command: See process (SENDMAIL). 9x1e

The BASE Insert Sendmail (form) command: See insert sendmailform. 9x1f

Link: Insert Link (to follow) DESTINATION OK: The Sendmail subsystem command "Insert Link" causes the system to create and place a link to the Sendmail item at the DESTINATION you specify if you have the right to write on the file. Since Journal files cannot be altered, this command will not place a link in a Journal file. Also, no link will be placed if the Number command has not been used to assign a number. 9x2

Journal file: See journal file (SENDMAIL). 9x2a

The Number Command: See number (SENDMAIL). 9x2b

Insert (accum following) STRING/STRUCTURE: The Calculator subsystem command "Insert" inserts the value of the accumulator into an NLS file. See also: accumulator. 9y

STRING: Insert (accum following) STRING DESTINATION OK: Use this command to insert the value of the accumulator following the type of STRING at the DESTINATION you specify. See also: STRING, DESTINATION, accumulator. 9y1

STRUCTURE: Insert (accum following) STRUCTURE DESTINATION LEVEL-ADJUST OK: Use this command to insert the value of the accumulator following the type of STRUCTURE at the DESTINATION you specify. See also: STRUCTURE, DESTINATION, LEVEL-ADJUST, accumulator. 9y2

Insert Format (at) DESTINATION (using Format #) CONTENT: (Title:) CONTENT

(Author Ident(s):) CONTENT

(Journal Number:) CONTENT (Formatting File)

The Format user-subsystem command "Insert" adds directives and any necessary special characters to a file according to a given predesigned format. You must first point to the file. It then lists your choice of formats. Printed samples of all the formats are available through FEEDBACK. You type the number of the desired format. 9z

I

Effects: Unless the file to be formatted is a Journal file, it asks you to type the title of the document, a list of author idents (which may include organization and group idents), and finally the Journal number (in case you have a preassigned number that you wish put on the file). To skip any of these fields in TNLS type CA, in DNLS type <CTRL-N>. The command will insert the directives necessary to produce the format you chose. It may insert directives in the origin statement, in every level one statement, and in some cases in the statement back from every level one statement. It also creates a title page as the last level-one branch in the file. The title, authors, and Journal number appear in the title page and in some cases in header or footer directives in the origin statement.

9z1

modifying the formatted file: The program only inserts text in the file. You may edit any of it as you see fit. For example, if one of the authors does not have an ident, you may add his/her name to the title page afterwards. Or you may edit the directives to modify the format. (You should feel fairly confident of your understanding of the Output Processor before you attempt to edit the more complex of these formats!) See directives.

9z1a

Formats designed for COM: Most of the formats were designed for Computer Output to Microfilm (COM). The intent is to make it very easy for users less experienced with the Output Processor to take advantage of COM's capabilities.

9z2

How to have your format and read it too!: To be safe you should use the "Format" command on files which previously have no directives in them. Since directives can get in the way of online reading, you may want to:

- Update File
- Execute (command in) Format Insert Format
- Output COM or Output Printer
- Delete Modifications

This last command undoes what the Insert Format command did. You are then left with a clean file. You must repeat the "Insert Format" command to prepare it for "Output" a second time. See output printer file.

9z3

inserting: See writing.

9a@

Institute PROGTYP (program) CONTENT OK: The Programs' subsystem command "Institute" activates a program that has already been loaded or compiled into your buffer. For CONTENT, you may use the name of the program or its number in your Buffer. Specify the purpose of the program for PROGTYP with one of the commandwords listed below. Loading programs automatically institutes them. See also: instituting, loading, compiling, show (PROGRAMS), commandwords:

9aa

- Content (analyzer): See content-analyzer, 9aa1
- Sequence (generator): See sequence, 9aa2
- Sort (key extractor): See sort (PROGRAMS), 9aa3
- deinstitute: See deinstitute (PROGRAMS), 9aa4

instituting loaded programs: Once a program has been loaded into the programs buffer, if it is a Content Analyzer filter, a Sort key algorithm, or a Sequence generator program, it is instituted automatically for you. Many programs may be loaded into the buffer at any time, but only one may be instituted for each function. Controlling viewspecs pass control to the instituted program only. See also: Loading, Institute, 9ab

interpreter: CML interpreter: a program that interprets grammars produced by the CML compiler. However, it could just as easily be a machine whose instruction set corresponds to the grammars produced by the CML compiler, 9ac

Interrogate OK: The Sendmail subsystem command "Interrogate" asks you five questions important for sending a simple piece of mail, 9ad

(distribute action to) CONTENT: See distribute (SENDMAIL), 9ad1

(distribute information-only to) CONTENT: See distribute (SENDMAIL), 9ad2

(title) CONTENT: See title (SENDMAIL), 9ad3

(type of source) ITEM: See item (SENDMAIL), 9ad4

(show status) ANSWER: See show (SENDMAIL), 9ad5

(send the mail ?) ANSWER: See send (SENDMAIL), 9ad6

How to skip questions: To skip one of the first three questions and go on to the next, type an OK (in DNLS a NULL character <CTRL- N> must precede the OK:), 9ad7

DNLS: See DNLS, 9ad7a

OK: See OK, 9ad7b

Interrogate: for retrieving Archived Files, use the TENEX interrogate command. See also: TENEX, 9ae

Invisible: a continuous STRING of one of the following generally non-printing characters. Pointing to any character position within the invisible will serve to point to the entire invisible. See also: notation, 9af

I

<ALT> Altmode or Escape key: See alt, 9af1

<CR>: the typewriter key that is used for a carriage return. See CR, 9af2

<CTRL-*> control character where * = any character: represented as <CTRL-*> See CTRL-character, 9af3

<EOL>: end of line See EOL, 9af4

<LF>: linefeed <CTRL-J>, See LF, 9af5

<NULL> nothing <CTRL-N>; See NULL, 9af6

<SP>: space key ..., also represented as <> See SP, 9af7

<TAB>; See TAB, 9af8

Item: one of the following, 9ag

Message: See message (SENDMAIL), 9ag1

STRUCTURE: See structure, 9ag2

Document: see Document, 9ag3

file: See file (SENDMAIL), 9ag4

offline: See offline (SENDMAIL), 9ag5

The Jump to item command: See jump item, 9ag6

iteration: if you don't understand this, read it again, 9ah

J

- j Viewspec: don't filter statements: "Ignore any content-analyzer," Viewspec j turns off viewspecs i and/or k. Viewspects i, j, and k are mutually exclusive. You can also turn on viewspec j and turn off viewspec i or k using the BASE subsystem command "Set Content (pattern) Off". This is a default viewspec,

10
10a
- J Viewspec: show statement numbers, not SIDs: "Use statement numbers for statement identification." This viewspec takes effect when viewspec m is on. It is also used to change I (show SIDs). The viewspecs G (right margin) and H (left of statement) determine where the statement numbers will appear. Example: if you have SIDs on at the right and want to change to statement numbers at the left, use the string HJ. This is a default viewspec. See also: Statementnumber, SID, m, Capital-I, Capital-H, Capital-G.

10b
- Jnumber: See xdoc.

10c
- Journal: stored items: The database of recorded items sent in the Sendmail subsystem. This was also a subcommand mode in old NLS-7 but has been replaced by the Sendmail Subsystem. See also: output journal, sendmail, distribution, ITEM, subcollections, header,

10d
- catalogs and indexes: See catalogs.

10d1
- SENDMAIL file: See file (SENDMAIL).

10d2
- journal-number: See numbering (SENDMAIL).

10e
- JSYS: lit,: "jump to system" The machine instruction used in TENEX to invoke a monitor supplied service; i.e. a jump to a subroutine.

10f
- Jump: The command "Jump" moves you from one file to another or from one place in a file to another. In TNLS you move to a character within a statement, and in DNLS, you move to the first character of the statement you point to. In DNLS, jump changes your view. For viewing in TNLS, use the Print command. The offers you a chance to change of Jump commands is available in all subsystems. See also: moving, jumping, subsystem, viewing.

10g
- Address:

10g1
- DNLS: Jump (to) Address (relative to) DESTINATION ADDRESS
 VIEWSPECS OK: The command "Jump (to) Address" moves you to a specific statement. To use a address in NLS, the system must know where you start from. For example, if you give .n for next, it must know the statement where you are (to go to the

J

next.) In this command, you establish where you are by entering something at the DESTINATION step. Then you can enter the address you want to go to from there. Use the Jump to Link command to jump directly to a statement not in your window. See also: ADDRESS, Jump Link. 10g1a

TNLS: Jump (to) Address DESTINATION OK: The command "Jump (to) Address" moves you to the location you specify. To use a address in NLS, the system must know where you start from. For example, if you give ,n for next, it must know the statement where you are (to go to the next.) In this command, you establish where you are by entering something at the DESTINATION step. Then you can enter the address you want to go to from there. You can move to another file and/or move within the file you have loaded. If you change files, the system will print out the new file's name. You can set up viewspecs for later reading, as with the print commands. See also: DESTINATION, ADDRESS, VIEWSPECS, reading, moving, filename. 10g1b

TNLS example:
 BASE C: Jump (to) C: Address A: onetest, alice .e
 BASE C: 10g1b1

BUG: [DNLS only] Jump (to) BUG VIEWSPECS OK: The "Jump (to) BUG" command moves you to the first character of the statement you Bug. You are positioned at the statement at the top of the screen after re-creation. See also: jumping, DNLS, VIEWSPECS, re-creating, bug. 10g2

Back: Jump (to) Back DESTINATION VIEWSPECS OK: The command "Jump (to) Back" moves you to the statement that is back of the one you specify for DESTINATION. See back. 10g3

TNLS example:
 BASE C: Jump (to) C: Back A: alice
 V:
 BASE C: 10g3a

Content: Jump (to) Content First/Next. 10g4

First: Jump (to) Content First SEARCH VIEWSPECS OK: SEARCH = CONTENT or OKREPEAT
 The command "Jump (to) Content First" will take you to the first time the characters you put in SEARCH appear in your file. You can TYPEIN or point to whatever characters you want, or hit the OKREPEAT character <CTRL-B> to search for characters you have already chosen. To repeat character search, use the TAB command, <CTRL-I>. You cannot search for something that is in quotes. See: TAB, content. 10g4a

TNLS example:
 BASE C: Jump (to) C: Content C: First RPT/T: T: soups

V: mw
"soups"=C ??
BASE C: Jump (to) C: Content C: First "soups" RPT/T: T:
Soups
V: mw
BASE C:

10g4a1

Next: Jump (to) Content Next SEARCH VIEWSPECS OK: SEARCH =
CONTENT or OKREPEAT

The command "Jump (to) Content Next" will find the next time
the characters you put in for SEARCH appear in your file. You
can TYPEIN what ever content you want, or hit the OKREPEAT
character <CTRL-B> to search for a CONTENT you have already
specified. To repeat a content search, use the TAB command.
See: TAB,

10g4b

TNLS example:
BASE C: Jump (to) C: Content C: Next "Soups" RPT/T: T:
Desserts
V:
BASE C:

10g4b1

Down: Jump (to) Down DESTINATION VIEWSPECS OK: The command "Jump
(to) Down" moves you to the statement that is down from the one
you specify for DESTINATION. See down.

10g5

TNLS example:
BASE C: Jump (to) C: Down A: 1c
V:
BASE C:

10g5a

End: Jump (to) End (of branch) DESTINATION VIEWSPECS OK: The
command "Jump (to) End " moves you to the end statement of the
branch that is defined by what you specify for DESTINATION. See
end,

10g6

TNLS example:
BASE C: Jump (to) C: End (of Branch) A: 1
V:
BASE C:

10g6a

File: Jump (to) File Named/Return,

10g7

Named: Jump (to) File Named CONTENT VIEWSPECS OK: The command
"Jump (to) File Named" allows you to go to the origin
statement of a file. Typein the FILEADDRESS of the file for
CONTENT. You need not include the final comma. If the file
is in your connected directory, you may "point" to its name
instead of typing the FILEADDRESS. The filename need not be a
part of a link. See also: FILEADDRESS, pointing, link,

10g7a

J

In DNLS, if the file is in another directory, and the filelink is in your window, use the Jump (to) File BUG command instead. Note: Jump (to) File Named does not follow the default directory for links when pointing to the FILEADDRESS. 10g7a1

TNLS example:
BASE C: Jump (to) C: File C: Named T: jmb
V: eb
< BECK, JMB,NLS;2, >
BASE C: 10g7a2

Return: Jump (to) File Return OK ("PAST FILEADDRESS")
ANSWER: The "Jump (to) File Return" command moves you to a file where you were before, ("PAST FILEADDRESS") is the name of the file you will go to if you answer Yes or hit CA. If you answer No, the FILEADDRESS before that will appear. See also: return. 10g7b

TNLS example:
BASE C: Jump (to) C: File C: Return OK: "< BECK, TALK,NLS;1, >Y/N: OK;
< BECK, TALK,NLS;1, >
BASE C: 10g7b1

Head: Jump (to) Head DESTINATION VIEWSPECS OK: The command "Jump (to) Head" moves you to the statement that is at the head of the statement you specify for DESTINATION. See head. 10g8

TNLS example:
BASE C: Jump (to) C: Head A: 1c
V: etb
BASE C: 10g8a

Jump (to) Return OK ("FLASHBACK") ANSWER: The command "Jump (to) Return" will take you back to a previous statement. ("FLASHBACK") represents the first few characters of the statement you will go to if you answer Yes or hit CA. If you answer No, the beginning of the previous position before that will appear as ("FLASHBACK"). See also: return. 10g9

TNLS example:
BASE C: Jump (to) C: Return OK: " WITH SOUR CREAM" Y/N: OK;
BASE C: 10g9a

ANSWER: See answer. 10g9b

Item: Jump (to) Item DESTINATION VIEWSPECS OK: The command "Jump (to) Item" moves you to the statement you specify for DESTINATION. 10g10

TNLS example:

BASE C: Jump (to) C: Item A: 012
V: etb
BASE C:

10g10a

Link: Jump (to) Link CONTENT OK: The command "Jump (to) Link" moves you to the ADDRESS and/or VIEWSPECS you point to or TYPEIN for CONTENT.

10g11

TNLS example:

BASE C: Jump (to) C: Link T: talk,

< BECK, TALK,NLS;1, >

BASE C:

10g11a

Name: The command "Jump (to) Name" finds the statement labeled by a name according to the following search-types and moves you to the first character of that statement. See also: STATEMENTNAME. 10g12

Any: Jump (to) Name Any CONTENT VIEWSPECS OK: The command "Jump (to) Name Any" finds a statement with the same name as the word (include dashes -, atsigns @, and apostrophes ') you specify for CONTENT in the fastest way possible regardless of its position in the file. You move to the first character of that statement. See also: STATEMENTNAME, CONTENT, VIEWSPECS, BUG,

10g12a

TNLS example:

BASE C: Jump (to) C: Name C: Any T/[A]: buffalo V: w
BASE C:

10g12a1

BUG: [DNLS only] Jump (to) Name BUG VIEWSPECS OK: The command "Jump (to) Name BUG" finds a statement with the same name as the word you bug (will include any dashes -, atsigns @, and apostrophes ') in the fastest way possible. This is usually, but not always the first one in the file. You move to the first character of that statement. See also: jumping, DNLS, VIEWSPECS, STATEMENTNAME,

10g12b

External: Jump (to) Name External CONTENT VIEWSPECS OK: The command "Jump (to) Name External" finds the statement with the same name as the word (includes dashes -, atsigns @, and apostrophes ') as specified for CONTENT. See also: statementname, CONTENT, VIEWSPECS, OK. See externalname, 10g12c

First: Jump (to) Name First CONTENT VIEWSPECS OK: The command "Jump (to) Name First" finds the first statement in the current file with the same name as the word (include dashes -, atsigns @, and apostrophes ') you specify for CONTENT, and moves you to its first character. See also: STATEMENTNAME, CONTENT, VIEWSPECS, 10g12d

J

TNLS example:

BASE C: Jump (to) C: Name C: First T: with
V:
BASE C:

10g12d1

Next: Jump (to) Name Next CONTENT VIEWSPECS OK: The command "Jump (to) Name Next" finds the next statement following your present location that has the same name as the word (include dashes -, assigns @, and apostrophes ') you specify for CONTENT. You move to its first character. See also: STATEMENTNAME, NEXTNAME, CONTENT, VIEWSPECS, next.

10g12e

TNLS example:

BASE C: Jump (to) C: Name C: Next T: with
V:
BASE C:

10g12e1

Next: Jump (to) Next DESTINATION VIEWSPECS OK: The command "Jump (to) Next" moves you to the statement that is next after the one you specify for DESTINATION. See next.

10g13

Origin: Jump (to) Origin DESTINATION VIEWSPECS OK: The command "Jump (to) Origin" moves you to the origin statement of the file that contains the statement you specified for DESTINATION. See origin.

10g14

Predecessor: Jump (to) Predecessor DESTINATION VIEWSPECS OK: The command "Jump (to) Predecessor" moves you to the statement that is the predecessor of the one you specified for DESTINATION. See predecessor.

10g15

Successor: Jump (to) Successor DESTINATION VIEWSPECS OK: The command "Jump (to) Successor" moves you to the statement that is the successor of the one you specified for DESTINATION. See successor.

10g16

Tail: Jump (to) Tail DESTINATION VIEWSPECS OK: The command "Jump (to) Tail" moves you to the statement that is the tail of the statement you specify for DESTINATION. See tail.

10g17

Up: Jump (to) UP DESTINATION VIEWSPECS OK: The command "Jump (to) Up" moves you to the statement that is up from the one you specify for DESTINATION, . See up.

10g18

Word:

10g19

First: Jump (to) Word First SEARCH VIEWSPECS OK: SEARCH = CONTENT or OKREPEAT

The command "Jump (to) Word First" finds the first occurrence of the word you choose for SEARCH. You can TYPEIN or point to what ever CONTENT you want, or hit the OKREPEAT character <CTRL-B> to search for a CONTENT you have already

specified. To repeat a content search, use the TAB command,
See: TAB, <CTRL I>.

10g19a

TNLS example:

BASE C: Jump (to) C: Word C: First RPT/T: T: soups

V: m

BASE C:

10g19a1

Next: Jump (to) word Next SEARCH VIEWSPECS OK: SEARCH =
CONTENT or OKREPEAT

The command "Jump (to) Word Next" will find the next
occurrence following your present location of the word you
specify for SEARCH. You can TYPEIN or point to whatever word
you want, or hit the OKREPEAT character <CTRL-B> to search for
a word you have already specified. To repeat a word search,
use the TAB command, <CTRL I>. See: TAB,

10g19b

TNLS example:

BASE C: Jump (to) C: Word C: Next "SOUPS" RPT/T:

V: m

BASE C: ; I used OKREPEAT there,

10g19b1

Jumping in DNLS: The NLS feature you use for moving to a new place
in a file. There is a whole family of Jump commands, available in
all subsystems. Some Jump commands take you to a character within a
statement; some take you to files; and some take you to statements
according to their structural position. In DNLS, all of them move
you to the first character of the statement or of the origin
statement of the file addressed. The view you specify in a Jump
command will appear in the file display window your cursor is in.
When you give the final OK for the command, your screen will be
re-created. See also: viewing, structural, pointing,

10h

re-creating the display: See re-creating.

10h1

Jumping in TNLS: See moving,

10i

K

K

11

K Viewspec: show next filtered statement: "Find the next statement that satisfies the content-analyzer, then turn the content-analyzer off." Viewspec j causes all statements to pass the filter, regardless of content. Viewspec i allows you to pass all statements containing the correct content. Viewspecs i, j, and k are mutually exclusive. Compare TAB-command.

11a

K Viewspec: statement signatures on: "Show statement signatures after each statement." Viewspec L suppresses statement signatures; K switches them on. Statement signatures contain the ident of the person who last edited that statement and the date and time of the last edit. See also: IDENT, Capital=L.

11b

Keyset: A device with five piano-like keys for entering characters into NLS at a display console. Each key controls a bit in 5-bit ASCII code. With your left hand on the keyset and your right hand on the mouse, you can give all input to DNLS without ever moving your right hand to the keyboard. Moving both hands to the keyboard is efficient for typing in a long series of text. Different combinations of mouse buttons are used in conjunction with keyset combinations to make this possible. The small Viewspec/Mouse and Keyset Card shows you all the possible mouse and keyset combinations. Ask your architect for this Card or address requests to the IDENT Feedback. You can also contact the Augmentation Research Center, SRI, 333 Ravenswood Avenue, Menlo Park, Calif, 94025, (415)326-6200 ext.3630, or in this publication see: mouse=keyset.

11c

Mouse=Keyset combinations: See Mouse=Keyset.

11c1

Keywords CONTENT OK: The Sendmail subsystem command "Keywords" allows you to specify which words will typify the nature of the document. CONTENT wants you to indicate the keywords. ARC does not at present produce keyword indices of journal items except on request. However, words in the title are used in the titleword index.

11d

Title command: See title.

11d1

CONTENT: See content.

11d2

catalog: See catalog.

11d3

subcollection: See subcollection.

11d4

Kill TENEX (subsystem) OK: The Programs' subsystem command "Kill
TENEX" undoes the command "Run TENEX," 11e

KW: Knowledge Workshop: See AKW. 11f

L

L

- l Viewspec: show plex only: "Show only the plex of the statement where you are located." Only the addressed plex will appear. In TNLS, this affects the operation of Output and Print commands. Viewspec h does NOT limit operation to one plex. To show one branch only, use g.

12
- L Viewspec: statement signatures off: "Don't show statement signatures." L switches off K (show statement signatures). This is a default viewspec. See also: Statement, Signatures, Capital-K.

12a
- L-colon: L: LEVEL-ADJUST d/u: See level-adjust.

12b
- L10: programming language: the ALGOL-like procedure-oriented programming language used at SRI-ARC. Some of NLS is written in L10. See programs.

12c
- Binding Precedence: Order of Operator Execution See Binding.

12d
- L10-HELP: The L10 user's guide: See locator, userguides, L10-guide, .

12d1
- language: See command.

12d2
- last-name search: ,lastname, ,last... If you type in a period and then a last name, the Sendmail subsystem will find the IDENTs for all people with that last-name. The beginning characters of a last name preceded by a period and followed by three periods will find the IDENTs for all last-names beginning with those characters. If only one IDENT satisfies your request, you will be shown this IDENT and asked if it is the correct one. Typing a CA will put this IDENT into the command. When an IDENTLIST is called for, any last-name search must have a comma separating it from the next item in the IDENTLIST. Typing a <CTRL-O> will stop an IDENT search at any time.

12e
- leaving NLS to TENEX: To return to the TENEX timesharing system from NLS use the Quit NLS command. After that, you can type "con" followed by carriage return at the TENEX herald to return to NLS. To break contact with TENEX entirely use the Logout command in TENEX or NLS. To leave NLS anytime for an excursion in TENEX, use the Goto TENEX command. This command issues to you a second copy of TENEX called "inferior exec". To return from this second copy to NLS, use the TENEX Quit command.

12f
- Inferior Exec: [TENEX as a subsystem of NLS] See Inferior.

12g
- The TENEX herald is the atsign (@): A herald is the identifying

12g1

- character(s) at the left margin that shows your current (sub)system. 12g2
- Goto SUBSYSTEM command: See goto. 12g3
- command to Quit: See quit NLS. 12g4
- command to logout: See logout. 12g5
- control-c <CTRL-C> and Continue: See <CTRL-C>. 12g6
- left button down while giving a keyset code = numbers, etc. Holding down the left mouse button while giving a keyset code allows you to input numerical and nonalphabetic characters. See keyset. 12h
- Left=anglebracket (<) command: Typing the left=anglebracket key (<) at the herald of a subsystem displays your subsystem stack -- See stack. 12i
- less-than: See lessthan. 12j
- lessthan symbol: < Subsystem Stack, See: stack; anglebrackets. 12k
- Letter: The user=program "Letter.rel" asks questions and formats the answers for a business letter. It is not a user=subsystems and therefore does not have the prompting, questionmark, and help features. You must already have written the body of the letter. It should be in a file by itself and you should be in that file. You should also have a pre-assigned journal number and a title ready to give as leaving them out causes the program to do bad things. See running (PROGRAMS). 12l
- level: In NLS, files are arranged in an outline form. Level refers to how far up or down a statement is in the outline. The organization of all the statements determines the STRUCTURE of a file. The level of a statement is created or modified when you use certain commands that prompt you with L:. Lower levels can be hidden by level clipping viewspecs. The normal indentation of different statements in the view of a file shows their level in the structure. If you see: illustration, you will notice that the statements at the same indentation as Statement 0 are first-level statements (e.g. 1, 2, 3, etc.); statements indented 3 spaces from first-level ones are second-level statements (e.g. 1a, 3b, etc.). Third-level statements are called "down" from second-level ones; first-level ones are called "up" from lower ones. See: STRUCTURAL, clipping. 12m
- If you don't see any level indentation: it doesn't necessarily mean that the statements aren't arranged at different levels; the indentation itself could be off; either your Useroptions Viewspecs remain set to the beginner's defaults (See also: Viewspecs (USEROPTIONS)), or you've put viewspec B on (See also: B). Statement numbers will still show levels in the file

L

structure when level-indenting is off. See also: statementnumber, 12m1

LEVEL-ADJUST: See level-adjust: , 12m2

level-clipping: With reference to NLS Viewspecs, the practice of controlling how deeply into the outline structure of a file you see in any given view one level. See clipping, 12m3

illustration of file structure: See illustration, 12m4

See also: statement, statement numbers, down, up, 12m5

LEVEL-ADJUST: prompted by L: asks you to specify the level you wish STATEMENTS to occupy relative to where you just pointed. If you want to change the level type a lowercase d for down or lowercase u for up. In the Insert STRUCTURE commands, these must be followed by a space or a CA before you indicate the new structure. You can type more than one u (with no spaces in between) to go up more than one level. If you don't want to change levels, just ignore the LEVEL-ADJUST field with a CA and go on. See also: PROMPTS, STRUCTURE, STATEMENT, 12n

down: See down, 12n1

up: See up, 12n2

combinations of characters, u's and d's: See combinations, 12n3

level-clipping: With reference to NLS Viewspecs, the practice of controlling how deeply into the outline structure of a file you see in any given view. See clipping, 12o

<LF>: linefeed <CTRL-J>. The notation <LF> represents the linefeed key <CTRL-J>, 12p

the LINEFEED command: See linefeed (BASE), 12p1

library: See userprograms, 12q

Limit commandword feedback in TNLS: When you type one, two, or three letters of a command word NLS normally completes the word. You may restrict the number of letters the system will type back in TNLS with Useroptions Feedback and Reset Feedback commands which specify Length (the default Length is all characters up to 50), 12r

Useroptions feedback command: See feedback (USEROPTIONS), 12r1

Useroptions reset feedback command: See reset feedback (USEROPTIONS), 12r2

Limitations of the default sort: The sort that NLS uses unless you specify a different sort key places certain special characters (CTRL-characters) first, then all spaces and other non-letters or digits, then all numbers, then all uppercase characters, then all lower case characters in this order:

<TAB> <ESC> <SP> ! " # \$ % & ' () * + , - . / 0 1 2 3 4 5 6 7 8 9 :
; < = > ? @ A B C D E F G H I J K L M N O P Q R S T U V W X Y Z [\] ^ _ ` a b c d e f g h i j k l m n o p q r s t u v w x y z | 12s

line: 12t

as a textual entity: NLS commands do not deal with lines per se. The basic unit of a file is the statement, which may be longer than one line of a standard typewritten page. If the statement is longer than one line, NLS automatically breaks between words to fit the statement to the lines you see on the terminal or hardcopy. NLS manipulates segments of statements; See also: scrolling, STRINGS, 12t1

processor -- line processor: See lineprocessor, 12t2

printer -- line printer: a piece of hardware that prints pages a line at a time, 12t3

feed: line feed: See lf, 12t4

<LINEFEED>: <CTRL-J>: Typing the LINEFEED key in TNLS will print the statement next to (below) the statement where you are. See also: next, 12u

TNLS example:
BASE C: <LF>
3b Of shoes and ships and ceiling wax, of cabbages
and kings.
BASE C: 12u1

Effects: On most terminals, the character for this function is the LINEFEED key or <CTRL-J>. No OK is required in this command. After execution, you are at the first character of the statement printed, 12u2

DNLS: <LINEFEED>: to do the equivalent of the <LINEFEED> key in DNLS, use the Jump (to) Next command, 12u3

Lineprocessor: a device that sits between certain alpha-numeric display terminals and a source of NLS computer service to allow use of the features of Display NLS, 12v

Connections: The Lineprocessor must be connected to a source of computer service. It may be wired permanently to a computer or to a TIP with access to the ARPANET, or it may be connected to a

L

telephone through a box called a modem with or without an acoustic coupler that cradles the receiver, 12v1

Simple Startup: See Simple, 12v2

Link: a STRING of CHARACTERS in a STATEMENT that names the address of any location in any NLS file (optionally with any view). Links are surrounded by delimiters in the order and format: <ADDRESS : VIEWSPECS>. An ADDRESS without VIEWSPECS needs no colon. If you use the VIEWSPEC field, you must have a colon preceding it. Spaces are optional. You can use parentheses "()" instead of angle-brackets "<>". Two dashes "--" also work as a left delimiter. Pointing to any character position ahead of or in a link will serve to point to the link. See also: pointing, 12w

ADDRESS: See address, 12w1

VIEWSPECS: See viewspecs, 12w2

parens (): See parens, 12w3

Warning with the Replace Link command: If you attempt to replace a link with something that does not fit legal link syntax, you will get an error message, the edit will not occur, and the text you have typed to replace the link will disappear, 12w4

Linking: See connecting, 12x

literal escape: <CTRL-V>: Typing the character <CTRL-V> allows you to insert a special character, as part of the text. Such special characters normally make something happen (like <CTRL-D>). For example, in TNLS, you may want to insert a carriage return in the text and carriage return, by default, also means command accept (CA). If you precede the carriage return with <CTRL-V>, it will not act as CA for that one time but rather as a literal carriage return. You can make any additional key to be your literal escape key with the Useroptions Control command. See also: control, TYPEIN, control (USEROPTIONS), 12y

Load File CONTENT OK: The command "Load File" will move you to the first character of the origin statement in the file specified by the FILEADDRESS you give for CONTENT. The file must already exist. If the file is located in another directory, be sure to specify it, 12z

TNLS example:
BASE C: Load C: File T: USERGUIDES, LOCATOR,
BASE C: 12z1

Load Program CONTENT OK: The Programs' subsystem command "Load Program" loads a pre-compiled program into the program buffer from the file with the FILEADDRESS you specify for CONTENT, 12a@

TNLS example:

PROG C: Load C: Program T: format
Loading User Program
PROG C:

12a@1

Effects: See loading.

12a@2

loading user program files: For programs that have already been compiled into files, use the Load Program command to get the program into your buffer space and instituted. First if you do not specify an EXTENSION, it will look in your connected directory for a file with an EXTENSION in the order listed below. If it does not find the file, it will look in the directory PROGRAMS. The Load Program command will do different things depending on the EXTENSION field of the program's FILENAME. You may use <ALT> for filename recognition. See also: Load (PROGRAMS), FILENAME, EXTENSION.

12aa

.REL; RELocatable L10 program (file): See REL.

12aa1

.CA; content-analyzer Program: See CA.

12aa2

.SK; Sort Key program: See SK.

12aa3

.SG; Sequence Generator program: See SG.

12aa4

.SUBSYS; An L10 program written to support a CML program: See SUBSYS.

12aa5

.CML; Command Meta Language: See CML.

12aa6

.PROC-REP; An L10 Procedure Replacement program: See PROC-REP.

12aa7

instituting loaded programs: See instituting.

12aa8

buffers: See buffers.

12aa9

stacks: See stacks.

12aa10

library: See userprograms.

12aa11

locating your position in a file: There are several ways you can show your location without changing it. Typing a Period (.) at a herald in TNLS will print your location as a character position and a statement, both indicated by numbers. Typing a Slash (/) at a herald in TNLS will print the location in the context of a few of the characters on either side of it. There are two ways (which you can use in DNLS too) which show your location within an ADDRESS: backslash (\), which prints statement, and slash (/), which prints context.

12ab

period [.] command: See period (BASE).

12ab1

backslash [\]: See backslash.

12ab2

L

slash [/]: See slash, 12ab3

locator file: The file named <userguides, locator, > is an outline of documents. In Locator, links are arranged to lead you easily to useful views of actual documents. Branch 1 of locator instructs you how to use locator. Further guidance appears as needed in the subject files. You cannot currently access the locator file with the Help command. In TNLS, say "Print Branch userguides, locator, 1 ,1" followed by a carriage return. In DNLS say "Jump (to) Link userguides, locator," followed by CA, 12ac

Locked file: See modification, 12ad

login (to TENEX): When your terminal is connected, type <CTRL-C> to get the attention of TENEX. You will see a login message and then the TENEX herald, @, at the margin. (If you enter through the Network, it hits the first <CTRL-C> for you.) Then type your username followed by the carriage return key. Then you will see typed "(password)", and you should type your password and a carriage return. Then you will see typed "(account)", and you should type a carriage return. When the herald appears again, you have logged into TENEX, 12ae

TENEX: See TENEX, 12ae1

TENEX=herald: See TENEX=herald, 12ae2

password: See password, 12ae3

account: See account, 12ae4

NLS (How to get NLS): See NLS, 12ae5

If you're not on a TI (upper/lower case) or TTY-35: see terminal-type, 12ae6

Logout OK: The NLS command "Logout" causes you to leave both the NLS system and the TENEX Executive level at once. It is equivalent to using the Quit NLS command and then TENEX's Logout command, 12af

TNLS example:
BASE C: Logout
TERMINATED JOB #, USER,.. 12af1

lp: See lineprocessor, 12ag

LSEL: Literal SElection: a synonym for content: See content, 12ah

M

- m Viewspec: statement numbers/SIDs on: "Show statement identification." Using m with J turns on statement numbers. Using m with I turns on SIDs. Viewspec n turns off all identification. G will put the statement identification at the right margin; H will place it at the left. Example: string mIG will make the SID for each statement appear after it at the right margin. See also: statementnumber, G viewspec, H viewspec, I viewspecc, J viewspec.

13
13a
- mail: See sendmail and sndmsg.

13b
- Mark Character (at) DESTINATION (with marker named) CONTENT OK: The command "Mark Character" assigns a marker at the DESTINATION you specify in the file, with the name you specify as CONTENT. See: bugmark, cursor.

TNLS example:
BASE C: Mark C: Character (at) A: 1a(with marker named) T/[A]:
tiger
BASE C:

See also: Show Marker, Delete Marker, Delete All.

13c
13c1
13c2
- MARKER: #MARKER (preceded by poundsign): 1-5 alphanumeric characters (incl. hyphen and quote), that are assigned to a particular character position in a file. You can point to a marked character by using the marker name preceded by # in an ADDRESS expression. You can also point there in DNLS by holding down the right-most button on the mouse and typing in the marker name. Assign markers with the mark command. They are normally invisible when viewing your file, but you can see a list of all your file's markers with the Show Marker list command.

examples of pointing with markers: If a marker's name is "signal", typing #signal for an address or holding down the right-most button on the mouse and typing signal will take you to that marker when prompted for a bug or address.

Mark command: See mark.

Show Marker (list) command: See show marker (BASE).

Delete Marker command: See delete marker.

Delete All Markers command: See delete all.

13d
13d1
13d2
13d3
13d4
13d5

M

menu: A numbered list of related subjects that may follow an explanation in the Help command. This list is called a menu. Typing a number followed by OK will show the explanation named. 13e

Merge: Merge STRUCTURE (at) DESTINATION (into) DESTINATION OK: This command moves and combines a plex, a group, or the substructure of a branch into another of the same kind. 13f

TNLS example:

BASE C: Merge C: Plex (at) A: 2a1

(into) A: 5b1

BASE C:

13f1

Effects: "Merge Statement" has no meaning. If both STRUCTURES have been previously sorted with the Sort command, the merged STRUCTURE will be properly sorted. After execution, you are at the first character of the first statement of the new group or plex. 13f2

Message - one of the following: 13g

message in the NLS Sendmail subsystem: Message CONTENT OK: The Sendmail subsystem command "Message" allows you to type one statement (up to 2000 characters). You may use backspace character (BC) and backspace word (BW) to edit the message and <CTRL-R> to see what you've written. 13g1

BW: See backspace, 13g1a

BC: See bc, 13g1b

<CTRL-R>: See CTRL-r, 13g1c

The sendmail subsystem: See sendmail, 13g1d

more about messages: A Journal or Sendmail message is any Item that consists of less than 2000 characters. When received, the entire message appears in the initial file of the receiving individuals. Messages are stored with other messages in large files in the Journal directory. Items over 2000 characters are called "documents", 13g1e

Item: See item (SENDMAIL), 13g1e1

Initial file: See initial, 13g1e2

The Send command: See send, 13g1e3

message in the TENEX system: (MESSAGE.TXT TENEX) file: When someone sends you a message via the TENEX SNDMSG system, a file called MESSAGE.TXT; is created to contain it. To read your unread messages in TENEX, type MESSAGE<CR> or type REA<ESC> <CR> <CR>. To read your TENEX messages in NLS, use the Message

user-subsystem. Use the SENDMAIL subsystem to send messages in NLS. Occasionally delete your MESSAGE.TXT file so it doesn't get too big. When you delete and expunge the MESSAGE.TXT file, all of your messages go away, but the filename remains as a deleted file until you get a new message. 13g2

the message user-subsystem: Message: The user-subsystem "Message" contains the following commands for using NLS to handle SNDMSGs. 13g3

Copy Message (File) OK (to follow) DESTINATION LEVEL-ADJUST OK: The Message user-subsystem command "Copy" will copy your MESSAGE.TXT file to the DESTINATION you point to. It changes the format to make the messages easy to handle in NLS. 13g3a

Move Message (File) OK (to follow) DESTINATION LEVEL-ADJUST OK: The Message user-subsystem command "Move" will copy your MESSAGE.TXT file at the DESTINATION you point to and then delete the MESSAGE.TXT file. It changes the format to make the messages easy to handle in NLS. A TENEX work file should contain your messages in case something goes wrong. 13g3b

send Message (structure:) OK: (To (and cc):) CONTENT (Subject:) CONTENT (Message/STRUCTURE:) MSGITEM (Status of the distribution is displayed here) (Send the message? (Type n to add to list)) ANSWER OK 13g3c

MSGITEM = Message CONTENT or Statement/Branch/Group/Plex DESTINATION: The Message user-subsystem command "send" asks the preceding questions and then sends a TENEX SNDMSG to the MESSAGE.TXT file of the people whose usernames or IDENTs you specify. You can say "Message" for MSGITEM and TYPEIN or point to the "text" you wish to send; OR you can specify a STRUCTURE command-word and point to a STRUCTURE you have already created. 13g3c1

Sort Message (Plex at) DESTINATION OK: The Message user-subsystem command "Sort" orders your messages by date most recent first. 13g3d

Reformat (citations in) STRUCTURE (at) DESTINATION OK: The Message user-subsystem command "Reformat" will reformat your sendmail citations to correspond with the way the Message user-subsystem command "Copy" and "Move" reformats sndmsgs including date of receipt and the distribution list if possible. 13g3e

middle mouse button: See Mouse. 13h

Minus: See also: minus (CALCULATOR), see stringposition or subtract. 13i

M

modification (file): a file containing the changes you have made on an NLS file. You can edit files temporarily or permanently with the NLS BASE subsystem. Temporary modifications reside in a holding file. The name you were logged in under when you made the modifications precedes the filename in parentheses. Its version number is the same as the NLS file, but its extension is .PC; (for Partial Copy) instead of .NLS;. This file disappears after the Update, or Delete Modification command. The Update command incorporates the changes permanently into the NLS file. To delete the modifications you have made since the last update, use the Delete Modification command. See also: modifying-commands. 13j

Logging out before updating: If you logout without updating and thus leave a modification file hanging, it will be there the next time you login. 13j1

Restrictions: The system prevents you from changing or establishing modification files for certain NLS files such as a file where someone else has created a modification file, or a file that you are not allowed to write on.
 You may load a file, and then someone else may load the same file and begin to make modifications on that file. If you also start to make modifications, the first OK that you hit will give you the message that the file is already being modified. The command you were inputting will be completely erased. 13j2

There is no way to view the contents of someone else's modification file: Modification files work like transparent overlays on illustrations. If some other user loads the file you are making changes on, he will not see the changes. The file will look like it did after the last update. The system tells you that the file is being modified by another. The modifications file itself is meaningless without the corresponding NLS file and there is no point in trying to load it separately. 13j3

Delete Modifications command: See delete modifications. 13j4

editing commands: See commands (BASE). 13j5

temporary modification: see temporary. 13j6

Update File command: See update. 13j7

modified file: See modification. 13k

Modify: The user-subsystem "Modify" contains three commands which are extensions of the BASE subsystem's editing commands. See also: writing. 13l

Append Group/PLex (at) DESTINATION (join with) CONTENT OK: The Modify user-subsystem command "Append" will append all of the statements in the Group or Plex you specify to one another successively. If any of these statements has sub-statements, the

sub-statements will be placed together in order under the new single statement. When the accumulated statements reach the maximum size (2000 characters), NLS starts a new statement. See: Append (BASE), 1311

Delete Column / Leading / Names ... 1312

Column: Delete Column (of width beginning at) DESTINATION (through) DESTINATION OK: The Modify user-subsystem command "Delete Column" will delete the text between the points in the line you point to. It will do this in all statements in the plex with the same level as the level of the statement you point to. 1312a

Visible: Delete Visible (beginning in column of width) DESTINATION (through) DESTINATION OK: The Modify user-subsystem command "Delete Visible" will delete the text between the points in the line you point to only if the first character of the column starts with a visible. It will do this in all statements in the plex with the same level as the level of the statement you point to. 1312a1

Leading: Delete Leading (spaces in) STRUCTURE (at) DESTINATION OK / [FILTER OK]: The Modify user-subsystem command "Delete Leading" will delete spaces that begin statements. See also: FILTER, 1312b

Names: Delete Names (in) STRUCTURE (at) DESTINATION OK / [FILTER OK] The Modify user-subsystem command "Delete Names" will delete the names that begin statements. See statement-names. See also: FILTER, 1312c

Force (sentence case in) STRUCTURE (at) DESTINATION OK: The Modify user-subsystem command "Force" will change statements that are all upper case to lowercase leaving upper case characters at the beginning of the statement and following spaces after a period, questionmark, or exclamation point. 1313

Insert Front/Back (of) STRUCTURE (at) DESTINATION (the text) CONTENT OK: The Modify user-subsystem command "Insert" augments the NLS BASE subsystem insert command. 1314

Front: Insert Front/Back (of) STRUCTURE (at) DESTINATION (the text) CONTENT OK: The Modify user-subsystem command "Insert" adds the characters you specify for CONTENT to the beginning or end of every statement in the STRUCTURE at the DESTINATION you specify. 1314a

Filter option: Before specifying the STRUCTURE to be modified, you may type <CTRL-U> to have the insertion operate through the FILTER viewspecs you specify.

M

Insert Front/Back (of) [Filtered: VIEWSPECS] STRUCTURE
(at) DESTINATION (the text) CONTENT OK: 1314a1

STRUCTURE: Statement, Branch, Group, or Plex: See
structure. 1314a2

Address: Insert Address (for ident(s)) CONTENT (to follow
statement at) DESTINATION LEVEL-ADJUST OK The Modify
subsystem command "Insert Address" inserts the U.S. Postal
Address after the DESTINATION you point to for any list of
IDENTs you specify. 1314b

IDENT: See ident. 1314b1

modifying-commands: Replace, Copy, Transpose, etc. See also:
file-handling. 13m

Append statement (at) SOURCE (to) DESTINATION CONTENT OK: see
Append. 13m1

Break Statement (at) DESTINATION LEVEL-ADJUST OK: See Break, 13m2

Copy: See Copy, 13m3

Delete: See Delete, 13m4

Edit: Edit Statement (at) DESTINATION EDITSTRING OK: See Edit, 13m5

Force (Case): See Force, 13m6

Insert: See insert, 13m7

Merge: Merge STRUCTURE (at) DESTINATION (into) DESTINATION OK:
See Merge, 13m8

Move: See Move, 13m9

OKINSERT: See OKINSERT, 13m10

Replace: See Replace, 13m11

Reset Case Mode: See reset case, 13m12

Sort STRUCTURE (at) DESTINATION OK: See Sort, 13m13

Substitute STRING (in) [(Filtered:) FILTER] ... See Substitute, 13m14

Transpose: See Transpose, 13m15

Update File: See Update, 13m16

Delete Modifications: See delete modifications, 13m17

- Undelete Modifications: See undelete modifications, 13m18
- modifying: See writing, 13n
- Monitor: A program which remains in memory at all times and controls the coming and going of data and other programs in the machine, 13o
- Mouse: A handsized device normally operated by the user's right hand when using NLS from a display console. The mouse rolls freely on any flat surface, causing a cursor (or mark) on the display screen to move correspondingly. Although you need only use the first four below, almost every combination of buttons on the mouse means something. See also: DNLS, mouse=keyset, bug, 13p
- right button alone = BUG / CA: the Command Accept key. The right button on the mouse works just as the CA key on the keyboard, 13p1
- left button alone = BC: the Backspace Character key. The left button on the mouse works just as the BACKSPACE key on the keyboard, 13p2
- center button alone = CD: the Command Delete key. The center button on the mouse works just as the CD key on the keyboard, 13p3
- left¢er buttons down while typing a letter = VIEWSPEC: Typing a letter while holding the left¢er buttons down on the mouse specifies a lower-case viewspec. For a capital-letter viewspec, hold all three buttons down while typing the letter. You can specify viewspecs anytime; NLS doesn't have to be ready for a new command. Your viewspecs will change immediately, though the screen won't show the change until you input an f viewspec, 13p4
- right¢er buttons alone = OKREPEAT: Holding down the right and center buttons on the mouse as the final confirmation of a command gives you the OKREPEAT function, 13p5
- left¢er buttons alone = BW: the Backspace Word Key. The left and center button on the mouse pressed at the same time and then released works just as the BACK SPACE WORD key on the keyboard. See BW, 13p6
- right&left (outside) buttons alone = ALT MODE or ESCAPE: Holding down the right and left outside buttons on the mouse works as ALT MODE or ESCAPE. It works just as the ALT MODE or ESC key on the keyboard. It may echo as <ESC>, 13p7
- all-buttons alone does nothing. This can be very useful: If you have pushed a mouse button down by mistake, push down the other two, then let all three up, 13p8
- center button down while typing a letter = Capital letters: Holding down the center mouse button while typing a letter causes the letter to be taken as a capital letter, 13p9

M

left button down while giving a keyset code = numbers, etc.
 Holding down the left mouse button while giving a keyset code allows you to input numerical and nonalphabetic characters, 13p10

right and center buttons down, typing a character =
 CTRL-CHARACTER: Holding down the right and center mouse buttons allows you to specify a CTRL-character. It works just as if you held down the CTRL key while typing the character. This feature will eventually be eliminated, 13p11

right button down while typing characters = Marker Search (on keyset or keyboard): Holding down the right-most mouse button while typing or using the keyset inputs the name of a marker. You must finish giving the marker before you let up the mouse button. The marker with that name can be used to indicate a DESTINATION in a command, 13p12

all-buttons down while typing a letter = CAPITAL VIEWSPEC (on keyset or keyboard): Holding down all the mouse buttons while typing a letter specifies a Capital-letter viewspec; e.g, if you type the keyset code for "k" while holding down all three mouse buttons, viewspec K will immediately be taken. You can specify viewspecs anytime; NLS doesn't have to be ready for a new command. Your viewspecs will change immediately, though the screen won't show the change until you input an f viewspec (while holding the two left buttons down), 13p13

Mouse-Keyset combinations:

Mouse				Mouse			
Keyset	000	010	100	Keyset	000	010	100
00000		CD	BC	10000	p	P	0
00001	a	A	!	10001	q	Q	1
00010	b	B	"	10010	r	R	2
00011	c	C	#	10011	s	S	3
00100	d	D	\$	10100	t	T	4
00101	e	E	%	10101	u	U	5
00110	f	F	&	10110	v	V	6
00111	g	G	'	10111	w	W	7
01000	h	H	(11000	x	X	8
01001	i	I)	11001	y	Y	9
01010	j	J	@	11010	z	Z	=
01011	k	K	+	11011	,	<	[
01100	l	L	-	11100	.	>]
01101	m	M	*	11101	;	:	_
01110	n	N	/	11110	?	\	ESC
01111	o	O	~	11111	SP	TAB	CR,

13q

Move: The command "Move" transfers one of the following SOURCES you specify to the DESTINATION you specify. It combines the Insert, Copy, and Delete commands. Move does not pay attention to the viewspecs you have on (i.e., it works throughout the STRUCTURE you point to whether all of it's visible to you or not), unless you specify VIEWSPECS in the FILTER option, which pays attention to level, content analyzer, names, and sequence generator viewspecs.

You cannot limit the effects to certain lines (like first lines only) with a filter. 13r

STRING: Move STRING (from) SOURCE (to follow) DESTINATION OK:
This group of "Move" commands moves a STRING to another location. 13r1

TNLS example:
BASE C: Move C: Character (from) A: 3d "use."
(to follow) A: "end of sentence"
BASE C: 13r1a

Effects: SOURCE includes the choice of TYPEIN, that is, you can "insert" a new STRING, instead of "moving" one, into the new location with this command. After execution, you are at the last character of the STRING in its new place. 13r1b

STRING: Character, Text, Word, Visible, Invisible, Number, or Link See string. 13r1c

STRUCTURE: Move STRUCTURE (from) SOURCE (to follow) DESTINATION [(Filtered:) FILTER] LEVEL-ADJUST OK
This group of "Move" commands moves a STRUCTURE to another location. 13r2

TNLS example:
BASE C: Move C: Group (from) A: 3d1
through A: 3d5
(to follow) A: 2a
L: d
BASE C: 13r2a

Effects: SOURCE includes the choice of TYPEIN, i.e., you can "insert" a new statement, instead of "moving" one, into the new location with this command. After execution, you are at the first character of the STRUCTURE in its new place. 13r2b

FILTER option: enter VIEWSPECS: With this option in force only statements move that "pass" certain viewspecs you can specify as a string of character codes. Type the OPTION character first and then enter any combination of the following Viewspecs: for level--a, b, c, d, e, w, x; for content analyzer--i, j, k; for sequence generator--O, P. If the filtering leaves statements somewhere without a source, substatements will move up in level. After using this option, you will be able to specify a LEVEL-ADJUST. See also: viewspecs, source, substatement, level, LEVEL-ADJUST. 13r2c

STRUCTURE: Statement, Branch, Plex, or Group: See structure. 13r2d

Edge: [DNLS only]: Move Edge (from) BUG (to) BUG OK: The command "Move Edge" moves from one place on the screen to another the edges of windows that have been created with the Insert Edge command. Use the Delete Edge command to get rid of a window. 13r3

M

File: Move File (from old filename) CONTENT (to new filename)
 CONTENT OK: The command "Move File" transfers a file from one directory to another. It is the equivalent of the TENEX Rename file command. The name of the file will change to the name you give. If you don't specify a version number, the file will be numbered one number higher than the highest version of the file with the same name (version 1 if it's a new name). The old name will appear in the origin statement until you Update the file. 13r4

TNLS example:
 BASE C: Move C: File (from) old filename F: latra
 (to new filename) T: trala
 BASE C: 13r4a

moving around in files and printing on your terminal in TNLS: The family of Jump and Print commands are used to view information in TNLS. Jump to Address is the basic TNLS pointing command. Other Jump commands point to a character within a statement; some point to files; and some point to statements by their structural position. See also: pointing, file, structural, Jump, and printing. 13s

Multiline Controller: a specially designed multiplexor-like device which supports the access of up to 64 terminals of varying type into a TIP. 13t

Multiply CONTENT OK: The Calculator subsystem command "Multiply" multiplies the value of the accumulator by the number(s) you specify for CONTENT. See also: operators, accumulator, CONTENT, OK. 13u

N

n Viewspec: statement numbers/SIDs off: "Don't show any statement identification." This viewspec turns off viewspec m (show statement identification). This is a default viewspec. See also: statementnumber, Capital-G, Capital-H, Capital-I, Capital-J, 14

name: 14b

marker name: See marker. 14b1

statement name: See statementname. 14b2

file name: See fileaddress. 14b3

username (directory name): See username. 14b4

site name: See site. 14b5

NAME: the field in a FILENAME portion of a FILEADDRESS that can contain up to 39 letters, numbers, dashes, and a few other special characters. It may be preceded by a directory name and it may be followed by an extension field. You can make the system type most of it by using <ALT>, <CTRL-F>, and stars. See also: FILENAME, recognition, directory, extension. 14c

Name (delimiters defaults): (left delimiter) CONTENT (right) CONTENT OK: 14d

This useroptions command sets the statement name delimiters to the characters you specify for CONTENT. These will be in effect whenever you create a file or use the Reset Name delimiters command. Only one character is allowed for the left delimiter and one for the right. If you do not use this command your statementname delimiters will be NULL NULL. See also: statementname, name-delimiters, show name (USEROPTIONS), reset name (USEROPTIONS), set name (BASE), reset name (BASE), show name (BASE).

name-delimiters: the characters which enclose, and thus define for system recognition, statement names. The default name delimiters are NULL NULL. This means the first word of every statement that begins with a letter, or atsign is named and the name is the first word of the statement. With this default, you can unname any statement by adding a space (or other character) to the beginning of the statement. A new statement you TYPEIN will have the same delimiters as its source. A delimiter may be any letter OTHER than those reserved for statementnames. Invisible characters after the name before the right delimiter will be ignored. You can change

N

your name delimiters with one of the following commands. See also: STRUCTURE, source, INVISIBLE, STATEMENTNAME. 14e

Set Name (delimiters) command: See set name. 14e1

Reset Name (delimiters) command: See reset name. 14e2

Show Name (delimiters) command: See show (BASE). 14e3

USEROPTIONS Name (delimiter defaults) command: See name (USEROPTIONS), 14e4

NDDT: See NLS-DDT. 14f

net: See network. 14g

Network: An interconnected community of computers such as the ARPANET operating with a plan for the systematic handling and relay of computer traffic. See ARPANET. 14h

NEWFILELINK: the part of a command that accepts the name of a new file in the form of a FILEADDRESS. See fileaddress. 14i

next: the statement immediately following your current statement regardless of its level in the outline. If you turn to "illustration" (in Section I), 1b3 is next to 1b2; statement 2 is next to 1b3. Back is the opposite of next. The LINEFEED command in TNLS prints the "next" statement. See illustration. 14j

NEXTNAME: *statementname (preceded by a star): an address element that moves you to the first character of the next statement with that name in the NLS outline structure. To search for the first name, use 0 (statement zero) in front of star name. 14k

EXAMPLE: If statement name is jonathan, type: 0 *jonathan
 If you use a statement name alone as an ADDRESS element (without *), 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. See also: searching, STATEMENTNAME, BRANCHNAME. 14k1

NIC: an acronym for Network Information Center: A part of ARC, the NIC stimulates use and interest in the Network, supports communication among scattered research teams, provides reference about Network resources, and serves as a developmental prototype for network information centers. Reference is offered through online documentation and a query language and offline through selected mailing of printed copies. Communication is through SENDMAIL and through special online files maintained for ARC groups. See also: ARPANET. 14l

NLS-DDT: a dynamic debugging system for the NLS program environment. 14m

for commands to use NLS-DDT: See set NDDT (PROGRAMS). 14m1

NLS: Online System: NLS is a system for using computers to help in work based on textual information. With NLS you may read, write, publish, mail, collaborate, calculate, and program, among other things, in an integrated way augmented by the computer. The command language allows you to move around in and modify the information hierarchy. NLS groups commands into subsystems for related tasks. To find out how to do a task in NLS, see: HOW. 14n

entering-NLS: (How to get NLS): NLS runs as a subsystem of TENEX. When TENEX is ready for commands, you will see an at sign ("@") at the margin. Type "NLS" followed by carriage return. If you use a group directory, NLS will ask for your IDENT. When you first enter NLS, the system loads for you a special file called your initial file and you are in the BASE subsystem. Unless you have altered your useroptions, the herald of the BASE subsystem, "BASE", will appear at the left margin. Then you may read or write on files. See also: Login, username, USEROPTIONS, reading, writing. 14n1

leaving NLS to TENEX: To return to the TENEX timesharing system from NLS use the Quit NLS command. After that, you can type "con" followed by carriage return at the TENEX herald to return to NLS. To break contact with TENEX entirely use the Logout command in TENEX or NLS. To leave NLS anytime for an excursion in TENEX, use the Goto TENEX command. This command issues to you a second copy of TENEX called "inferior exec". To return from this second copy to NLS, use the TENEX Quit command. 14n2

Systems in general: See systems. 14n3

Information hierarchy: See Information. 14n4

Command language parameters: See Command. 14n5

BASE subsystem: See Base. 14n6

Sendmail subsystem: See Sendmail. 14n7

Useroptions subsystem: See Useroptions. 14n8

Programs subsystem: user programming software See Programs. 14n9

Calculator subsystem: See Calculator. 14n10

TENEX: See TENEX. 14n11

noiseword: a word typed by the system to help you understand the purpose of the command and what input is expected of you. Noisewords always appear in parentheses. You can turn off or limit noise words (as well as lessen commandword feedback) with

N

Useroption's Feedback command. See also: notation, heralds, prompts.	14o
Useroptions Feedback command: See feedback (USEROPTIONS).	14o1
nominals: any word used as a noun. In the NLS Base, every command is made up of a verb followed by a nominal. Some of the most common nominals found in NLS are:	14p
Character: See character.	14p1
Word: See word.	14p2
Number: See number.	14p3
Visible: See visible.	14p4
Invisible: See invisible.	14p5
Text: See text.	14p6
Link: See link.	14p7
Statement: See statement.	14p8
Branch: See branch.	14p9
Group: See group.	14p10
Plex: See plex.	14p11
File: See file.	14p12
Directory: See directory.	14p13
non-alphanumeric: See character.	14q
non-printing characters (invisible): See invisible.	14r
notation for command syntax: special symbols to help explain commands. You may see notation for command syntax when you type questionmark, as the first line of many command explanations, in prompts, and when you type <CTRL-S>. Each special notation is described below. If you understand the meanings of these special symbols, you can learn how to use any command by reading its command syntax.	14s
Commandwords: First Letter Capitalized: See commandword.	14s1
VARIABLES: ALL CAPITAL LETTERS See VARIABLES.	14s2
(noisewords): words in parentheses: See noiseword.	14s3

- [optional] things in square brackets: type <CTRL-U> See optional. 14s4
- !comments! words in exclamation marks !not part of command!: See also: comments (SENDMAIL). 14s5
- <anglebrackets>: a notation that helps to depict ... See anglebrackets. 14s6
- noun: See nominals. 14t
- NULL: 14u
- null CONTENT --TNLS <CA>: Type a command accept <CA> if you want nothing in the CONTENT. 14u1
- null CONTENT--DNLS <CTRL-N>: If, in the part of the command asking for for CONTENT, you want to specify nothing, use either of the following:
-- typing <CTRL-N>
--typing any character then Backspace Character (BC) and Command Accept. 14u2
- as a name delimiter (NULL): See name-delimiters. 14u3
- NUM: number(s) followed by an OK and added to the accumulator in the Calculator subsystem. Any character that is not a number is simply ignored. 14v
- number as: 14w
- Number: a special string of digits, used chiefly with the calculator subsystem. Numbers may be preceded by a plus or a minus sign and may include decimal points and commas only in certain positions. Pointing to any character position in the number will serve to point to the whole number. 14w1
- special effects editing numbers. When replacing a number with the Replace Number command that is smaller than the original, spaces will be inserted to keep the right side of the number in the same position. Note that 12345 in 789,12345, is a legal word but not a legal number because the comma is not in a legal position; and in <journal--12345,> 12345 is not a legal number because there are two minus signs. Also note that if you use the Number commandword to edit 75 in the date 10-DEC-75, the dash after DEC will be carried with the 75. If you try to Move or Copy a legal number to follow an entity which is not a number, you will get the message "illegal number" and the computer will not do the edit. 14w1a
- calculator numbers: See numbers (CALCULATOR). 14w1b

N

Number Assign/Previously ...: The Sendmail subsystem command "Number Assign" shows you the number of your current item. The command "Number Previously" allows you to give a number that you have already reserved. In addition, there is a Reserve command elsewhere in the Sendmail subsystem for getting other types of numbers. See also: numbering (SENDMAIL). 14w2

Assign: Number Assign OK: The Sendmail subsystem command "Assign" allows you to see the number that has been assigned to your current journal item. If you do not use this command, Sendmail will not tell you the number of your item until you see it in the author branch of your INITIAL file. Use Sendmail's Reserve command to get a number you can use at a later time. See also: journal-number. 14w2a

Journal number: See number (SENDMAIL). 14w2a1

Journal item: See item (SENDMAIL). 14w2a2

Sendmail subsystem: See sendmail. 14w2a3

Previously: Number Previously (Reserved) CONTENT OK: The Sendmail subsystem command "Previously" allows you to specify a previously reserved number for the number of your current journal item. Use Sendmail's Reserve command to reserve a number. The Send command will be carried out only if one of the authors or the logged-in user has previously reserved but not used that number. You must use the Sendmail RFC command to use a previously reserved RFC number. 14w2b

The Number Assign command: See number assign (SENDMAIL). 14w2b1

The Reserve numbers command: See reserve. 14w2b2

The Done command: See done. 14w2b3

The RFC command: See RFC. 14w2b4

Journal number: See number (SENDMAIL). 14w2b5

Numbering system: The Sendmail Journal number system consists of a single sequential list of numbers starting from 1 and counting to 31000 as of July 1974. There are many overlapping subsets of these numbers (some subcollections have secondary numbering sequences) which have various ambiguous and synonymous names in common usage. All of the numbers in the sequential list are called Catalog Numbers. Journal Numbers include only items that have been entered via the Sendmail (formerly Journal) subsystem. In addition, there are XDDC numbers which refer to external documents which have been given a number but have not been entered via the Sendmail subsystem. You may reserve a Journal number(s) to be used at a later time with the Sendmail Reserve command. Reserved Journal numbers are also called "Preassigned" numbers. 14x

XDOC: acronym for external document See XDOC. 14x1
Subcollections: See subcollections. 14x2
Reserving a number: See number assign. 14x3
Using a number: See number previously (SENDMAIL). 14x4

numbers (recognizable to the Calculator):

123456	-123456	123456-
123.12	\$123.00	.12345-
123,456	(\$1,123,123)	12,123.123+
.1	.12-	0.11
+1		

You may also treat the values of any of the ten accumulators as operands with the Use Saved (Accumulators) command. See also: Saved, number, accumulator.

14y

0

0

15

o Viewspec: frozen statements on (DNLS only): "Display the frozen statements." If you set viewspec 0, any statements that have been set aside with the Freeze Statement command will be displayed at the top of the window, separated by a dotted line from the rest of the display; if none have been frozen only a dotted line will appear (which is useful with horizontal split screens). Viewspec p turns o off.

15a

0 Viewspec: user sequence generator on: "Turn on user-written sequence generator." Viewspec P employs the system's standard sequence generator in lining up statements for output. It is possible (but only knowing advanced L10 programming) to write your own sequence generator program. Viewspec 0, if turned on, would then use yours instead of the standard one. See also: Sequence, Capital-P.

15b

Obsoletes (item number(s)) CONTENT OK: The Sendmail Subsystem command "Obsoletes" places a note in the header of the journal item being sent stating that the item number you specify for CONTENT is obsoleted (replaced) by this item and the fact is noted in the indices. There is no further use of this command at the present time.

15c

Offline (item -- located at) CONTENT OK: The Sendmail subsystem command "Offline" allows you to mail a citation for and give a number to an offline item. Use the CONTENT selection in SENDMAIL to describe the offline location. See also: xdoc.

15d

number: See number (SENDMAIL).

15d1

CONTENT: See content.

15d2

OK: command confirmation: Most commands must be terminated by one of three confirmation functions: CA (Command Accept <CTRL-D>); OKREPEAT <CTRL-B>; or OKINSERT <CTRL-E>. The system will prompt you with "OK: " when one of these OK functions is expected. You may hit a CD (Command Delete <CTRL-X>) at any time in a command (before the final CA) to stop the command. See also: prompts, CTRL, CTRL-O.

15e

CA: Command Accept See CA.

15e1

OK=colon: OK: CA: <CTRL-D>; RPT: <CTRL-B>; OKINSERT: <CTRL-E>; CD: <CTRL-X>.

When prompting is on and you have finished giving a command, NLS prompts you with "OK:". It expects you to confirm that you

- want the command to take place as written. CA, OKREPEAT, or OKINSERT will serve as confirmation. 15e2
- OKINSERT: <CTRL-E>: Typing the character for OKINSERT, <CTRL-E>, at the end of a command will start another Insert Statement command. This allows you to continue to insert statements following the one you just inserted without having to give the command "Insert Statement" again. It is as if you typed CA, Insert Statement, and pointed to your current location. L: will appear prompting you for LEVEL-ADJUST but you can ignore it by just starting to type. OKINSERT continues to repeat until you type a CD. Typing another <CTRL-E> while in repeat mode will act like CA. See also: OKREPEAT, CTRL-character. 15e3
- LEVEL-ADJUST: See level-adjust, 15e3a
- Insert Statement command: See insert statement. 15e3b
- Making some other key work like <CTRL-E>: See control (USEROPTIONS). 15e3c
- OKREPEAT: <CTRL-B>: Typing the character for OKREPEAT, <CTRL-B>, at the end of a command, will execute the command and then begin to repeat the same command from the beginning. Each commandword will be repeated until the system reaches the first part not a commandword that you can specify. Once you have gotten into this REPEAT mode, the last command will be repeated no matter how you confirm it, until you type <CTRL-X>. In DNLS press down and release the two right-most mouse buttons for OKREPEAT, See OKINSERT. 15e4
- RPT: OKREPEAT prompt See RPT, 15e4a
- Trick with the Execute command: You may use the Backspace Character function to back out of the command and specify another command but remain in REPEAT mode. You may also use this feature to continue the use of "Execute" in another subsystem. Follow Execute and the command you choose with <CTRL-B>. When the command repeats, back up to the herald using <CTRL-A>, and then specify some other command in the normal manner. You can keep on this cycle indefinitely. Command Delete returns you to the first subsystem. See also: backspace. 15e4b
- CD: Command Delete See CD. 15e5
- Note--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 REPEAT the command or get into INSERT mode, terminate the TYPEIN, LEVEL-ADJUST, VIEWSPECS, or ADDRESS with the OKINSERT or OKREPEAT instead of CA. 15e6

0

- OLDFILELINK: the part of a command that wants you to specify the name of an existing file in the form of a FILEADDRESS. See fileaddress. 15f
- on: to be on a statement means you are located at that statement. There are several things you can turn on and off in NLS. See also: useroptions, Set Content (BASE), viewspecs. 15g
- Operands: those parts of a command you specify after you have typed the COMMANDWORDS and before you have typed the OK command terminator. see also: COMMANDWORD, OPERATORS, OK. The operands are as follows: 15h

 - DESTINATION: See DESTINATION. 15h1
 - CONTENT: See CONTENT. 15h2
 - SOURCE: see SOURCE. 15h3
 - stars-in-brackets: [**]: See stars. 15h4
 - LEVEL-ADJUST: See LEVEL-ADJUST. 15h5
 - VIEWSPECS: See VIEWSPECS. 15h6
 - ANSWER: See ANSWER. 15h7
- operator: See commandword. 15i
- operator: the person who runs the computer. You may see her logged into the system as a user named "operator." Frequently it is useful to contact the operator for help with problems, particularly recovery from bad files. 15j
- operators: Arithmetic operators are always entered in the Calculator subsystem directly from the keyboard and followed by an operand. Valid operators include: 15k

 - NULL or <SP> or Add or +: to add to accumulator: See add. 15k1
 - Subtract or -: to subtract from accumulator: See subtract. 15k2
 - Multiply or * or x: to multiply to the accumulator: See multiply. 15k3
 - Divide or /: to divide into the accumulator: See divide. 15k4
- OPT: and []: are prompts for OPTION character <CTRL-U>: See optional. 15l
- option: See optional. 15m
- optional: things in square brackets: type <CTRL-U> to get in an

option mode: There are some optional parts in commands that won't be available unless you specifically ask for them. Type the character <CTRL-U> (OPTION character) when prompted by something in square brackets [**] or OPT: , and then type questionmark to see the part that's between the squarebrackets. See also: prompts, control, 15n

options vs alternatives: See alternatives, 15n1

origin: statement--Statement zero: statement 0 (zero) that is found in every file. It is the structural source; one level above the first level statements (numbers 1, 2, etc. in the illustration). The system writes and maintains the following information in the origin statement: < FILEADDRESS, DATE, TIME, IDENT (of last person to update the file), and ; ; ; ; (four semicolons). See also: header, statementnumber, 15o

modifying the origin statement: You can also modify the origin statement. You can add output processor directives and the AccessList for a private file to the origin statement, 15o1

AccessList: See Set NLS Private, 15o1a

directives: See directives, 15o1b

Output: In general output is the product that leaves a computer system. In the NLS world it is most often printed paper, but may also be tapes containing files or files shipped by electronic means to other computer systems. Output from NLS usually means conversion to some sequential form, 15p

The command "Output Printer" sends items through what is called the Output Processor. In the BASE subsystem, Load File userguides, locator,, It will take you to the Output Processor Userguide. See also: hardcopy, 15p1

Assembler: Output Assembler File/Append CONTENT OK: The command "Output Assembler File/Append" allows you take an NLS file holding assembly language code in a certain format and copy or append it to a sequential file suitable for the assembler, 15p2

TNLS example:
BASE C: Output C: Assembler file T: prog
OK:
Output for Assembler in Progress
BASE C: 15p2a

COM: Output (to) COM OK: The command "Output (to) COM" allows you to produce a sequential file formatted for Computer Output to Microfilm. The command creates a job identified by your initials in the directory COM. Output Processor directives will be considered in formatting the file. Printing begins from the

statement where you are located. The compiled file should be placed in the <COM> directory (as it is when you just say OK: without specifying any of the below), then contact Dean Meyer, Dirk van Nouhuys or Ann Weinberg at SRI-ARC. See <userguides, op=guide, 1>.

15p3

TNLS example:
BASE C: Output C: COM OK:
Processing Output
BASE C:

15p3a

Append: Output (to) COM Append (to file) CONTENT OK: The command "Output (to) Com Append" allows you to produce a sequential file formatted for Computer Output to Microfilm and appends it to the file at the FILEADDRESS you specify for CONTENT.

15p3b

File: Output (to) COM File (to file) CONTENT OK: The command "Output (to) COM (to file)" allows you to Create a sequential file formatted for Computer Output to Microfilm at the FILEADDRESS you specify for CONTENT. It does not copy the file to the printer.

15p3c

Copies: Output (to) COM Copies CONTENT OK: The command "Output (to) COM Copies" allows you to specify the number of copies for CONTENT that will be printed on the line printer. No file will be created in your directory. See also: output com.

15p3d

Test: Output (to) COM Test OK/File... The command "Output (to) COM Test" formats the file and places special symbols in it to represent what the COM version would look like on a line printer and prints it on the printer if you type an OK. Instead of OK, you can say "File" and have the COM test appear in the file with the fileaddress you specify for CONTENT.
Output (to) COM Test File CONTENT OK:

15p3e

Journal: Output Journal (quickprint) OK: The command "Output Journal" looks for a statement named "journal", such as in your initial file. Then it prints one copy on your computer's line printer of each journal citation followed by the complete item (except for the origin statement in a file). To see only those items you have not already seen, you must move the items you have seen out of the branch named "journal". See also: journal, statementname, Move STRUCTURE, sendmail, initial.

15p4

TNLS example:
BASE C: Output C: Journal Quickprint OK:
Output Journal Quickprint in Progress
BASE C:

15p4a

Append: Output Journal (quickprint) Append (to file) CONTENT OK: The command "Append Output Journal (quickprint) Append"

- appends the sequential file generated from journal items to the sequential file you specify for CONTENT. 15p4b
- Copies: Output Journal (quickprint) Copies CONTENT OK: The command "Output Journal (quickprint) Copies" prints on the line printer as many copies as you specify for CONTENT. This command prints from the file you have loaded anything you have in a branch named "journal." Each journal item and the complete text of any links that are shown are printed, 15p4c
- File: Output Journal (quickprint) File (to file) CONTENT OK: The command "Output Journal (quickprint) File" inserts the journal items as a sequential file named whatever you specify for CONTENT, 15p4d
- Printer: The command "Output Printer" will produce a sequential file in directory <Printer> formatted for the line printer. Output Processor directives will be considered in formatting the file. Printing begins from the statement were you are located. Any files in the <PRINTER> directory will be printed then deleted. If you wish to save the print file, specify a filename in another directory and copy it to the <PRINTER> directory when you want a copy. See (userguides, op-intro, 3). See also: sequential, FILEADDRESS, 15p5
- TNLS example:
BASE C: Output C: Printer OK:
Processing Output
BASE C: 15p5a
- OK: Output Printer OK: The command "Output Printer" prints it on the line printer, 15p5b
- Copies: Output Printer Copies CONTENT OK: The command "Output Printer Copies" prints on the line printer as many copies as you specify for CONTENT , 15p5c
- File: Output Printer File (to file) CONTENT OK: The command "Output Printer File" creates a sequential file named whatever you specify for CONTENT, 15p5d
- Append: Output Printer Append (to file) CONTENT OK: The command "Output Printer Append" appends the processed file to the sequential file you specify for CONTENT, 15p5e
- See also: 15p5f
- processor: Output Processor: The NLS procedures that processes NLS files into sequential files suited to drive devices that produce hardcopy, 15p5g
- Quickprint: Output Quickprint OK: The command "Output Quickprint" prints hardcopy at the line printer of the computer

where you are logged in. It observes viewspecs in force but not output printer directives, which remain as text in the printout. The printout is paginated and bears the file header. Quickprint runs more than 10 times faster than Output Printer. Output Quickprint compiles your file to a printer file just like the view you would get with a Print command but paginated. Printing begins from your current location. Instead of OK: you can specify one of the following alternatives.

15p6

TNLS example:

BASE C: Output (to) C: Quickprint OK:
Output Quickprint in Progress
BASE C:

15p6a

Append: Output Quickprint Append (to file) CONTENT OK: The command "Output Quickprint Append" allows you to specify for CONTENT the FILEADDRESS of a sequential file to which your quickprint is to be appended.

15p6b

Copies: Output Quickprint Copies CONTENT OK: The command "Output Quickprint Copies" allows you to specify the number of copies to be printed for CONTENT.

15p6c

File: Output Quickprint File CONTENT OK: The command "Output Quickprint File" allows you to save a print file after it has been printed. You specify a FILEADDRESS for CONTENT and when you want to print it again, you copy the file to the <Printer> directory. Any files in the <PRINTER> directory will be printed and then deleted.

15p6d

No: Output Quickprint No (headers) OK/C: The command "Output Quickprint No" prints your file so that the only thing appearing at the top-right of each page is "Page #". Instead of OK, you may also specify these commandwords:

15p6e

Append: Output Quickprint No (headers) Append (to file) CONTENT OK:

The command "Output Quickprint No (headers) Append" allows you to specify a sequential file to which your quickprint is to be appended. CONTENT wants you to give the FILEADDRESS of a sequential file.

15p6e1

Copies: Output Quickprint No (headers) Copies CONTENT OK: The command "Output Printer No (Header) Copies" allows you to specify the number of copies to be printed. Content wants you to give a number.

15p6e2

File: Output Quickprint No (headers) File CONTENT OK: The command "Output Quickprint No (headers) File" allows you to save a print file (that has no headers) after it has been printed. You specify a FILEADDRESS for CONTENT and when you want to print it again, you copy the file to the <Printer> directory. Any files in the <PRINTER> directory will be printed and then deleted. If you wish to save the

print file, specify a FILEADDRESS for CONTENT and copy it to the <PRINTER> directory whenever you want a copy. 15p6e3

Remote: Output Remote (printer -- TIP): The command "Output Remote" will compile a print file, considering directives, and send it to a printer on a network TIP. Remote printing uses a printer connected to a TIP at your site. You must supply the number of an available TIP port to the command. You may choose not to send form feeds (page breaks); they may be simulated with line feeds, or you can send no page breaks at all. You may have the printer wait after each page if you like. You may have it wait to start until you say go. 15p7

TNLS example:
BASE C: Output C: Remote printer--TIP T: radc-tip
Port T: 4
Send Form Feeds? C: Yes
Wait (at) page breaks? C: No
Go? CA:/C:
Output Remote printer in Progress
BASE C: 15p7a

form feed: See formfeed. 15p7b

line feed: See <LF>. 15p7c

Sequential: Output Sequential. 15p8

TNLS example:
BASE C: Output C: Sequential C: File T: buz
OK:
Output Sequential in Progress
BASE C: 15p8a

Append: Output Sequential Append (to file) CONTENT OK: The command "Output Sequential Append" appends the sequential output from your file to the sequential file whose FILEADDRESS you specify for CONTENT. An NLS file may be converted to a sequential text file with the Output Sequential command. The filename extension will default to "TXT". 15p8b

File: Output Sequential File CONTENT OK: The command "Output Sequential File" converts an NLS file to a sequential text file. The filename extension will default to "TXT". See also: FILEADDRESS. 15p8c

Terminal: Output Terminal OK: /File ... The command "Output Terminal" will process a file considering directives, like the Output Printer command, but it will print at your terminal. You may choose not to send form feeds when a new page starts; they may be simulated with line feeds. You may have the output wait after each page if you like. "Output Terminal File" will create

0

a sequential file properly formatted that may then be sent via
sndmessage, copied over the ARPANET, or to the printer. <CTRL-O>
will abort the printing. See also: commands, output printer,
sequential.

15p9

TNLS example:
BASE C: Output C: Terminal Send Form Feeds? Yes
wait (at) page breaks? No
Go? Yes
Output Terminal in Progress
BASE C:

15p9a

syntax: Output Terminal OK: (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 CA when ready, CD to abort) <SP>

15p9b

ownership: See privacy.

15q

P

- p Viewspec: frozen statements off (DNLS only): "Don't display the frozen statements." This viewspec turns off viewspec o; the frozen statements and/or dotted line in the window will disappear, but this does not unfreeze the statements and they will appear again upon setting Viewspec o. The command "Release" unfreezes statements. This is a default viewspec. 16a
- P Viewspec: user sequence generator off: "Do not use user-written sequence generator program." This viewspec returns control to the system's standard sequence generator in lining up statements for output. Viewspec O switches to a user-written sequence generator program (writing one requires knowing advanced L10 programming). This is a default viewspec. See also: sequence, Capital-O. 16b
- Packet: strings of bits bounded by routing information which form the transmission units in the ARPA net. 16c
- pages: 16d
- in TNLS Print command: See E. 16d1
 - in Output Quickprint: See output quickprint. 16d2
 - online (Jump to Next): See next. 16d3
 - the Useroptions subsystem "Printoptions Page" command: See page (USEROPTIONS). 16d4
- pages on the disk: Computer (disk) storage space is divided into disk pages of 512 36-bit words. These equal approximately one typewritten page (or about 250-300 English words). The amount of text in a computer page can be roughly equal to the amount of text on a page of paper but they are two different things. To find out how many disk pages are allocated and used by a file, use the Show File Size command. To find out how many disk pages are allocated and used by a directory, use the size option in the Show Directory command. 16d5
- command to Show File Size: See Show File Size. 16d5a
 - command to Show Disk space status: See Show Disk. 16d5b
- pagination: The output from your terminal when the Print commands are used will be divided into pages if viewspec E is on. Pages are numbered, and a cutting line consisting of ---'s is generated before the start of a new page. You can control the margins and page sizes

P

- with the Printoptions command in the Useroptions subsystem. See also: Capital-E, Printoptions (USEROPTIONS). 16e
- paragraph: See statement. 16f
- parens () (problems with using): Since parentheses are legal characters in a filename, placing two links delimited by parens next to each other not separated by a space causes an irresolvable confusion. Also, it is possible for parenthetical clauses in a statement to become confused with links. If you are using the Link entity while editing a link that does not have proper syntax, it is possible to end up editing the parenthetical clause instead. To avoid confusion, we suggest you use angle-brackets <> instead of parentheses in links. 16g
- partial copy: now referred to as Modification file. See also: search. See modification. 16h
- Password: the string of characters necessary for the computer to recognize you at login and necessary for connecting to the directory of another user. When you type a password, no characters appear. There is a CHANGE PASSWORD command in TENEX. See also: IDENT. 16i
- pattern: content-analyzer pattern: A content-analyzer pattern is different from a content-analyzer program in that it does not include all of the lines of L10 code necessary for the program. It just consists of a string of character and special symbols that specify what to look for. When a content-analyzer pattern is specified by the "Set Content To" command in the BASE subsystem or by placing the pattern between semi-colons in the viewspec field of a link, the proper lines of L10 code are automatically called to make the pattern work as a content-analyzer program. For the elements of content-analyzer patterns, see the L10 User's Guide. COMPARE content-analyzer program. 16j
- The Set content (pattern) command in Base: See set content. 16j1
- content-analyzer patterns in the viewspec field of a link: See semicolons. 16j2
- Square-brackets in content-analyzer patterns: See Square-brackets. 16j3
- .PC; designates: this file is a modification file: See modification. 16k
- PDP-10: Since 1970, all versions of NLS have run on Digital Equipment Corporation's (DEC) PDP-10 computer under the TENEX time-sharing system developed at BBN. The asynchronous arithmetic Processor has a 1-microsecond cycle and uses 36-bit words paged in a BBN paging box into 512-word pages. 16l
- period: 16m

in an address expression: See POSITION, 16m1
in filenames: See filename, 16m2
as a command: See period , 16m3

period: [TNLS only]: Typing the period key at the herald of a subsystem prints your statement number, or SID if viewspec I is on, followed by a number indicating how many characters you are to the right of the beginning of the statement, COMPARE address slash, 16n

TNLS example:
BASE C: . = 2d +12
BASE C: 16n1

Playback Record (of session from file) CONTENT (simulate recorded timing?) ANSWER OK:
The command "Playback Record" will pass control to the file you recorded on and precisely the same commands will be seen and executed on the file you were working on as during the control session. This will happen in approximately the same timing if you ANSWER with a y (for yes). If you ANSWER with an n (for no), the session will playback as fast as it can. CONTENT wants you to TYPEIN or point to the FILEADDRESS of the file you recorded on, 16o

TNLS example:
BASE C: Playback C: Session (from) file T: rf
[commands recorded on file will be executed here]
BASE C: 16o1

Effects: you should be careful that everything is set up properly when you playback the session. If you get into trouble, <CTRL=O> stops the playback, 16o2

Start Record command: See start, 16o3

plex: a specified branch, plus all the other branches having the same source. In the illustration, to be found under I, the plex defined (and addressed) by statement 3a consists of branches 3a, 3b, and 3c (i.e, statements 3a, 3b, 3c, 3c1, and 3c1a). Plex 3b and 3c are exactly the same as 3a, 16p

illustration of file structure: See illustration, 16p1

Plex (at) SOURCE OK: The Sendmail Subsystem command "Plex" allows you to send a Plex. Specify the Plex to be mailed with a SOURCE specification, VIEWSPecs do not matter, 16p2

Plex: See plex, 16p2a

SOURCE: See source, 16p2b

P

- plus command: +: See add. 16q
- Plus: + in addresses: See stringposition. 16r
- point: used as a noun to refer to a character in a line,
used as a verb to specify a character in a line. 16s
- Pointing to information: addressing and bugging: moving to a
specific character within a file. You point in this way whenever a
command asks for an ADDRESS (prompts you with A:). In DNLS, you can
also point by bugging with the mouse. If a link appears in the text
of a file, you may point at the link and then indicate to the system
that you want to go to the place named in the link. See also:
information. 16t
 - ADDRESS: See address. 16t1
 - locating your position in a file: See locating. 16t2
 - bugging: See bug. 16t3
 - Group-Text: pointing See Group-Text. 16t4
 - Trick: See Trick. 16t5
- Portrayal Generator: The NLS code that creates something formatted
for view by a human. 16u
- POSITION: in and among files (preceded by a period): These infile
address elements, preceded by a period, move you in relation to
your current location in the direction that corresponds to the
character you type. A number before any of these letters indicates
the number of moves (default for number is 1). 16v
 - .b back: See back. 16v1
 - .c next occurrence of content: See contentaddress. 16v2
 - .d down: See down. 16v3
 - .e end: See end. 16v4
 - .fr file return: See fr. 16v5
 - .h head: See head. 16v6
 - .l link: See link. 16v7
 - .n next: See next. 16v8
 - .o origin: See origin. 16v9
 - .p predecessor: See predecessor. 16v10

.r return: See d. 16v11
.s successor: See successor. 16v12
.t tail: See tail. 16v13
.u up: See up. 16v14
.w next occurrence of word: See contentaddress. 16v15

predecessor: the statement preceding a given statement at the same level and having the same source. In the illustration, the predecessor of 3c is 3b; statement 1 is the predecessor of 2 (which is called the successor). Statements either have one predecessor or none. "Head" statements such as the origin statement and statement 1 never have predecessors. See also: illustration, 16w

Print (in TNLS): The TNLS command "Print" types at your terminal what you specify, 16x

File: Print File OK: The command "Print" prints your entire file with default viewspecs without affecting your current viewspecs or your location. To select a starting point and view of a file for printing, use the Print STRUCTURE command. See: Print STRUCTURE, Print Rest, 16x1

Effects: Typing <CTRL-O> will stop the printing. After execution, you are in the same statement you were when you started this command. You may have TNLS paginate your output with any print command; See also: CTRL, pagination, 16x1a

Journal: Print Journal (mail) OK: The command "print Journal" will look for a statement named "journal", as in your initial file. Then it prints at your terminal each journal citation followed by the complete item. To only get those items you have not already seen, you must move the items you have seen out of the branch named "journal". See also: statementname, Move STRUCTURE, sendmail, citation, item, Output Journal. 16x2

Rest: Print Rest OK: The TNLS command "Print Rest OK" will print the rest of your loaded file, starting with the statement you are currently at. This command will not affect your location or your viewspecs. To select a starting point and view of a file for printing, use the Print STRUCTURE command. Typing <CTRL-O> will stop the printing. See: Print STRUCTURE, Print File, 16x3

STRUCTURE: Print STRUCTURE (at) DESTINATION VIEWSPECS OK: This group of "Print" commands prints at the terminal the particular STRUCTURE in a file you specify, according to the viewspecs you give to control the format of the printout. If you give no viewspecs, your current viewspecs will control printing. 16x4

TNLS example:

P

BASE C: Print CA:/C: C: Branch (at) A: alice

V: m

3 (alice) The Walrus

3a "The time has come," the Walrus said,

3b "To speak of many things,

3b1 Of shoes and ships and ceiling wax,

3b2 of cabbages and kings,

3b3 Of why the sea is boiling hot,

3b4 And whether pigs have wings."

BASE C:

16x4a

Effects: Typing <CTRL-O> will stop the printing. After execution, you will be at the first character of the first statement printed, i.e., the statement you were in when you started this command. Any viewspecs you entered remain in effect until you change them again.

16x4b

STRUCTURE: Statement, Branch, Plex, or Group: See STRUCTURE.

16x4c

See also: Output, viewspecs, STRUCTURE, CTRL.

16x5

printer: The directory "printer" contains files that are being or are waiting to be printed on your computer's line printer. If you accidentally print something big and cannot delete and expunge it from this printer directory, notify your computer's operator to halt the printer. See also: output.

16y

printer: printing on your computer's line printer: The Output Processor subsystem allows users to format printed documents. You may control page size, position of text, indentation, numbering, headers, footers, and many other features through embedded directives. To learn the directives, read the Output Processor User guide. The Output Processor converts NLS files either to hardcopy at a line printer or to files printable later on printers that accept ASCII II sequential files. See also: ARC, output.

16z

Output Quickprint command: See Output Quickprint.

16z1

Output Printer command: See Output Printer.

16z2

Output Journal Quickprint command: See Output Journal.

16z3

remote: printing at a TIP: See Output Remote.

16z4

COM: an acronym for Computer Output to Microfilm See COM.

16z5

Problems with some Printers: Certain printers require adjustments in page size by means of directives on special processes to delete control characters. If you run into trouble with the way your printer presents files that have passed through the Output Processor, report the problem to feedback.

16z6

printing characters (visible): ! " # \$ % & ' () * + , - . / 0 1 2 3
4 5 6 7 8 9 : ; < = > @ A B C D E F G H I J K L M N O P Q R S T U V
W X Y Z [\] ^ _ a b c e f g h i j k l m n o p q r s t v w x y z. 16a@

printing on your terminal: TNLS can print at your terminal through two groups of commands which allow you more or less formatting. 1) The Print commands allow simple formatting, such as pagination. Printing format is also controlled by Viewspecs. 2) Output Printer uses over two hundred directives that give you essentially a printer's control of layout. Read the Output Processor Users' Guide. See also: printing, printer, reading, pointing. 16aa

pagination: See pagination. 16aa1

Print commands in BASE subsystem. See Print. 16aa2

output commands: See Output. 16aa3

formatting viewspecs: See formatting. 16aa4

Printoptions PRINTSPECS CONTENT OK: The Useroptions subsystem command "Printoptions" allows you to specify the number of spaces for level Indenting and Tab stop settings. You can set the left and right margins used for TNLS Print commands. You can specify bottom margin and page size used at your terminal when pagination (viewspec E) is on in the Print commands. 16ab

related commands: See also: Print, Show Printoptions (USEROPTIONS), Reset Printoptions (USEROPTIONS). 16ab1

PRINTSPECS: 16ab2

Right: Printoptions Right (margin is column) CONTENT OK: The Useroptions subsystem command "Printoptions Right (margin is column)" allows you to specify a Number for the column where your printing should stop at the right margin of the page. CONTENT wants a specific Number. This affects both paginated output (when viewspec E is on) and regular TNLS output immediately upon using the TNLS Print commands. See also: pagination, E Viewspec. 16ab3

Left: Printoptions Left (margin is column) CONTENT OK: The Useroptions subsystem command "Printoptions Left (margin is column)" allows you to specify a Number for the column where your printing should start at the left margin of the page. CONTENT wants a specific Number. This affects both paginated output (when Viewspec E is on) and regular TNLS output immediately upon using the TNLS Print commands. See also: pagination, E Viewspec. 16ab4

Bottom: Printoptions Bottom (margin is line) CONTENT OK: The Useroptions subsystem command "Printoptions Bottom (margin is line)" allows you to specify a Number for the number of lines from the top of the page down to where the printing will stop for

P

that page. CONTENT wants a specific number. This takes effect immediately upon using the TNLS Print commands whenever Viewspec E is on. See also: pagination, E Viewspec. 16ab5

Page: Printoptions Page (size is (lines)) CONTENT OK: The Useroptions subsystem command "Printoptions Page" allows you to specify a number for CONTENT for the number of lines from the top of the page to the bottom of the page (the place below the page numbers where dashes mark a page break). This takes effect immediately upon using the TNLS Print commands whenever viewspec E is on. See also: pagination, E Viewspec. 16ab6

Indenting: Printoptions Indenting (per level) CONTENT OK: The Useroptions subsystem command "Printoptions Indenting" allows you to control the indenting of levels of NLS heirarchical structure, CONTENT wants a Number for the spaces each level will be indented from the preceding level. This takes effect immediately. See also: level. 16ab7

Tab: Printoptions Tab (stop settings) CONTENT OK: The Useroptions subsystem command "Printoptions Tab" allows you to set the column locations where TAB (as a regular invisible character, not a command) will take you. (Warning: the use of TABs often causes trouble when moving from one medium of output to another.) You are not allowed more than 9 tabstops per line. A tabstop cannot be set in column 1. CONTENT wants one of the following forms:
 (1) t t t t t t t t t t
 where the t's are separated by spaces to the proper position for the tab stops. A tabstop cannot be set in column 1.
 (2) 8,16,24,32,40,48,56,64,72
 where the number represents the column position (starting from 1 not 0) for the next tab stop. 16ab8

Problems with tabs in NLS: Tabstops cannot be set for an online file. Instead, the tabstops you set will affect any and all files you read. You can use the Output Printer directive "TABSTOPS" to specify the stops in specific "Output Printed" files, but they will not appear correctly in online or "Output Quickprinted" files unless the reader uses the Useroptions subsystem Printoptions Tab command to set his tabstops to be the same as those set in the TABSTOPS directive. Other problems with the use of tabs in NLS stem from a change in structure. When a statement formatted for one level is moved to a lower level, it is automatically indented 3 spaces. This can cause a tab to be moved past its intended stop and unintentionally go to the next stop (destroying your format). There is no clean way to convert tabs into spaces. A tab located after your last tabstop setting generates an error message. We do not recommend using TABS to format for normal NLS purposes. 16ab8a

privacy: To use TENEX, you must know a (secret) password. (NLS recognizes you by an independent IDENT associated with you as a

user.) The right to list, read, and execute the file of another user varies by default among machines where NLS runs; a user may reset privacy for his directory or for one file. In addition to these three functions, you may write on your own files and possibly those of a group of co-workers. With the Set TENEX (protection) command, you may extend or restrict any of these four functions, to yourself, your group, or all users, for your files. Note: The Set TENEX (protection) command in NLS does not work at the present time. With the Set NLS (protection for file) command, you can restrict, to any list of idents, read (and therefore write) access to your files. There is also a Private command in the SENDMAIL subsystem.

16ac

Set TENEX (protection ...) command: See set TENEX.

16ac1

Set NLS (protection ...) command: See set NLS.

16ac2

SENDMAIL Private command: See private (SENDMAIL).

16ac3

Showing lists of files: See Show Directory.

16ac4

write access to files: See write.

16ac5

executing program files: See running (PROGRAMS).

16ac6

Private OK: The Sendmail subsystem command "Private" marks the Sendmail Item to allow only those mentioned in the sendlist to read the item. It automatically places the AccessList IDENTLIST into the header of the Journalized Document. Only those in the AccessList IDENTLIST can Forward the document to others not in the original sendlist. See also: Send;, sendlist, Forward, Sendmail public, Base Private.

16ad

problems with using parens (): Since parentheses are legal characters in a filename, placing two links delimited by parens next to each other not separated by a space causes an irresolvable confusion. Also, it is possible for parenthetical clauses in a statement to become confused with links. If you are using the Link entity while editing a link that does not have proper syntax, it is possible to end up editing the parenthetical clause instead. To avoid confusion, we suggest you use angle-brackets <> instead of parentheses in links.

16ae

.PROC=REP; An L10 Procedure Replacement program: A filename with this extension points to a compiled L10 procedure whose name is the same as the L10 procedure currently in effect. The Load Program command will place the new procedure in your buffer and replace the old one. See <NLS, sysgd,> for the list of procedures. See also: procedure.

16af

Procedures (routines) you can use to write programs: Procedures are sub-routines which can be "called" by any program to do its thing. See also: Compile Procedure.

16ag

Process: NLS provides commands that execute a series of other

P

commands. You can also have any series of commands executed automatically by using the Startup Command. 16ah

Process (sendmail form at) DESTINATION OK: The Sendmail subsystem command "Process" causes a previously entered and properly filled Sendmail form or Sendmail Status form to be processed by one command saving the user from specifying each command separately. Be sure you specify the type of source before using this command. See also: process (PROGRAMS). 16ah1

types of sources: See item (SENDMAIL). 16ah1a

Insert Sendmail form command in the BASE subsystem: See Insert Sendmailform. 16ah1b

Insert Status form command in the SENDMAIL SUBSYSTEM: See Insert Status (SENDMAIL). 16ah1c

The formats for sendmail commands: See sendmailforms. 16ah1d

Process (commands from) STRUCTURE OK: The command "Process" carries out a list of commands written for DEMAND recognition mode. Insert CTRL characters (like CA, OKREPEAT, etc.) by using the literal escape key <CTRL-V> before typing the CTRL character. Note that DEMAND recognition mode requires a space after each Commandword even if it is followed by CA. You can have the system automatically process commands everytime you login by using the Useroptions Startup command. The system will automatically load the programs and subsystems you specify in the USEROPTIONS' Include and Entry commands. See also: STRUCTURE, 16ah2

The Useroptions Startup command: See Startup. 16ah3

Profile defining: the Useroptions subsystem: See Useroptions. 16ai

program: content-analyzer program: When you specify a content-analyzer pattern, NLS constructs an L10 program that looks for the pattern in each statement and only displays the statement if the pattern matches. You can gain more control and do more things if you build the L10 program yourself. The program will be used just like the simple pattern program and has many of the same limitations. Programs are written in NLS just as you write any other information. They then can be converted to executable code by a compiler. This code resides (or is loaded) in your programs buffer space where it can be instituted as the current content-analyzer like a content-analyzer pattern. COMPARE content-analyzer pattern. See: programs. 16aj

library of "approved" compiled content-analyzer programs: See content-analyzers. 16aj1

Programming for users: See program. 16ak

Programs subsystem: user programming software: In addition to the stock capabilities of NLS you may write your own special functions or load a program or subsystem already written and compiled. These programs may serve as complex filters through which you may view a file, or they may actually modify the file. Simple Content patterns may be set from the BASE subsystem. See also: Set Content. 16a1

commands in the Programs subsystem: Control over user programs is through the Programs subsystem. Programs may be compiled, loaded into the user programs buffer, and used. A complete explanation of the commands accompanies instructions on using L10 to write filters and programs in the L10 Users' Guide. 16a11

Attach Subsystem SUBSYSTEM OK: See Attach (PROGRAMS). 16a11a

Compile: See Compile (PROGRAMS). 16a11b

Deinstitute PROGTYPE (program) OK: See Deinstitute (PROGRAMS). 16a11c

Delete: See Delete (PROGRAMS). 16a11d

Execute (command in) SUBSYSTEM: See Execute. 16a11e

Goto SUBSYSTEM OK: See Goto. 16a11f

Institute PROGTYPE (program) CONTENT OK: See Institute (PROGRAMS). 16a11g

Jump: See Jump. 16a11h

Kill TENEX (subsystem) OK: See Kill (PROGRAMS). 16a11i

Load Program CONTENT OK: See Load (PROGRAMS). 16a11j

OKREPEAT <CTRL-B>: See OKREPEAT. 16a11k

Quit: See Quit. 16a11l

Reset: See Reset (PROGRAMS). 16a11m

Run Program/TENEX ... : See Run (PROGRAMS). 16a11n

Set: See Set (PROGRAMS). 16a11o

Show Status/TENEX ... : See Show (PROGRAMS). 16a11p

semicolon: See Semicolon. 16a11q

writing programs: See writing. 16a12

compiling user programs: See compiling. 16a13

loading user program files: See loading. 16a14

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- running programs: See running, 16a15
- commands in the Programs subsystem: See commands, 16a16
- userprograms library: See userprograms, 16a17

Prompt PMODE OK: PMODE

The Useroptions subsystem command "Prompt" allows you to turn prompts off, to show the basic alternatives in commands, or to show all options as well as alternatives. If you have previously used this command to change your prompting, you may return to partial prompting with this command or with the Reset Prompt command. To see what kind of prompting is currently set, use Useroption's Show Prompt command.

16am

PMODE: Off, Partial, Full: These are the modes you can choose for prompting. Off will suppress prompting completely. Partial is the default and prompts you for all nonoptional alternatives. Full will prompt you for all your choices, including options. See also: optional, alternatives.

16am1

See also: prompts, optional, alternatives, Useroptions Reset Prompt, Useroptions Show Prompt,

16am2

prompts: symbols printed by the system indicating the command input it expects from you. When partial prompting or full prompting is set on by the Useroptions subsystem, single characters or brief strings followed by colons will appear in the course of NLS commands to show what type of input will work next, (like a commandword or text), "partial prompting" lists simple choices; "Full prompting" indicates all the alternatives and options you have at each point. Compare Heralds, See also: Prompt (USEROPTIONS).

16an

T/_: is a prompt for the Help command: See help,

16an1

C: is a prompt for Commandword: See commandword,

16an2

A: is a prompt for ADDRESS and, in TNLS, for DESTINATION: See ADDRESS.

16an3

T/[A]: is a prompt for CONTENT in TNLS: See content,

16an4

A/[T]: is a prompt for SOURCE in TNLS: See source.

16an5

B/A: is a prompt for DESTINATION in DNLS: See destination,

16an6

B/T/[A]: is a prompt for CONTENT in DNLS: See content,

16an7

B/A/[T]: is a prompt for SOURCE in DNLS: See source,

16an8

/ means alternative: See alternatives,

16an9

V: is a prompt for VIEWSPECS: See viewspecs,

16an10

- L: is a prompt for LEVEL-ADJUST (d/u): See level-adjust, 16an11
- SP: is a prompt for SPACE: In a few commands NLS requires a space to continue and prompts SP: . Strike the space bar, 16an12
- CA: is a prompt for Command Accept <CTRL-D>: When prompting is on, in some commands NLS asks for CA (command accept) to mark the end of the step. CA is <CTRL-D> and is carriage return on most TNLS terminals. See also: prompts, CA, 16an13
- Y/N: is a prompt for: ANSWER y = yes; n = no: See answer, 16an14
- RPT: is a prompt for: OKREPEAT <CTRL-B>: See rpt, 16an15
- OK: prompts CA or RPT or OKINSERT: When prompting is on and you have finished giving a command, NLS prompts you with "OK: ". It expects you to confirm that you want the command to take place as written. CA, OKREPEAT, or OKINSERT will serve as confirmation. OKREPEAT and OKINSERT effect the next command. Command delete (CD) is an alternative at any point in a command before the final confirmation. 16an16
- > ... means "doing it": While this is displayed (in DNLS only), the computer is running and doing the task you have just specified. When it gets done, a prompt for your next input will appar, 16an17
- OPT: and []: are prompts for OPTION character <CTRL-U>: See optional, 16an18
- Stars: ** prompt for Special alternatives and FILTER See Stars, 16an19
- Protect: See privacy, 16ao
- PROTECTION: You can set your TENEX protection with three pairs of numbers. The first two numbers are for you. The second two numbers are for people in your directory group. The last two numbers are for the outside world. The pair 77 means reading, writing, and for programs, execution is allowed. 52 means read and execute, but not write. 00 means don't allow access and in fact, don't even let anyone not connected to your directory see the file exists. You can change your TENEX protection status with the NLS Set TENEX Protection command or the Rename File Command in TENEX. See PRIVACY, 16ap
- example: 775200
775200 means you can read, write, and execute this file. People in your directory group can read, execute and not write your file. And the outside world can't even see your file exists, 16ap1
- Protocol: The rules of interaction between two processes. In computer work, the rules of interaction between two programs. Among

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users of the ARPA Computer Network, there is a document describing conventions for talking between computers over the Network called the "Protocol Notebook". This is available from the Network Information Center, 16aq

Public: The Sendmail subsystem command "Public" makes a Sendmail item marked Private in that session return to being Public, 16ar

publish: See hardcopy, 16as

Publish: Use the user-subsystem "Publish" to automatically generate a Table of Contents, References in standard formats from Links to Journal items or an Index keyed to statement numbers. You can also count "words". These are the commands available: 16at

Count (visibles in) STRUCTURE (at) DESTINATION OK: The command "Count" in the PUBLISH user-subsystem counts the number of visibles in the STRUCTURE at the DESTINATION you specify, 16at1

Filtered alternative: Instead of typing the "OK", you can type an "F" to have the count operate through the FILTER viewspecs you specify.

Count (visibles in) STRUCTURE (at) DESTINATION Filtered: VIEWSPECS OK

See filter, 16at1a

Generate Table/References ... 16at2

Table: Generate Table (of Contents for File at) DESTINATION: (number of levels of depth) CONTENT OK: The command "Generate Table" in the PUBLISH user-subsystem asks you to specify a file and the number of levels of depth you wish included in the table. The new Table of Contents branch is added as the first level-one branch. The Table of Contents does not cite pages, it cites statement numbers so the body of the formatted version should have statement numbers printed to make the Table useful. You will not want to print the statement numbers for the Table of Contents, 16at2a

References: Generate References (from Journal links in file at) DESTINATION (using format number) CONTENT OK: The command "Generate References" in the PUBLISH user-subsystem asks you to specify a file for DESTINATION and the number for the format you wish to use for CONTENT. The file you specify is searched for links to journal items. When one is found, catalog indexes are searched for the reference information. Available formats of references are: 16at2b

0 (Ref12345) Author, "Title", DATE. [Cited in 1A2B: (JOURNAL, 12345,)]

1 (12345,) Author, Title, Augmentation Research Center,
Stanford Research Institute, Menlo Park, California 94025,
DATE,

2 (1A2B) Author, Title, Augmentation Research Center,
Stanford Research Institute, Menlo Park, California 94025,
DATE (JOURNAL, 12345,)

16at2b1

Index STRUCTURE (at) DESTINATION OK: The command "Index" in the PUBLISH user-subsystem invokes an experimental program that creates a word index for a statement, branch, group, or plex. It inserts the Index as a branch at the same level at the end of a group or plex, down from a statement, or at the end of the plex down from a branch. It filters with respect to viewspecs. This program is slow, and creates a large index. It will only work on very small chunks of files (100 statements or so). The index may have to be hand edited after creation to shorten it. It excludes all words ending with "iy", all numbers, all words less than or equal to two characters, and all words in a list in the file <programs, publish, a>. Send candidates for the exclusion list to FEEDBACK. See also: filter, structure,

16at3

Q

Q

q Viewspec: show one line less: "Show one less line than appeared before." This viewspec will change or modify viewspecs w and s (counting back from the highest number of lines), x and t (you won't see anything), and r (each q cancels out one r).

17

17a

Q4: Queue four: the position in the time sharing waiting line in which a job has had its processing suspended. TENEX puts your job on one of four queues (lines) waiting to be done. Some queues have a higher priority than others. If you use up too much clock time while your process is being executed and the load average is high, you get placed in Queue four (Q4) which gets no service until the load average drops.

17b

query: NIC offers a system to search for and recategorize information on certain subjects. A few commands enable you to sift large files on named subjects. The Network Resource Notebook is now available through query.

17c

Questionmark: (?): Typing a question mark at any point in an NLS command, will show you the NLS command alternatives available at that point. After the list has printed you can go on as if you had not typed questionmark. Type <CTRL-Q> to stop printing. See also: CTRL-Q.

17d

Quit OK: The command "Quit" allows you to leave the subsystem you are working in and return to one you were last working in. The "Quit OK" command takes you to the subsystems you were just in. If you want to quit back to an even earlier subsystem, use the Quit To SUBSYSTEM command. The subsystem you quit from is erased from your subsystem stack. See stack.

17e

TNLS example:
SEND C: Quit OK:/C:
BASE C:

17e1

To: Quit To SUBSYSTEM OK: The command "Quit to" returns you to any subsystem you have in your subsystem stack.

17e2

TNLS example:
PROG C: Quit OK:/C: To C: Base OK:
BASE C:

17e2a

Effects: You will be returned TO the subsystem you name after "To". A subsystem stack lists the subsystems you've been in (See: Stack). If you don't supply a name, you will return to the most recent subsystem in the stack. The subsystem you are quitting from, as well as all of those between it and the one

you quit TO, will be erased from your subsystem stack. See
also: Quit, 17e2b

SUBSYSTEM: See subsystem, 17e2c

NLS: Quit NLS OK: The command "Quit NLS" allows you to leave NLS
(all the subsystems) and return to the TENEX Executive. It is
slightly slower than typing <CTRL-C> but much safer and we
recommend you use this command instead of <CTRL-C>. See also:
<CTRL-C>, 17e3

TNLS example:
BASE C: Quit OK:/C: Nls OK:
@
atsign is the TENEX herald, 17e3a

Effects: Atsign (@) is the TENEX herald. You can reenter NLS
with the TENEX command CONTINUE, 17e3b

See also: TENEX, herald, 17e3c

See also: SUBSYSTEMS, herald, Goto, Execute, 17e4

R

R

- r Viewspec: show one line more: "Show one more line than was previously specified." This viewspec is often combined with x or t; each r in the string adds one more line of each statement. If combined with q, each r cancels out one q.

18
18a
- RADC: Acronym for Rome Air Development Center. A group at Rome began using NLS in 1971.

18b
- Random: See Sequential.

18c
- re-creating the display: After you move to another location in a file, change the type of view or change something in the part of the file(s) you have in view, DNLS has to re-format the file-display area to show the changes in their proper context. If you have viewspec u on, this happens automatically upon execution of every command. Viewspec v suppresses that automatic re-creation, which saves time during some repetitious operations (Warning: you may point to a statement no longer there while viewspec v is on). Independently of either viewspec, re-creation will take place immediately upon specifying viewspec f. See also: F.

18d
- Note--Inputting Viewspecs with mouse buttons is not a command: so viewspec u will not affect this; so put in an f at the end of the series of lower-case viewspecs. See also: buttons.

18d1
- reaching subsystems: NLS has subsystems for specific tasks, such as editing files and sending mail. You are automatically put into the BASE subsystem when you enter NLS. You can also enter subsystems with the Goto command. If you want to give only one command in a subsystem you are not presently in, use the command "Execute" and then give the name of the subsystem you want to use.

18e
- Goto command: See Goto.

18e1
- Execute command: See Execute.

18e2
- Reading and viewing information: You can read any NLS files whose name you know, except files whose access has been specifically restricted. You call files with the Load File command. After you have loaded it, you can move around within its structure by "pointing" to the specific place you want to go. You can view a file in different ways with viewspecs or you can print it out for reading. See also: pointing, information. For DNLS, See also: viewing.

18f

- accessing files: See accessing, 18f1
- moving around in files and printing on your terminal in TNLS: The family of Jump and Print commands are used to view information in TNLS. Jump to Address is the basic TNLS pointing command. Other Jump commands point to a character within a statement; some point to files; and some point to statements by their structural position. See also: pointing, file, structural, Jump Address, printing (TNLS). 18f2
- Hardcopy printing and formatting: See hardcopy, 18f3
- Windowing and DNLS viewing: See viewing, 18f4
- Sendmail reading: See Print Journal, 18f5
- privacy provisions: See privacy, 18f6
- commands for viewing: See viewing-commands, 18f7
- Reading your mail: In TNLS, use the Print Journal command. Mail you receive appears in your initial file in the form of citations. New citations are added at the top for quicker viewing of the most recent ones. The message "You Have New Journal Mail" appears when you login if mail has been delivered to you since you last logged in. It is a recommended practice to create a branch in your initial file named, for example, "done" to which journal items can be moved as they have been read. Then the Print Journal command will only get new items. See also: reading, 18g
- In DNLS: See viewing, See also: initial, TNLS, DNLS, sndmsg, 18g1
- Journal: stored items See Journal, 18g2
- Numbering system: See Numbering, 18h
- recognition: 18h
- Command recognition: In specifying a command, you must type certain characters. The system can recognize commandwords after a certain number of letters. There are four modes by which NLS will recognize commandwords: Terse, Fixed, Anticipatory, and Demand. Use the Useroptions subsystem Recognition and Show Recognition commands to change and see your recognition mode. See also: show (USEROPTIONS), recognition (USEROPTIONS), 18h1
- Fixed Mode: See Fixed, 18h1a
- Anticipatory Mode: See Anticipatory, 18h1b
- Demand Mode: See Demand, 18h1c
- Terse Mode: See Terse, 18h1d

R

FILENAME recognition and defaults: In specifying a file, you must give NLS certain information and then it will be able to recognize the file that you want, 18h2

star convention: See star, 18h2a

<ESC>: Escape and <CTRL-F> See ESC, 18h2b

defaults: See defaults, 18h2c

Recognition-TENEX: (recognition of commands in TENEX): Commands in TENEX, either the Executive or a subsystem of NLS, are recognized in the Demand mode. See demand, 18h3

Note: If you use <SP> rather than <ALT> to force recognition, the rest of the commandword and following noisewords won't echo, 18h3a

Additional shortcut for TENEX commands only: When a TENEX commandword is at the end of the command, or all there is in the command, you may just type enough letters for uniqueness and then a <CR>. You won't get any feedback, 18h3b

TENEX has commandwords and noisewords similar to NLS. See notation, 18h3b1

Recognition (mode) RMODE OK: The Useroptions subsystem command "Recognition" allows you to change your recognition mode. Your choices for RMODE are--Fixed, Anticipatory, Demand, and Terse. With Terse, choose one of the above for the secondary recognition mode. See also: Reset Recognition (USEROPTIONS), Show Recognition (USEROPTIONS), 18h4

RMODE: Recognition and the Recognition Modes: See recognition, 18h4a

RMODE = Anticipatory
 or Demand
 or Fixed
 or Terse (secondary mode) RMODE2
 RMODE2 = Anticipatory or Demand or Fixed or Terse, 18h4b

recording, marking characters, 181

Playback Record (of session from file) CONTENT ... See Playback, 1811

Start Record (of session to file) CONTENT OK: See Start, 1812

Stop Record (of session) OK: See Stop, 1813

Mark Character (at) DESTINATION (with marker named) CONTENT OK: See Mark, 1814

- .REL; RELocatable L10 program (file): A filename with this extension points to a compiled L10 program that can be placed in your programs buffer with the Load Program command in the Programs subsystem. See also: loading. 18j
- Release: The DNLS command "Release" thaws statements that were frozen with the "Freeze" command. See also: Freeze. 18k
- All: Release All (frozen statements) OK: The DNLS command "Release All" thaws all statements that were frozen with the "Freeze" command. See also: Freeze. 18k1
- Frozen: Release Frozen (statement at) DESTINATION OK: The DNLS command "Release Frozen" thaws the statement you specify for DESTINATION that was frozen with the "Freeze" command. See also: Freeze. 18k2
- remote: printing at a TIP: See Output Remote. 18l
- Renumber Sids (in file) OK: The command "Renumber Sids" renumbers all the SIDs in the file you're in to be sequential, ignoring the outline structure. SIDs were originally assigned to statements in order of creation. See also: SIDs, structure. 18m
- TNLS example:
BASE C: Renumber C: SIDs in file OK: 18m1
BASE C: 18m2
- Effects--no side effects, we hope. 18m2
- repeat: See OKREPEAT. 18n
- Replace STRING/STRUCTURE (at) DESTINATION (by accumulator) OK: Use the Calculator subsystem command "Replace" to replace a STRING or STRUCTURE (such as a visible or a branch) with the value of the accumulator. See also: DESTINATION, STRUCTURE, STRING, accumulator. 18o
- Replace: The Base command "Replace" allows you to erase one of the following things at the DESTINATION you specify and put in some other CONTENT you specify. It combines the Insert and Delete commands into one command. 18p
- STRING: Replace STRING (at) DESTINATION (by) CONTENT OK: This group of "Replace" commands erases an existing STRING and replaces it with another of the same kind that you copy or characters that you TYPEIN. 18p1
- TNLS example:
BASE C: Replace C: Character (at) A: 7a +e
by T: ,
BASE C: 18p1a

R

Effects: CONTENT provides you the choice of pointing (as an option) to a STRING to be copied as a replacement, or of typing one in from the keyboard. After execution you are at the last character of the new STRING. When replacing a link, angle-bracket delimiters will be automatically supplied if you supply no delimiters. 18p1b

Warning when replacing links: See warning. 18p1b1

STRING: Character, Text, word, Visible, Invisible, Number, or Link: See string. 18p1c

STRUCTURE: Replace STRUCTURE (at) DESTINATION (by) CONTENT OK: This group of commands erases an existing STRUCTURE and replaces it with another of the same kind that you copy, or with a something that you type in. 18p2

TNLS example:

To replace a plex with a single statement:

BASE C: Replace C: Plex (at) A: 2a

by T: It was all lies,

BASE C: 18p2a

Effects: CONTENT provides you the choice of pointing (as an option) to a STRUCTURE to be copied as a replacement, or of typing a statement in from the keyboard. After execution you are at the first character of the new STRUCTURE. 18p2b

STRUCTURE: Statement, Branch, Plex, or Group: See structure. 18p2c

reporting bugs and making suggestions: In systems and their documentation, a bug is anything that does not work as documented. Report bugs, questions, your difficulties with the system, and suggestions about improvements on the system to the Feedback mechanism located at OFFICE-1: send a message to Ident FEEDBACK with Sendmail, or to username FEEDBACK with Sndmsg. In the same way, you may also ask FEEDBACK about OFFICE-1 or NLS status, current plans, and the decision status of others' suggestions. See also: SNDMSG, IDENT, SENDMAIL. 18q

All messages will normally be answered within one working day. You should receive some response to your messages whether they are immediate problems (such as a bad file), a bug report, a design bug, or a design recommendation. If a problem cannot be fixed immediately, an acknowledgement will be sent indicating a specialist will handle it as soon as software/hardware resources are available, and any further developments reported to the feedback originator. All other inquiries (like suggestions) that need to be studied will also be promptly acknowledged. 18q1

Reserve: The Sendmail subsystem command "Reserve" allows you to

reserve one of the following types of numbers. See also:
numbering.

18r

Journal: Reserve Journal (numbers -- how many?) CONTENT: (insert
the number list?) RESPOND
RESPOND = Yes (to follow) DESTINATION OK:

!or! No OK:

The Sendmail subsystem command "Reserve Journal" allows you to
reserve up to 20 Journal numbers by specifying a count for the
CONTENT. They will print out at your terminal. You can have the
list inserted at the DESTINATION you specify if you type "y" for
Yes to RESPOND. See also: numbering.

18r1

Journal number: See number (SENDMAIL).

18r1a

Xdoc: Reserve Xdoc (numbers -- how many?) CONTENT: (insert the
number list?) RESPOND

RESPOND = Yes (to follow) DESTINATION OK:

!or! No OK:

The Sendmail subsystem command "Reserve Xdoc" allows you to
reserve up to 20 XDOC numbers for items that you do not intend to
access online by specifying a count for the CONTENT. They will
print out at your terminal. You can have the list inserted at
the DESTINATION you specify if you type "y" for Yes to RESPOND.
See also: XDOC, numbering.

18r2

Journal number: See number (SENDMAIL).

18r2a

RFC: Reserve RFC (number) OK: (title) CONTENT

(author) CONTENT

(send to) CONTENT

(online document?) ANSWER

(show status?) ANSWER

(insert the number list?) ANSWER

(to follow) DESTINATION OK:

The Sendmail subsystem command "Reserve RFC" allows you to reserve
one RFC number by answering the questions. You can have the
number inserted at the DESTINATION you specify if you say Yes to
RESPOND. see also: RFC, numbering.

18r3

Journal number: See number (SENDMAIL).

18r3a

Reset:

18s

All: Reset All OK: The Useroptions subsystem command "Reset All"
returns all Useroptions parameters to the new user's system
defaults. In effect, it executes every Useroptions Reset
command. Reviewing each item below will take you to a fuller
description of the individual Reset commands that will be
executed:

18s1

Control character definitions for All terminals back to

R

- defaults, Carries out: Reset Control (characters for terminal) All OK, See Reset control (USEROPTIONS), 18s1a
- Commandwords will be recognized upon typing enough letters to identify them uniquely (Terse Mode), Carries out: Reset Recognition (mode) OK, See Reset Recognition (USEROPTIONS), 18s1b
- Feedback of noisewords and commandwords becomes full, Carries out both: Reset Feedback Mode OK and Reset Feedback Length OK, See Reset Feedback (USEROPTIONS), 18s1c
- You'll be prompted for all non-optional alternatives in commands (Partial prompting), Carries out: Reset Prompt (mode) OK, See Reset Prompt (USEROPTIONS), 18s1d
- Resets size of return ring to be 10, Carries out: Reset Return (ring entries) OK, See Reset Return (USEROPTIONS), 18s1e
- Resets size of file return ring to be 10, Carries out: Reset Filereturn (ring entries) OK, See Reset Filereturn (USEROPTIONS), 18s1f
- Currentcontext length--response to the Slash--back to 7 characters, Carries out: Reset Currentcontext (length) OK, See Reset Currentcontext (USEROPTIONS), 18s1g
- TNLS heralds will be the first 4 characters of the subsystem name, Carries out both: Reset Herald Mode OK and Reset Herald Length OK, See Reset Herald (USEROPTIONS), 18s1h
- TNLS page specifications (margins and size) return to defaults, Carries out: Reset Printoptions Right (margin) OK and Reset Printoptions Left (margin) OK and Reset Printoptions Bottom (margin) OK and Reset Printoptions Page (size) OK, See Reset Printoptions (USEROPTIONS), 18s1i
- All TNLS commands will start printing at the left margin, Carries out: Reset Feedback Indenting OK, See Reset Feedback (USEROPTIONS), 18s1j
- Tabstop settings return to default columns, Carries out: Reset Printoptions Tab (stop settings) OK, See Reset Printoptions (USEROPTIONS), 18s1k
- The Startup commands feature to be disabled, Carries out: Reset Startup (commands branch address) OK, See Reset Startup (USEROPTIONS), 18s1l
- Control: Reset Control (characters for terminal) TERMINALS OK: The Useroptions' subsystem command "Reset Control" sets back to defaults the characters that stand for the various control functions, You must specify the various terminals where you want this to take place, 18s2

Effects: If you choose All for TERMINALS, all character sets will return to default definitions. Character sets can be seen with the Useroptions Show Control command. They can be changed with the Useroptions Control command. 18s2a

TERMINALS = Ti (terminal) or Tasker or NVT
or Lineprocessor or Imlac or Execuport
or 33-TTY or 35-TTY or 37-TTY or All. 18s2b

more about TERMINALS: NVT acronym for "Network Virtual Terminal".

Specifying Tasker, Imlac, or Line processor will set up definitions only for the use of DNLS from that terminal. All others set up definitions for TNLS. When you run TNLS from EXEC on one of those display terminals, you'll get the character set for Ti. Going into TNLS via Simulate command gets you the set for the terminal you specify. 18s2c

Control functions: See CONTROLFUNCTIONS. 18s2d

See also: terminals, Useroptions Control, Useroptions Show Control. 18s2e

Currentcontext: Reset Currentcontext (length) OK: The Useroptions' subsystem command "Reset Currentcontext" returns the number of characters that surround the character you are located at (as shown in response to typing a slash) to the default value of 7. 18s3

To change the number of characters printed to other than 7: use Useroption's Currentcontext command: See currentcontext (USEROPTIONS). 18s3a

To see the number of characters presently established: use Useroption's Show Currentcontext command: See Show Currentcontext (USEROPTIONS). 18s3b

Default: Reset Default (subsystems and programs) OK: The Useroptions' subsystem command "Reset Default" sets the subsystems and userprograms to the system default. There are no default programs. See subsystems. See also: Useroptions Show Default, Useroptions Entry, Useroptions, Include. 18s4

Directive: Reset Directive (filter) OK: The Format user-subsystem command "Reset Directive" sets your current content-analyzer filter to what it was before the Set Directive (filter) command. This only works for one window in DNLS (be careful if you have inserted an edge to split your window). 18s5

Feedback: USEROPTIONS Reset Feedback FEEDRESETS OK: The Useroptions' subsystem command "Reset Feedback" allows you to set the feedback Mode back to Verbose--noise words will appear. For your TNLS sessions, you may set the Length of the noisewords you

R

will see back to all characters (up to 50). You can also set the completed commandwords you will see back to all (up to 50). You can also set the number of characters for indenting commands back to zero, 18s6

FEEDRESETS: Mode, Length, Indenting, 18s6a

Mode: Reset Feedback Mode OK: The Useroptions subsystem command "Reset Feedback Mode" sets the feedback you will see for noisewords back to verbose which is the default, 18s6b

Length and Indenting affect TNLS only-- 18s6c

Length: Reset Feedback Length OK: The Useroptions subsystem command "Reset Feedback Length" sets the number of characters you will see for noisewords back to all (up to 50), 18s6d

Indenting: Reset Feedback Indenting OK: The Useroptions subsystem command "Reset Feedback Indenting" returns commands to the left margin of your TNLS printout, 18s6e

See also: command, command recognition, commandword, noiseword, TNLS, pointing, TYPEIN, CONTENT, Useroptions Feedback, Useroptions Show Feedback, 18s6f

Filereturn: Reset Filereturn (ring entries) OK: The Useroptions' subsystem command "Reset Filereturn" returns the maximum size of your file return ring to 10. The command "Reset Return" returns the statement return ring size to 10, 18s7

Effects: The commands won't take effect until you create a new window in DNLS or until your next NLS session. They will remain in effect for subsequent sessions until you change the size again, like with Useroptions' Jump command, 18s7a

See also: statement return, file-return, Useroptions Jump, Useroptions Show Jump, 18s7b

Herald: [affects TNLS only] Reset Herald HERALDPARAMS OK: The Useroptions' subsystem command "Reset Herald" allows you to set the herald mode from Terse back to Verbose, or to set the Length of a Verbose herald back to being the first four characters of the subsystem name. See also: herald, subsystem, 18s8

HERALDPARAMS = Mode or Length: Resetting Mode will make a Terse herald (*) Verbose, i.e., the herald will be the first few characters (current Length) of the current subsystem name. Resetting Length will return a Verbose herald to being four characters long, 18s8a

related commands: The Useroptions subsystem' command "Herald" allows you to change the Length and the mode (Terse or Verbose) of heralds. Use the Useroptions command Show Herald

to see the status of your heralds. See also: Herald (USEROPTIONS), Show Herald (USEROPTIONS). 18s8b

Return: Reset Return (ring entries) OK: The Useroptions subsystem' command "Reset Return" returns the maximum size of your statement return ring to 10. See also: return ring, file-return, Useroptions Return, Useroptions Show Return, 18s9

Effects: The commands won't take effect until you create a new window in DNLS or until your next NLS session. They will remain in effect for subsequent sessions until you change the size again, like with Useroptions' Jump command, 18s9a

Printoptions: Reset Printoptions PRINTSPECS OK: The Useroptions' subsystem command "Reset Printoptions" allows you to return any of the parameters for TNLS Print commands to defaults. These defaults are: left margin at column 0, right margin at column 72, bottom margin at line 63, page size of 66 lines. Or you can return level indenting to 3 spaces or tabstops to 8,16,24,32,40,48,56,64,72,80,88,96,104. For the meanings and effects of these specifications, See also: command: Useroptions Printoptions, 18s10

PRINTSPECS: Right (margin)
or Left (margin)
or Bottom (margin)
or Page (size)
or Indenting (per level)
or Tab (stop settings) 18s10a

See also: the related status command: Useroptions Show Printoptions, 18s10b

Prompt: Reset Prompt (mode) OK: The Useroptions subsystem' command "Reset Prompt" returns the prompting mode to Partial which is the default. The Show Prompt command will indicate your current prompting mode. The Prompt command can be used to change the mode to Off, Partial, or Full. 18s11

The prompt modes: See pmode, 18s11a

See also: prompts, Useroptions Show Prompt, Useroptions Prompt, 18s11b

Recognition: Reset Recognition (mode) OK: The Useroptions' subsystem command "Reset Recognition" returns the recognition mode to the beginner's default--Terse; secondary mode Terse. You can control recognition mode with the Useroptions' Recognition command. Use the Useroptions' Show Recognition command to learn your current recognition mode, 18s12

R

recognition and the recognition modes: See recognition, 18s12a

See also: these related commands:
 Useroptions Recognition, Useroptions Show Recognition, 18s12b

Startup: Reset Startup (commands branch address) OK: The Useroptions' subsystem command "Reset Startup" causes the startup commands branch address to be "none", and in effect disables it. Invoke the mechanism with Useroptions' Startup command, See also: STARTUP, 18s13

Viewspeccs: Reset Viewspeccs OK: The Useroptions' subsystem command "Reset Viewspeccs" will turn OFF the Viewspeccs feature of NLS in this and following NLS sessions. You will not be able to specify VIEWSPECCS in Base's commands and the hierarchical structure of NLS files will be invisible. VIEWSPECCS for all levels, all lines, hjumpuyBCEHJLP will be initially in effect for your NEXT and subsequent NLS sessions. To see definitions of individual VIEWSPECCS, See, for example, J, B, x, b, or p Viewspecc, 18s14

See also: these related commands:
 Useroptions Viewspeccs, Useroptions Show Viewspeccs, Base Reset Viewspeccs, Base Set Viewspeccs, Base Show Viewspeccs, 18s14a

Reset: The command "Reset" allows you to change back to the original-default-setting any one of the following things that you specify, See also: SET, RESET (USEROPTIONS), RESET (PROGRAMS), RESETTING, 18t

Archive: Reset Archive (request for file) CONTENT OK: The command "Reset Archive" allows you to reset the archival status of all files to the original mode where they will be archived and deleted if they have not been read in 21 days. CONTENT wants you to give the name of a file, 18t1

Case: Reset Case (mode) OK: The command "Reset case" allows you to reset the case mode setting for subsequent Set Case STRING and Set Case STRUCTURE commands to "upper" (all alphabetic characters will be capitalized). This is the default setting. This case mode setting will remain in effect until the Set Case Mode command is used again, 18t2

TNLS example:
 BASE C: Reset C: Case (mode) OK:
 BASE C: 18t2a

Character: Reset Character (size for window) OK: The command "Reset Character" sets your character size back to the default which is number one. Only the window to which your mouse is pointing when you type OK: will be affected. This command will

not work for terminals that cannot change their character size.
See also: Set Character, 18t3

Content: Reset Content (pattern) OK: The command "Reset Content (pattern)" sets aside the content-analyzer you have been using. It is still available to you, but viewspecs i and k will no longer use it to filter statements. The Show Status command in the programs subsystem will show you a list of content-analyzers that are available to you but not in force at the moment. To inforce one use the programs subsystem command Institute, 18t4

TNLS example:
BASE C: Reset C: Content (Pattern) OK:
BASE C: 18t4a

content-analyzers: See content-analyzer, 18t4b

Link: Reset Link (default for file) OK: The command "Reset Links" resets the directory for all links in a file that fail to specify a directory to the default. The default is the directory the file itself resides in. This command is used after the Set Link Default command. If at any time you are not sure which is the link default for your file, use the Show File Default (directory for links) command, 18t5

TNLS example:
BASE C: Reset C: Link (default for file) OK:
BASE C: 18t5a

Show File Default (directory for links) command: See Show File, 18t5b

Name: Reset Name (delimiters) OK: The command "Reset Name" sets the characters that define and mark the boundaries of statement names in a STRUCTURE to your default. See name-delimiters, 18t6

TNLS example:
BASE C: Reset C: Name delimiters in C: Branch at A: 2a
BASE C: 18t6a

See also: Set Name, Show Name, 18t6b

Temporary: Reset Temporary (modifications to file) OK: This command does not work. The command "Reset Temporary" erases all the temporary modifications and sets the modification mode back to normal for a given file. You may set the modifications to a file to temporary (with the command Set Temporary modifications) so that you may edit the file for your own purposes without having write access. See also: write, Set Temporary, 18t7

TNLS example:

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BASE C: Reset C: Temporary (modifications for file) OK: 18t7a
 BASE C:

TTY: Reset TTY (window) OK: The command "Reset TTY" clears your TTY simulation window and replaces the NLS contents that were in the window before you used the Set TTY. See also: Clear, 18t8

Viewspeccs: Reset Viewspeccs OK: The command "Reset Viewspeccs" sets the viewspeccs back to your initial set for NLS sessions, 18t9

TNLS example:
 BASE C: Reset C: Viewspeccs OK:
 BASE C: 18t9a

Effects: To list the viewspeccs currently in force, use the Show Viewspeccs status command. One method of changing viewspeccs is the Set viewspeccs command. Users can specify their initial set of viewspeccs for themselves (the ones you'll go back to when you reset) in the Useroptions subsystems, with that subsystems's Viewspeccs command. See also: change, Show Viewspeccs (BASE), Set Viewspeccs (BASE), Viewspeccs (USEROPTIONS), 18t9b

Reset: See also: Delete (PROGRAMS), 18u

Buffer: Reset Buffer (size) OK: The Program's subsystem command "Reset Buffer" sets the buffer size back to its default of 4 pages = 2048 words, 18u1

TNLS example:
 PROG C: Reset C: Buffer (size)
 PROG C: 18u1a

NDDT: Reset NDDT <CTRL-H> OK: The command "Reset NDDT" will return <CTRL-H> to its original function which is the same as <CTRL-A>, 18u2

TNLS example:
 PROG C: Reset C: NDDT control-h
 PROG C: 18u2a

set NDDT command: See set NDDT (PROGRAMS), 18u2b

resetting: 18v

resetting an NLS session: See emergencies, 18v1

The reset command in the BASE and Useroption subsystems: See Reset, 18v2

delete modifications command: See Delete Modifications, 18v3

- backspacing in commands: See backspacing. 18v4
- Sendmail Initialization: See Initialize. 18v5
- Useroptions reset: See Reset (USEROPTIONS). 18v6
- Programs reset: See Reset (PROGRAMS). 18v7
- Calculator clear command: See Clear (CALCULATOR). 18v8
- Restricted Distribution: When the ident of a group is used for distribution or for the author of a journal item, you may restrict distribution to the co-ordinator of the group by typing an ampersand(&) before the ident. 18w
- Expanded distribution: See expanded (SENDMAIL). 18w1
- Return ring--one of the following: 18x
- return ring for files: an ordered list of the last files you have been in. Additions to the ring are made "on top" of the current position; if you return to a file on the ring, it is added to the top of the list. You are always at the top of the list; additions force the oldest off the bottom after established size is reached. You can control the number of files kept on your ring with commands in Useroptions. Use ,fr (jump to file return) as an ADDRESS element. 18x1
- Jump to File Return command: See Jump File Return. 18x1a
- Useroptions subsystem commands for size of ring: See Filereturn (USEROPTIONS). 18x1b
- See also: Statement Return. 18x1c
- Record of statements within a single file: See return. 18x2
- Return (ring entries) CONTENT OK: The Useroptions subsystem command "Return" allows you to change the maximum size of your Statement Return Ring. The default is 10. The maximum allowed is 25. CONTENT wants the Number of entries for the ring. Each location remembered on your ring takes up space and too many could slow you down or cause problems. For this reason we recommend no more than 10 except for special cases. 18x3
- Effects: The commands won't take effect until you create a new window in DNLS or until your next NLS session in TNLS. They will remain in effect for subsequent sessions until you change the size again. 18x3a
- See also: Useroptions file, file-return, CONTENT, Useroptions Show Return, Useroptions Reset Return. 18x3b

R

RFC (number) CONTENT OK: The Sendmail subsystem command "RFC" allows you to use a reserved RFC number if you know the IDENT to which it is reserved. RFC stands for Request For Comments which is a series of memoranda between Network Liaison personnel numbered and distributed at the Network Information Center. They are no longer restricted to requests for comments. You must specify a title and author by the Sendmail Title and Author commands. 18y

The reserve RFC number command: See RFC. 18y1

The Reserve command: See Reserve. 18y2

Right-anglebracket (>) command: Typing the right-anglebracket key (>) at the herald of a subsystem displays the name of your current subsystem -- See stack. 18z

ring: See bells. 18a@

RINS: See journal-number. 18aa

routine: See procedures. 18ab

RPT: OKREPEAT prompt: In certain commands it is possible to repeat the contents of certain fields from a previous command or field, e.g. the content you are searching for in Jump to Content. Where such repetition is possible, full prompting prompts with "RPT: ". Normally, you type <CTRL-B> to repeat use of the holdover field. See also: OKREPEAT. 18ac

RSEXEC file: a file that shows up in your directory surrounded by squarebrackets and contains the necessary information for using RSEXEC. RSEXEC is a subsystem available in TENEX which allows you to learn information about certain activities on the ARPANET and to perform restricted operations at other sites. 18ad

Run Program/TENEX ... : 18ae

Program: Run Program CONTENT OK: The Program's subsystem command "Run Program" transfers control to the program you specify in CONTENT. The program must be compiled and loaded in the buffer. The first program compiled or loaded into the buffer is number one. CONTENT accepts the program name or its buffer number. This command is unnecessary for userprograms that are subsystems (user-subsystems). Treat them just as subsystems. 18ae1

The load program command: See load (PROGRAMS). 18ae1a

TNLS example:
PROG C: Run C: Program T: format
COM Formatter: Select....
PROG C: 18ae1b

TENEX: Run TENEX (subsystem) CONTENT OK: (output to) OUT (input

mode) IN (wait for completion?) ANSWER (Go?) OK:

The programs subsystem command "Run TENEX" allows you to operate the TENEX subsystem you specify for CONTENT while you continue working in NLS.

18ae2

OUT = File CONTENT !or! Teletype OK:

If you specify "Teletype" for the output, the process will appear on your terminal. Otherwise, if you specify "File" the process will be remembered in the sequential file with the name you specify for CONTENT.

IN =

18ae2a

From (file) CONTENT OK: This commandword allows you to specify a sequential file containing a stream of characters which will be interpreted in the TENEX subsystem you specify.

18ae2a1

No (input) OK: This commandword is for subsystems that do not need any user input other than calling the subsystem name.

18ae2a2

Typeahead CONTENT OK: This commandword allows you to specify a stream of characters to be interpreted by the TENEX subsystem. Enter CA and CD by preceding them with <CTRL-V>.

18ae2a3

Interactive (termination character) CONTENT OK: This commandword allows you to specify the necessary input characters as you go along. When you get to the point where you wish to leave the TENEX subsystem you type the "termination character" you specify here. <CTRL-Y> is a good one to use. If you say "No" to "wait for completion?", the TENEX subsystem will continue until it is finished while you do other things in NLS. You can abort the subsystem by using Programs subsystem's Kill TENEX (subsystems) command.

18ae2a4

Use programs' Kill TENEX (subsystem) command to terminate the process. Use programs' Show TENEX command to see the current status of your TENEX subsystem. See also: TENEX, Kill TENEX (PROGRAMS), Show TENEX (PROGRAMS), sequential.

18ae2a5

TENEX: Run TENEX (subsystem) CONTENT OK: (output to) OUT (input mode) IN (wait for completion?) ANSWER (Go?) OK:

The programs subsystem command "Run TENEX" allows you to operate the TENEX subsystem you specify for CONTENT while you continue working in NLS.

18ae3

Runnable Programs: See REL files:

18af

running programs: The Programs subsystem command Run Program will pass control to the program. In such cases, the program file will

R

have the extension "REL". For programs with other extensions: See
loading user programs files.

18ag

S

s Viewspec: show all lines: "Show all lines of each statement." This viewspec is normally on, but if you were previously looking at one line only and you wanted to see all lines, you'd set viewspec s. It releases any previous line-cutting viewspecs but, unlike w, does not show more levels.	19 19a
screen: See display.	19b
Search - one of the following:	19c
for character with ADDRESS: See characteraddress.	19c1
for word with ADDRESS: See word-search.	19c2
pointing in general: See pointing.	19c3
for content with ADDRESS--usually within one statement or branch: See contentaddress.	19c4
for content with viewspecs--usually over a whole file: See content-pattern.	19c5
for statementname with ADDRESS: There are four basic ways of searching for statement names. These can be talked about with the Jump command. Jump (to) Name Any takes you to a name the fastest way possible. If you have not changed the position of your named statements since the last time you did an Update File Compact, this will also equal a Jump (to) Name First. Jump (to) Name First and Next are slower. See also: statementname, nextname, branchname, externalname.	19c6
The Jump (to) Name commands: See Jump Name.	19c6a
secondary:	19d
recognition mode: See terse.	19d1
distribution changed to "Forward" in Sendmail Subsystem: See forward (SENDMAIL).	19d2
seeing: See reading.	19e
semicolon:	19f
semicolon: ; TYPEIN OK: Typing the semicolon character (;) at	

S

the herald allows you to enter a comment not taken as command input. 19f1

TNLS example:
BASE C: ; This next series of commands shows how to
BASE C: 19f1a

Effects: Anything you type after the semicolon and before the OK will be printed at your terminal but not processed in any other way by NLS. People often use ; after the Connect TTY command, which "links" two terminals. You can then have comments you type be printed at both terminals without affecting either job. 19f1b

See also: terminals, Connect TTY, 19f1c

the semicolon as a viewspec: set off content-analyzer patterns in links: When the viewspec field of links contains a content-analyzer pattern, the pattern is placed between semi-colons among the other viewspecs. For example:
<address : viewspecs ; content-analysis pattern; viewspecs>
If no other viewspecs are used, the pattern still must be preceded by a colon. See: pattern. 19f2

Send (the mail) OK: The Sendmail subsystem command "send" sets in motion the Sendmail process after you have specified correctly a source and any other information you wish. (If you put impossible things in some fields, it won't work.) 19g

types of sources: See item (SENDMAIL). 19g1

Sending mail: Use the Sendmail Interrogate command to be prompted for the basic elements of a sendmail item. You will be asked for a distribution list made up of IDENTs. 19h

Interrogate command: See Interrogate (SENDMAIL). 19h1

Sources for sendmail items: See item (SENDMAIL). 19h2

error messages in the Sendmail subsystem: See Initialize. 19h3

identification and mailing lists: See identification. 19h4

commands in the Sendmail subsystem: See commands. 19h5

sendlist: See identlist. 19i

Sendmail subsystem: The Sendmail subsystem allows you to send messages and documents to a list of people known to NLS and have these messages cataloged and stored in the NLS Journal. The

recipients may receive hardcopy, or notice of the item in their initial file, or the item itself if it is short. 19j

commands in the Sendmail subsystem: 19ji

Authors CONTENT OK: See Authors (SENDMAIL). 19jia

Branch (at) SOURCE OK: See Branch (SENDMAIL). 19jib

Comment CONTENT OK: See Comment (SENDMAIL). 19jic

Distribute (for) CATEGORY (to) CONTENT OK: See Distribute (SENDMAIL). 19jid

Execute (command in) SUBSYSTEM: See Execute. 19jie

Expedite OK: See Expedite (SENDMAIL). 19jif

File DESTINATION OK: See File (SENDMAIL). 19jig

Forward (item number) CONTENT (for) ACT/INFO (only) ...: See Forward (SENDMAIL). 19jih

Goto SUBSYSTEM OK: See Goto. 19jii

Group (from) SOURCE OK: See Group (SENDMAIL). 19jij

Offline (item -- located at) CONTENT OK: See Offline (SENDMAIL). 19jik

OKREPEAT <CTRL-B>: See OKREPEAT. 19jil

Initialize (specifications) OK: See Initialize (SENDMAIL). 19jim

Insert: See Insert (SENDMAIL). 19jin

Interrogate OK: See Interrogate (SENDMAIL). 19jio

Keywords CONTENT OK: see Keywords (SENDMAIL). 19jip

Message CONTENT OK: See Message (SENDMAIL). 19jiq

Number Assign/Previously ...: See Number (SENDMAIL). 19jir

Obsoletes (item number(s)) CONTENT OK: See Obsoletes (SENDMAIL). 19jis

Plex (at) SOURCE OK: See Plex (SENDMAIL). 19jit

Private OK: See Private (SENDMAIL). 19jiu

Process (sendmail form at) DESTINATION OK: See Process (SENDMAIL). 19jiv

Public: See Public (SENDMAIL). 19jiw

S

Quit OK: See Quit, 19j1x

RFC (number) CONTENT OK: See RFC (SENDMAIL), 19j1y

Reserve: See Reserve (SENDMAIL), 19j1z

Send (the mail) OK: See Send (SENDMAIL), 19j1a0

Show Status/Record: See Show (SENDMAIL), 19j1aa

Statement (at) CONTENT OK: See Statement (SENDMAIL), 19j1ab

subcollections CONTENT OK: See Subcollections (SENDMAIL), 19j1ac

Title CONTENT OK: See Title (SENDMAIL), 19j1ad

Unrecorded ANSWER: See Unrecorded (SENDMAIL), 19j1ae

Update (to item number(s)) CONTENT OK: See Update (SENDMAIL), 19j1af

Reading your mail: See Reading, 19j2

Sending mail: See Sending, Insert Sendmail form, 19j3

sendmessage: See sndmsg, 19k

Sequence Generators: determine the way in which the statements in a file are arranged into a structure before display. The usual order is the outline structure you see when the file is printed while viewspec P, the default, is on. Users may create others. Use viewspec capital-O and capital-P to turn on and off a user sequence generator. A sequence generator observes filter viewspecs, i.e., content-analysis and level clipping, in determining which statements to pass on to the formatter. Sequence Generator programs are complex and generally limited to experienced L10 programmers. None are currently supported as user-programs. COMPARE: sequential, 19l

sequential: With regard to computer files that contain text, a sequential file stores its characters in a single sequence like beads on a string. NLS files are not sequential files, but rather have statements stored in a random order with a system of pointers to retrieve them as needed. You can turn a sequential file into an NLS file using the Copy Sequential command and you can turn an NLS file into a sequential file using the Output Sequential command or the File alternative in the Output Quickprint or Output Printer commands. Sequential files generated from NLS files often have the extensions ,TXT or ,Print. See also: extension, TENEX, PRINTER, 19m

Copy Sequential command: See Copy Sequential, 19m1

Output Sequential file command: See Output Sequential, 19m2

Server computer: A computer providing service to users via the ARPANET. Sometimes called a "Host". See NIC. 19n

Set: 19o

Buffer: Set Buffer (size to) CONTENT OK: The Program's subsystem command "Set Buffer" allows you to specify the number of pages reserved for user-program code. 19o1

buffers: See buffers. 19o1a

TNLS example:
PROG C: Set C: Buffer (size to) T: 8 pages = 4096 words
PROG C: 19o1b

NDDT: Set NDDT <CTRL-H> OK: The command "Set NDDT" allows you to go to NLS-DDT when you type a <CTRL-H>. 19o2

TNLS example:
PROG C: Set C: NDDT (control-h)
PROG C: 19o2a

NLS-DDT: See NLS-DDT. 19o2b

reset NDDT control-h command: See reset NDDT (PROGRAMS). 19o2c

Set: The command "Set" allows you to change any one of the following things that you specify. Use the Reset commandverb to get back to the original default setting. See also: SET (PROGRAMS), RESET. 19p

Archive: Use the BASE subsystem's Archive command: See archive. 19p1

Character: Set Character (size for window to) CONTENT OK: The command "Set Character" allows you to change the size of your characters to one of the numbers (shown below) you specify for CONTENT. Character size 1 is the default. Only the window to which your mouse is pointing when you type OK: will be affected. This command will not work for terminals that cannot change their character size. See also: Reset Character. 19p2

0 The smallest. 19p2a

1 The average size (72 characters per line) the default. 19p2b

2 The large size. 19p2c

3 The largest size. 19p2d

Content: Set Content (pattern) Off/On/To ... 19p3

Off: Set Content (pattern) Off OK: The command "Set Content (pattern) Off" de-activates your content-analysis pattern by

S

turning viewspec j on. All statements will pass. Viewspec i or the command "Set Content (pattern) On" activates your content-analysis pattern. 19p3a

viewspec j: See j. 19p3a1

content-analyzers: See content-analyzer. 19p3a2

Set Content (pattern) On (Base command): See Set Content (BASE). 19p3a3

On: Set Content (pattern) On OK: The command "Set Content (pattern) On" activates your current content-analysis pattern by turning viewspec i on. Only statements that contain the current pattern will pass. Viewspec j or the BASE subsystem command "Set Content (pattern) Off" de-activates your content-analysis pattern. 19p3b

viewspec i: See i. 19p3b1

content-analyzers: See content-analyzers. 19p3b2

Reset Content (pattern): See Reset Content. 19p3b3

To: Set Content (pattern) To CONTENT OK: The command "Set Content (pattern) To" allows you to type in or point to a content-analyzer pattern. It then compiles the pattern and makes it your current content-analyzer. After you specify the content-analyzer pattern, you may turn it off and on by the viewspecs i, j, and k. When pointing to a pattern instead of typing it in, you must point to the first character of the entire pattern which must end with semicolon. Content-analyzer programs already compiled into a program file, can be loaded with the Programs subsystem command "Load Program". 19p3c

content-analysis viewspecs: See content-analysis. 19p3c1

The Programs subsystem Load Program command: See load (PROGRAMS). 19p3c2

Directive: Set Directive (Filter) OK: The Format user-subsystem command "Set Directive" sets your current content-analyzer filter to one which only shows statements with Output Processor directives in them. You may then use viewspec i to turn the filter on, and viewspec j to turn it off (show everything). 19p4

Delimiters alternative: If directives in the file you are working on use delimiters other than period and semicolon (because you changed the delimiters in a preceding statement), you must use the command:

Set Directive (Filter) Delimiters (Left) CONTENT (Right)
CONTENT OK:

Typein or point to the left and right directive delimiter characters which you wish the program to use. Each new view of the file (a Jump or Print) through this filter begins with the assumption that the directive delimiters are these new characters. Changes in the delimiters by subsequent directives in the view will not keep them from being viewed, 19p4a

External: Set External (names link file to:) CONTENT OK: To use this command, you must have a file that contains statement names followed by links. Specify this file's name for CONTENT. See also: Jump Name, EXTERNALNAME, 19p5

Link: Set Link (default for file to directory) CONTENT OK: The command "Set Link" allows you to change the operation of links in a specific file so they work as if the named directory were in the link. Then, when you do not specify a directory name for links in that file, the one you have chosen will be assumed. You can go back to the default set by the system prior to this command--the directory the file itself resides in--by using the Reset Link default command. See also: defaults, 19p6

TNLS example:
BASE C: Set C: Link (default for file to directory) T: alice
BASE C: 19p6a

Reset Link (default) command: See Reset Link, 19p6b

Show File Default (directory for link) command: See Show File Default (BASE), 19p6c

Name: Set Name (delimiters in) STRUCTURE (at) DESTINATION: (left delimiter) CONTENT (right delimiter) CONTENT OK:
The command "Set Name" allows you to change the characters which define and mark the boundaries of statement names in a particular STRUCTURE at the DESTINATION you specify. Typein or point to one character as the CONTENT for both the left and right delimiters. It will only take effect on those statements passing the current viewspecs. See also: statementname, STRUCTURE, Reset Name, Show Name, 19p7

TNLS example:
BASE C: Set C: Name (delimiters in) C: Branch at A: 2a
left delimiter T:
right delimiter T: ;
BASE C: 19p7a

Effects: See name-delimiters, 19p7b

NLS: Set NLS (protection for file) Private/Public OK: 19p8

S

Private: Set NLS (protection for file) Private OK: The command "Set NLS (protection for file) Private" allows you to limit access to the file in which you are currently located. Only those people with their IDENTs listed in the origin statement of the file in exactly the following syntax: AccessList: IDENTLIST; will be allowed to see the file. The word AccessList must be followed by a colon (:) and a space before you list the IDENTs. The list of IDENTs must be all capitals, separated by commas, and with a semi-colon (;) at the end. After inserting the AccessList, and setting the protection to private, you must update the file before the protection will work. If you do not put the AccessList outside the delimiters of the origin statement, it will disappear when you update. NOTE, if you make a mistake, you can easily deny access to yourself. If this occurs, one of your computer's operators should be able to bail you out. See also: statement, Set NLS Public, Show File Status.

19p8a

Effects: A NULL AccessList (i.e., one which is specified but has no idents in it) is very different from a nonexistent AccessList. The former grants access to no one; the latter effectively grants access to everyone. An unauthorized user's attempt to load a private file is declined by NLS with the message: "Private file: access denied to you." Once a file has been Set Private, it remains private until it is specifically set Public. When a new file is created, it is Public.

19p8a1

Public: Set NLS (protection for file) Public OK: The command "Set NLS (protection for file) Public" makes the file in which you are presently located open to anyone. Set NLS Public undoes what the Set NLS Private command does but is independant of the Set TENEX (protection) command.

19p8b

Temporary: Set Temporary (modifications to file) OK: (really?) OK:

The command "Set Temporary" allows you to edit a file for your own purposes without having write access (e.g. journal files). Reset Temporary modifications erases all the temporary modifications and sets the modification mode back to normal for the given file.

19p9

TNLS example:

BASE C: Set C: Temporary (modifications for file) OK:
BASE C:

19p9a

DANGER: The command "Reset Temporary" does not work at all. Be sure you understand the "Set Temporary" command before you use it.

19p9b

write access: See write.

19p9c

modifications: See modifications.

19p9d

Reset Temporary (modifications for file) command: See Reset Temporary. 19p9e

TENEX: Set TENEX (protection for file named) CONTENT CONTROLS OK: 19p10

TTY: Set TTY (simulation for window) BUG OK: The command "Set TTY" allows you to BUG the DNLS window you wish to have simulate a teletype. You will want to use the Insert Edge command first to create a special window. See also: TTY-simulation, 19p11

Viewspeccs: Set Viewspeccs VIEWSPECCS OK: The command "Set Viewspeccs" allows you to change the viewspeccs at any time for the current NLS session. 19p12

TNLS example:
BASE C: Set C: Viewspeccs V: dmIGY
BASE C: 19p12a

Effects and related commands: To list the viewspeccs currently in force for this session, use the Show Viewspeccs command. After this NLS session, your viewspeccs will revert to a default initial set which you can select for yourself in the Useroptions subsystem, with the Viewspeccs and Reset Viewspeccs commands. To check what initial set is established, use Useroptions' Show Viewspeccs command. Base's Reset Viewspeccs command will return current viewspeccs to that same initial set immediately. See also: Reset Viewspeccs (BASE), Show Viewspeccs (BASE), Viewspeccs (USEROPTIONS), Reset Viewspeccs (USEROPTIONS), Show Viewspeccs (USEROPTIONS). 19p12b

.SG; Sequence Generator program: filename with this extension points to a compiled L10 Sequence Generator. The Load Program command in the Programs subsystem will place the Sequence Generator in your buffer and automatically institute it as your current Sequence Generator replacing any other Sequence Generator that might be there. 19q

Sequence Generators: See sequence. 19q1

shared screens: See connect display. 19r

Show: The command "Show" does different things and has different alternative operands in different subsystems. See also: verb, operand, SUBSYSTEM. 19s

Base Show: See Show (BASE). 19s1

sendmail show: See Show (SENDMAIL). 19s2

Useroptions Show: See Show (USEROPTIONS). 19s3

S

- Programs Show Status: See Show (PROGRAMS), 19s4
- Sendmail Show Record (for) IDENT OK: See Show Record (SENDMAIL), 19s5
- Calculator Show: See Show (CALCULATOR), 19s6

Show: see the status of special things: The command "Show" allows you to see the status of any one of the following things that you specify. See also: reading, viewing, 19t

Directory: Show Directory (of) DEFAULT [DIROPT] OK: DEFAULT = OK !to specify the directory to which you are connected!
!or! CONTENT !accepts any FILEADDRESS!

The command "Show Directory" will display a list of files in link syntax according to options you can specify with commandwords in DIROPT after you type <CTRL-U>. You can insert the list into a file with the Copy Directory command. If the file is being modified, it will state this in square brackets following the link syntax for that file. See also: directory, option, commandword, link, 19t1

DIROPT: See DIROPT, 19t1a

Copy Directory command: See Copy Directory, 19t1b

TNLS example:
BASE C: Show C: Directory T: kabinet,*,NLS;*
OPT:/OK: OK:
<KABINETT>
XXX,NLS;9

BASE C: 19t1c

Effects: Altmode works when specifying a FILEADDRESS. If the FILENAME is not specified, all files in the directory to which you are connected (the one you logged in under or subsequently Connected to) will be printed, 19t1d

filename and star convention: See star, 19t1d1

Connect to Directory command: See Connect Directory, 19t1d2

Disk: Show Disk (space status) OK: The command "Show Disk (space status)" will print the number of disk pages in use for deleted and undeleted files, and the maximum number of disk pages allowed for your directory. It also shows how many pages are in use by the whole system, and how many are left, 19t2

deleted files: See deleted 19t2a

TNLS example:
BASE C: Show C: Disk (space status) OK:
Connected to WEINBERG

93 Total pages in use -- 300 Allowed, 93 Undeleted, 0 Deleted
System Total: 3246 Pages left, 55604 Used
BASE C:

19t2b

Return: Show Return (ring) OK: The command "Show Return (ring)" will show the beginnings of the last few statements where you have been. The most recent statements you visit are added in turn to the top of the list. To change the size of your return ring (from the default 10 to up to 25) use Useroptions Return command. See also: return.

19t3

TNLS example:
BASE C: Show C: Return (ring) OK:
so we left for the mountain
and so on
an extraxterrestria
buffalo consider.
BASE C:

19t3a

File:

19t4

Default: Show File Default (directory for links) OK: The command "Show File Default" will print the link default directory for the file you are in. This command has no effect on the file. The link default directory may be changed with the Set Link command.

19t4a

TNLS example:
BASE C: Show C: File C: Default (directory for links) OK:
Private File (but with no Access List)
< WEINBERG, RE,NLS;16, >
Default directory for links is WEINBERG
BASE C:

19t4a1

Modification: Show File Modification (status) OK: The command "Show File Modification" will print the modification status of the loaded file. The first creation or change of text begins a set of modifications and changes the modification status to modified. Normally, only one person can be modifying a file at any time. The file modification status remains "modified" until you incorporate your changes into the file with a Update command. See also: modifications, Update.

19t4b

TNLS example:
BASE C: Show C: File C: Modifications (status) OK:
< WEINBERG, RE,NLS;17, >
Being Modified By WEINBERG (POOH)
BASE C:

19t4b1

Return: Show File Return (ring) OK: The command "Show File Return" will show your file return ring. The most recent

S

files you've worked in (in this NLS session) have been added in turn to the top of the list; the file you're in is at the top. To change the size of your return ring (from the default 10 to up to 25) use Useroptions' Filereturn command. See also: Jump File Return.

19t4c

TNLS example:

```
BASE C: Show C: File C: Return (ring) OK:
< WEINBERG, RE,NLS;17, > Being Modified By WEINBERG (POOH)
< WEINBERG, POOH,NLS;61, > Being Modified By WEINBERG (POOH)
BASE C:
```

19t4c1

Size: Show File Size OK: The command "Show File Size" will print information about the size of the file in which you are located. It refers to TENEX pages which are roughly equivalent to typed pages.

19t4d

TNLS example:

```
BASE C: Show C: File C: Size OK:
<DOE>WONDER,NLS;34
31 statements in file
Structure pages = 1/95
Data pages = 1/370
Total pages in file = 8
1402 words used out of 2048 words in file ( =68%)
BASE C:
```

19t4d1

Status: Show File Status OK: The command "Show File Status" will print certain basic information about the loaded file, including: link default directory, modification status, date of creation, and file size. This command has no effect on the file. See also: loading, modifications.

19t4e

TNLS Example:

```
BASE C: Show C: File C: Status OK:
< WEINBERG,RE,NLS;16, >
being Modified By WEINBERG (POOH)
Private File (but with no Access List)
Default directory for links is WEINBERG
Creation date of version 1: 14-JAN-75 08:03
Creation date of this version: 6-FEB-75 15:14
26 statements in file
Structure pages = 1/95
Data pages = 6/370
Total pages in file = 8
1101 words used out of 4096 words in file (=27%)
Try an Update File Compact to improve % used.
```

19t4e1

Marker: Show Marker (list) OK: The command "Show Marker" will list the markers, with their addresses, of the loaded file.

19t5

Effects: Markers are normally invisible when viewing your

file. Markers are named with the Mark Character command, and deleted with the Delete Marker or Delete All markers commands. 19t5a

pointing with a marker: You can point to a marked character by using the marker name in an ADDRESS expression. You can also point there in DNLS by holding down the right-most button on the mouse and typing in the marker. See also: buttons, down, 19t5b

See also: markers, Mark, Delete Marker, Delete All, 19t5c

Name: Show Name (delimiters for statement at) DESTINATION OK: The command "Show Name" will print the characters currently defined (by the Set and Reset Name delimiters commands or by your useroptions default) to mark off statementnames for the statement you specify. 19t6

TNLS example:
BASE C: Show C: Name (delimiters for statement at) A: 1
NULL NULL
BASE C: 19t6a

See also: statementname, name-delimiters, 19t6b

Viewspeccs: Show Viewspeccs (status) [Verbose] OK: The command "Show Viewspeccs" will (in the terse form) simply list the viewspeccs in force in the current NLS session. In the verbose form, it will list the viewspeccs with their meanings. 19t7

TNLS example:
BASE C: Show C: Viewspeccs (status) OK/[**]:
levels: ALL, lines: ALL, hjnpuzACEGJLP
BASE C: 19t7a

Effects: For verbose, type the OPTION character and then specify the commandword Verbose before confirming the command. The Set and Reset Viewspeccs commands are used to change viewspeccs. See also: change, Set Viewspeccs (BASE), Reset Viewspeccs (BASE), 19t7b

Show Status/Record, 19t8

Record: Show Record (for ident) CONTENT OK: The sendmail subsystem command "Show Record" takes an IDENT and ident-search-codes for CONTENT and then displays current information in the Identfile about that person. 19t8a

IDENT: See ident, 19t8a1

Status: Show Status OK: The Sendmail subsystem command "Show Status" displays to you what it knows about the current journal item to be sent. It shows the fields along with their

S

current values. Empty fields are omitted. You may replace or add to the items in this list with the appropriate command. You may also use the Insert Status (form) command to place the status as a statement in a file where you may then modify or add to fields that can then all be processed at once with the Process (sendmail form) command. 19t8b

The Insert Status (form) command: See Insert Status (SENDMAIL). 19t8b1

The Process (sendmail form) command: See Process (SENDMAIL). 19t8b2

Show: 19u

All: The Useroptions subsystem command "Show All" lists all your useroptions settings. 19u1

Control: Show Control (characters for terminal) TERMINALS OK: The Useroptions subsystem command "Show Control" prints a list of the control-characters or special characters assigned to certain Command Control Functions for a given brand of terminal, and the echo they feed back. 19u2

TNLS example
 USER C: Show C: Control (characters for terminal) C: Ti
 (Terminal) OK:
 Control Characters: Standard Definitions (non-alterable)
 CA:<^D>, CD:<^X>, RPT:<^B>, INSERT:<^E>, BC:<^A>, BW:<^W>,
 BS:<^Q>, LITESC:<^V>, IGNORE:<^s>, SC:<^s>, SW:<^s>, TAB:<^I>
 Control Characters: User Definitions (alterable)
 TI/EXECUPORT :[<EOL>,<NUL>]
 USER C: 19u2a

Effects: If you specify a particular device for TERMINALS, you will get a list of definitions for the functions you have changed for that terminal only. If you specify "All" for TERMINALS, you will get a list of the standard control function definitions users can't alter and a list of the alterable definitions currently in effect for all terminals using TNLS or DNLS, whichever you're in. Within the squarebrackets, the second character in anglebrackets refers to the echo, the character that prints when the function is used. The Control command and the Reset Control command change alterable control function assignments. 19u2b

TERMINALS = Ti (terminal) or Tasker or NVT
 or Lineprocessor or Imlac or Execuport
 or 33-TTY or 35-TTY or 37-TTY or All. 19u2c

NVT means "Network Virtual Terminal".
 Specifying Tasker, Imlac, or Line processor will set up definitions only for the use of DNLS from that terminal. All others set up definitions for TNLS. If you type TNLS from

TENEX on one of those display terminals, you'll get the character set for T1. Going into TNLS via the NLS Simulate command gets you the set for the terminal you specify. 19u2d

CONTROLFUNCTIONS: Command Control Functions:

Ca = Command Accept (See also: CA)
Cd = Command Delete (See also: CD)
Rpt = OKREPEAT (See also: OKREPEAT)
Insert = OKINSERT (See also: OKINSERT)
Bc = Backspace Character (See also: Backspace)
Bw = Backspace Word (See also: Backspace)
Bs = Backspace Statement--erases whole TYPEIN field
Litesc = Literal Escape means: "Take the character which follows as literal text instead of its special function."
Ignore = NLS will always ignore the character defined for Ignore, as if it had never been typed
Sc = Shift Character (for an upper-case-only terminal being used for upper/lower case)
Sw = Shift Word (for an upper-case-only terminal being used for upper/lower case)
Tab = (See also: TAB) 19u2e

See also: control-characters,
Useroptions Reset Control, Useroptions Control, 19u2f

Currentcontext: Show Currentcontext OK: The Useroptions subsystem command "Show Currentcontext" shows how many characters will surround the character you are located at in response to typing a Slash. See also: ADDRESS. 19u3

TNLS example:
USER C: Show C: Currentcontext OK:
length: 0, 19u3a

Effects of other commands: If the number has not been changed with the Currentcontext command, it will remain at 7, the default. If you do use the Currentcontext command to change the currentcontext length, you can return to 7 characters with the Reset Currentcontext command. See also: Currentcontext (USEROPTIONS), Reset Currentcontext (USEROPTIONS), 19u3b

Slash: See slash, 19u3c

Default: Show Default (subsystems and programs) OK: The Useroptions subsystem command "Show default" shows the list of subsystems that is automatically loaded and the one you will be placed in when you enter NLS. You can add to this list using Useroptions Include command. Subtract from the list by using Useroptions Exclude. Specify the entry subsystem with Useroptions Entry command, see also: Include (USEROPTIONS), Exclude (USEROPTIONS), Entry (USEROPTIONS), SUBSYSTEM, Programs, 19u4

S

TNLS example:
 USER C: Show C: Default (Subsystems and Programs) OK:
 Universal Subsystem: SUPERVISOR
 Entry subsystems: BASE
 Other Subsystems and User Programs: USEROPTIONS SENDMAIL
 PROGRAMS USER C: 19u4a

Feedback: Show Feedback OK: The Useroptions subsystem command "Show Feedback" shows whether your feedback mode is Verbose (noisewords appear in the feedback of commands) or Terse (noisewords will be shut off) and shows the current values for Length and Indenting. 19u5

TNLS example:
 USER C: Show C: Feedback OK:
 mode: VERBOSE, length: 50 indenting: 0
 USER C: 19u5a

Effects of other commands: If the mode has not been set to Terse with the Feedback command or if it has been reset with Reset Feedback Mode, it will be Verbose. Indenting has to do with where commands appear on TNLS paper, not with levels. 19u5b

See also: command, commandword, noiseword, TNLS, Useroptions Feedback, Useroptions Reset Feedback. 19u5c

Herald: Show Herald OK: The Useroptions subsystem command "Show Herald" shows you the herald mode and length currently set for your TNLS use. You can learn this in DNLS too, although heralds only appear in TNLS. 19u6

What you'll see and what it'll mean to you in TNLS: Terse mode means that a star * will print at the left margin for each command as your herald in every subsystem. Verbose mode means that part of the name of your current subsystem will print as your herald. The number of characters of the subsystem name that will print is shown as "length" (i.e., "mode: VERBOSE length: 3" means that your herald for programs will be PRO, for Base, it'll be BAS, etc.). 19u6a

related commands: To change your heralds for TNLS, use the Useroptions Herald command. To return to the defaults, mode: VERBOSE length: 4, use Reset Herald. See also: Herald (USEROPTIONS), Reset Herald (USEROPTIONS). 19u6b

Name: USEROPTIONS Show Name (delimiter defaults) OK: The Useroptions subsystem command "Show Name" will display your default statementname delimiters. See name (USEROPTIONS), statementname. 19u7

TNLS example:
 USER C: Show C: Name (delimiter defaults) OK:

NULL NULL
USER C:

19u7a

Return: Show Return (ring sizes) OK: The Useroptions subsystem command "Show Return" shows you the maximum size of your Statement Return Stack (shown as "return"), and your File Return Stack (shown as "filereturn") which is going to take effect the next time you create a new window in DNLS or the next time you enter NLS. It will also be the current maximum size of the ring if you haven't changed it this session. You can change your return ring sizes with the following commands: Useroptions Return, Useroptions Filereturn, Useroptions Reset Return,

19u8

TNLS example:
USER C: Show C: Return (ring sizes) OK:
return: 10 filereturn: 10
USER C:

19u8a

Printoptions: Show Printoptions OK: The Useroptions subsystem command "Show Printoptions" will show the present values for the four parameters for TNLS Print commands used with viewspec E, the tabstops, and the number of spaces set for level indenting. For the meanings and effects of these specifications, See also: command; Useroptions Printoptions,

19u9

TNLS example:
USER C: Show C: Printoptions OK:
Margins left: 0 right: 72 bottom: 63
page size: 66 indenting per level: 3
tabstops: 8,16,24,32,40,48,56,64,72,80,88,96,104
USER C:

19u9a

Prompt: Show Prompt OK: The Useroptions subsystem command "Show Prompt" shows your current mode for prompts.

19u10

TNLS example:
USER C: Show C: Prompt OK:
mode: FULL
USER C:

19u10a

What the prompting modes mean: See pmode.

19u10b

related commands: The Prompt command sets the mode to Off or Partial or Full. The Reset Prompt command returns the prompting mode to Partial, the default. See also: Reset Prompt (USEROPTIONS), Prompt (USEROPTIONS).

19u10c

Recognition: Show Recognition OK: The Useroptions subsystem command "Show Recognition" shows your current commandword recognition mode: Fixed, Demand, Anticipatory, or Terse. If it is Terse, you will also see the secondary recognition mode.

19u11

S

TNLS example:
 USER C: Show C: Recognition OK:
 mode: TERSE secondary mode: TERSE
 USER C: 19u11a

meanings of recognition and recognition modes--: See
 recognition, 19u11b

related commands: To change your recognition mode, use the
 command Useroptions Recognition. The command to return to the
 beginner's default mode--Fixed--is Useroptions Reset
 Recognition, 19u11c

Viewspeccs: Show Viewspeccs OK: The Useroptions subsystem command
 "Show Viewspeccs" shows you the default viewspeccs initially set
 to be in force in your NEXT and subsequent NLS sessions, and
 you'll see whether the Viewspecc feature is On or Off, that is,
 available in appropriate commands, or unavailable and invisible.
 (This has effect in the CURRENT and subsequent NLS sessions.) It
 might look something like this:
 levels: ALL lines: ALL hjmpuyBCEHJLP Viewspecc prompting:
 Off, 19u12

related commands: For changing this initial set of Viewspeccs,
 See also: commands: Useroptions Viewspeccs, Useroptions Reset
 Viewspeccs, Base's Show Viewspeccs command (See also: Show
 Viewspeccs (BASE)) lists the VIEWSPECCS presently in force that
 may be changed with Base commands. See also: Set Viewspeccs
 (BASE), Reset Viewspeccs (BASE), 19u12a

Show Status/TENEX ... : The Programs' subsystem command "Show
 Status" allows you to determine the status of your programs, 19v

Status: Show Status (of programs buffer) OK: Lists all programs
 loaded and instituted, and your current buffer size, 19v1

loading: See loading, 19v1a

instituting: See instituting, 19v1b

TNLS example of show:
 PROG C: Show C: Status (of programs buffer) OK:
 Stack of compiled programs (first is #1):
 Message
 Content Analyzer program for display area: None
 Sequence Generator program for display area: None
 Sort Key Extractor program for display area: None
 Current buffer size: 6 pages = 3072 words,
 Room left in buffer: 2954 words,
 BASE C: 19v1c

TENEX: Show TENEX (subsystem status) OK: The Program's subsystem

command "Show TENEX" will tell you if you have any TENEX subsystems running. See TENEX. 19v2

Show: 19w

Accumulator: Show Accumulator (Registers) OK: See also: accumulator. 19w1

File (DNLS only): Show File (in window) DESTINATION OK: See also: file (CALCULATOR). 19w2

showing: see also: show: See reading. 19x

SID: Statement Identifier: 012 (no preceding character); unique numbers that are assigned by the system to statements in a file in the order in which they are created. A SID is a number always beginning with a zero (0). It remains with its corresponding statement for the life of the statement (despite editing changes). You can, however, renumber a file's SIDs consecutively with the Renumber command (See also: Renumber). Every statement is also separately numbered according to its position in the file hierarchy (See also: statementnumber). Use viewspecs capital-I and m to turn on SIDs. You may also name statements (See also: statementname). Such identifiers of statements automatically refer to its first character when used in an ADDRESS. See also: ADDRESS, capital-I, m. 19y

signatures: statement signatures: See Capital-K. 19z

Simple Startup: The instructions for simple startup assume the Lineprocessor is either wired or connected by a modem without acoustic coupler to a TIP. If these assumptions are false for your workstation, you need to study the Lineprocessor User's Guide. 19a@

STEP-1 Turn on the display with its ON-OFF switch. 19a@1

STEP-2 Turn the display to "online" or "receive" mode if this does not happen automatically. Make sure the terminal is in full duplex mode. 19a@2

STEP-3 On the Lineprocessor, make sure all the sense switches (the slim silver toggles on the upper right) are down. 19a@3

STEP-4 If the telephone modem is not on, turn it on. 19a@4

STEP-5 Turn on the Lineprocessor with the ON-OFF button toward the lower right and press the System Reset button.

Note: At this point the display cursor (on most displays a small line like a hyphen) should move when you move the mouse. If it doesn't, first press the System Reset button, center top. If that doesn't work, check the connections described under setup in the Line Processor Users' Guide. The error light does not indicate a problem at this stage. If it comes on, turn it off by

S

pressing the Error Reset button just to its left. The status lights should read 0X00. 19a05

Step-6 Type "@ SPACE I SPACE 25 CARRIAGE RETURN" unless the port you are using to reach the TIP has been left open (See 10).

Note: Normally the character "@"(atsign) gets the attention of the TIP. The TIP starts responding when you hit "atsign", and stops responding when you hit carriage return or linefeed. "@" is called the TIP intercept character. "@" is inconvenient for the Lineprocessor. The 25 in the command to the TIP in STEP 6 makes <CTRL-Y> the TIP intercept character. <CTRL-Y> will remain your TIP intercept character until you reset the TIP, or the TIP malfunctions, or you set the intercept to some other character. 19a06

STEP-7 Strike "<CTRL-Y> SPACE L SPACE 43 CARRIAGERETURN"

Note: 43 is the number of host Office-1; you may log into other hosts by using other numbers. Only certain hosts run NLS. The TIP will respond with its TENEX login message. 19a07

STEP-8 When you've seen the TENEX Login message, type "TER ESCAPE/ALTMODE LI ESCAPE/ALTMODE CARRIAGERETURN". 19a08

STEP-9 Login to TENEX and NLS. 19a09

STEP-10 When you are finished with your NLS session, you can disconnect from the TIP by typing <CTRL-Y> CARRIAGERETURN.

Note: If you log out of TENEX at the end of your session, but do not disconnect from the TIP, you can pick up at STEP 9 next time merely by typing <CTRL-C>. 19a010

Simulate terminal type TYPE OK: TYPE = Tasker or T1 (terminal) or NVT; or Lineprocessor or Imlac or Execuport; or 33-TTY or 35-TTY or 37-TTY. The command "Simulate terminal type" makes your terminal mimic some other type of terminal, preserving the state of the current NLS session as much as possible. Its common use is to move a display user between DNLS and TNLS. Tasker, Imlac, and Lineprocessor--which cannot be simulated from a teletype--move the user to DNLS; all the other types operate in TNLS. 19aa

TNLS example:

BASE C: Simulate (terminal type) C: 33-TTY OK: 19aa1
BASE C:

Site: Computer: Each computer in the ARPA computer network has a name corresponding to its location and called its Site. 19ab

Network Information Center: See NIC. 19ab1

PDP-10: See PDP-10. 19ab2

size limits: A file may contain no more than 9690 statements (if each statement is little more than a word long) or 370 pages =

189,440 5-character words. A statement may contain no more than 2000 characters. Use the Show File Size command to see the size of a file. 19ac

.SK; Sort Key program: A filename with this extension points to a compiled L10 sort-key extractor. The Load Program command in the Programs subsystem will place the Sort Key in your buffer and automatically institute it as your current sort-key replacing any other sort-key that might be there. See also: loading. 19ad

sort-key extractors: See sort-keys. 19ad1

slash: 19ae

printed by the system in prompts between your current choices:
See prompts. 19ae1

to divide in the Calculator: See divide. 19ae2

slash: / prints the characters surrounding you: Typing the key / prints the characters surrounding you. You may place the backslash among the elements in an ADDRESS. After you terminate the ADDRESS, a few characters with a line feed break and an arrow (==>) pointing to the character you are on will appear. In TNLS at the herald of a subsystem, the characters surrounding you will print immediately when backslash is typed. COMPARE address slash, period. 19ae3

TNLS example:
BASE C: /
1 2 3
==>4 5 6 7
BASE C: 19ae3a

To change the number of surrounding characters printed: See currentcontext (USEROPTIONS). 19ae3b

SNDSMSG; TENEX sndmsg subsystem: a TENEX subsystem that allows you to send unrecorded TENEX sequential files or typed in messages to other users by username. Use the SENDMAIL subsystem of NLS to send messages in NLS. To use the sndmsg subsystem, Goto TENEX, and type "SNDM" followed by carriage return. TENEX will prompt you from then on. The message user-subsystem allows you to send and receive TENEX sndmsgs in NLS. To read your messages in TENEX, type MESSAGE <CR>. 19af

sending messages from sndmsg to an NLS mailbox: You may address a TENEX sndmsg to users at NLS sites in such a way that the message automatically enters the NLS Sendmail subsystem and thus avail yourself of addressing by ident, cataloging, recording the message, etc. Simply type "your IDENT/addressee IDENT(s)@sitename" where TENEX prompts you for a username. 19af1

the SENDMAIL subsystem: See sendmail. 19af2

S

- the Message user-subsystem: See message (PROGRAMS), 19af3
- the TENEX MESSAGE, TXT file: See message, 19af4
- sending an NLS file via sndmsg: See Output Terminal, 19af5
- username: See directory, 19af6
- network: See network, 19af7

Software: information contained in an information storage device, or transferred via a communication medium as opposed to the hardware that makes up the device, or medium. This term is specifically used to refer to computer machine instructions, or "code". Stored information, or data, is contained in what is called a "data base". NLS software is oriented for use from a Display, or from a Teletype. Users may write their own software called userprograms. See also: documentation, 19ag

- Dialog Support Systems (DSS): See Dialog, 19ag1
- DNLS: Display oNLine System See DNLS, 19ag2
- TNLS: Typewriter oNLine System, See TNLS, 19ag3
- NLS: See NLS, 19ag4

Sort STRUCTURE (at) DESTINATION OK: The command "Sort" puts the highest-level statements in a plex or group in order according to your current sort-key. Statements carry their substructure. "Sort statement" has no meaning and specifying "Branch" for this command defines a plex (one level down) to be sorted. After execution, you are at the first character of the new group or plex, 19ah

TNLS example:
 BASE C: Sort C: Plex A: 4b1
 BASE C: 19ah1

keys: sort keys and effects: See sort-keys, 19ah2

Sort-Keys library: These are some of the user-programs that modify the rules for sorting by the Sort STRUCTURE command in the BASE subsystem. They are available with the Load Program command in the Programs subsystem. For other useful sort-keys, see Class-II, 19ai

Limitations of the default sort: See Limitations, 19ai1

Sortnmskp, SK: See Sortnmskp, 19ai2

Sortnocase, SK: See Sortnocase, 19ai3

Sortnum, SK: See Sortnum, 19ai4

Sortrev, SK: See Sortrev, 19ai5

Sortnmskp, SK: After loading the sortkey "sortnmskp", whenever you use the command "Sort" it will order statements in the default order but disregarding statement names. 19aj

Sortnocase, SK: After loading the sortkey "sortnocase", whenever you use the command "Sort" it will order statements disregarding capitalizations. 19ak

Sortnum, SK: After loading the sortkey "sortnum", whenever you use the command "Sort" it will order statements according to the first number anywhere in each statement. The number may include a decimal and may be immediately preceded by a minus sign. All statements without numbers will be put at the end in their original order. 19al

Sortrev, SK: After loading the sortkey "sortrev", whenever you use the command "Sort" it will order statements in reverse the default order. 19am

Source-code: The characters making up the human-readable program. 19an

Source: one of the following: 19ao

SOURCE in command syntax: a variable in the command notation that tells you to indicate some text (sometimes files) to operate on. It's mainly meant for text already online, but you can also type in new text. In TNLS, SOURCE wants either an ADDRESS or an optional TYPEIN of text (prompted by A/[T]:). In DNLS you can also BUG (prompted by T/B/[A]:). When pointing (with BUG or ADDRESS) to Group or Text, two BUGs or two ADDRESSes are needed. See also: variable, notation. 19ao1

ADDRESS: See address. 19ao1a

OPTIONAL TYPEIN [T]: precede the TYPEIN with <CTRL-U> See typein. 19ao1b

In DNLS, you can also BUG the CONTENT (prompted by A/B/[T]:). See bug. 19ao1c

source in file structure: Every statement (except the origin) is defined by a statement one higher which is called its source. The source is always one level higher than the node referred to as the substatement. In the illustration, the source of statement 1b2 is 1b; the source of 1b is statement 1. See also: illustration. 19ao2

sources for Sendmail items: See item (SENDMAIL). 19ao3

SP-colon: SP: SPACE: In a few commands NLS requires a space to continue and prompts SP: . You need to strike the space bar. 19ap

S

<SP>: space key ..., also represented as <>: The notation <SP> or <> represents the space bar on the keyboard (or all five keys depressed on the keyset. See also: keyset). In Terse recognition mode, <> represents space. See also: notation. 19aq

Square-brackets in content-analyzer patterns: In writing content analyzer patterns, square brackets instruct the search to pass a statement if the pattern enclosed is anywhere to be found in the statement. If you omit square brackets, the search will begin only at the first character and give up at the first character that fails to pass. You use the Programs subsystem to write content analyzer programs. See also: writing (PROGRAMS). 19ar

SRI: acronym for Stanford Research Institute: 333 Ravenswood Avenue Menlo Park California, 94025 (415) 326-6200 and ask for ARC. 19as

SSEL: Source SElection: See source. 19at

Stack: Subsystem Stack: an ordered list of the NLS subsystems you've employed. Those you reached via the Execute command are erased from the stack after the command is finished. When you Quit back to an earlier item in the stack, the intervening ones are erased. To view your subsystem stack anytime in NLS, type the left anglebracket (<) at the herald. To display the name of your current subsystem in NLS, type the right anglebracket (>) at the herald. 19au

Seeing your current subsystem >: See greaterthan. 19au1

Seeing your subsystem stack <: See lessthan. 19au2

stacks: Program stack: A stack is used to hold your programs by name in sequential order as you compile or load them. You can point to them by number or name to run them. The delete last command will delete the top or most recent program on your stack. 19av

Running: See running. 19av1

The Programs' Delete Last command: See Delete Last (PROGRAMS). 19av2

Star: 19aw

to find the next name in an ADDRESS: See nextname. 19aw1

star convention in filenames: When you want to specify more than one file in a command, a star may replace any field of a filename. For example, to get all the versions of a file, type: directory, filename,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. 19aw2

the calculator star (multiply) command: See multiply. 19aw3

stars-in-brackets: [**]: See stars in prompts, 19aw4

stars in prompts: ** prompt for Special alternatives and
FILTER: Steps in certain NLS commands allow a list of options
that are not used frequently. When full prompting is on and the
list is too long to print easily, "[**]" represents the list.
You may see the list by typing <CTRL-U> questionmark (?) in NLS.
See: FILTER, options, verb, square-bracket, 19aw5

Making prompting on, off and partial: See prompt
(USEROPTIONS), 19aw5a

Start Record (of session to file) CONTENT OK: The command "Start
Record" allows you to begin to record on a file all the interactions
with NLS on another file. CONTENT wants you to TYPEIN or point to a
FILEADDRESS of the file on which you want to record all the things
you do. To terminate the recording, use the command Stop Record of
session. Then you can see a simulation of exactly what you did by
using the command Playback, 19ax

Playback Record command: See Playback, 19ax1

Stop Record command: See Stop, 19ax2

Startup (commands branch address) CONTENT OK: The Useroptions
subsystem command "Startup" allows you to specify certain commands
to take place automatically every time you enter NLS. CONTENT wants
you to give the ADDRESS of a statement or branch of commands that
can be executed. Thereafter, whenever you enter NLS, the commands
in the branch at that address will be executed as in the Process
STRUCTURE command. <CTRL-O> halts processing, 19ay

For automatic user-program or user-subsystem loading, See include
(USEROPTIONS), 19ay1

Effects: Because the process which carries out commands skips
over the name of a statement, many users begin this branch
with a statement consisting only of a name and place the
actual commands in structure under the name. Remember, in
building such a branch, statements derive their name
delimiters from their SOURCE. If the delimiters of the SOURCE
are NULL NULL, then the process will skip over the first word
of your command. You can use the command Set Name (delimiters
in) to change the name delimiters for your startup branch, 19ay1a

Statement: the basic NLS file STRUCTURE component made of STRINGS of
from 1 to 2000 characters. It may be a character, line, sentence,
heading, paragraph, table, or graphic. You point to a statement by
pointing to any character within it. See also: Insert Statement,
INFILEADDRESS, STRINGPOSITION, 19az

STRING: See STRING, 19az1

S

structural relationships: See structural, 19az2

signatures: statement signatures: See Capital-K, 19az3

Statement (at) CONTENT OK: The Sendmail subsystem command "Statement" allows you to send an NLS statement. Specify the statement to be mailed as a SOURCE. VIEWSPECS do not matter, 19b0

Statement: See branch, 19b01

SOURCE: See statement, 19b02

viewspecs: See viewspecs, 19b03

statement-return ring: See return, 19ba

STATEMENTNAME: statementname (no preceding character): a string of characters that begins with an alphabetic letter, is enclosed in name delimiters, and precedes all other printing characters of the statement it names. It may include letters of the alphabet, numbers, hyphen -, the atsign @, and apostrophe '. Case of letters is ignored. Statementnames "name" a statement so you can point to it by typing its name in an ADDRESS. One statementname can be assigned to each statement. Using this in an ADDRESS works like the Jump (to) Name Any command, 19bb

name-delimiters: See name-delimiters, 19bb1

searching: See searching, 19bb2

STATEMENTNUMBER: 1A2B3C4D5E... (no preceding character): a number assigned to a statement, which indicates the exact position of the statement within the structure of a file. The number does not remain a permanent part of the statement, and will change if you change the position of the statement. It is a series of fields containing alternately letters and digits. The first field always contains a number. The total number of fields indicates the level of the statement; the numbers and letters indicate consecutive statements. See also: illustration, 19bc

status: The Show file Status command: prints a list of information about the file. The Verify File command checks to see if the file is bad. See also: Show, 19bd

Show File Status command: See Show File Status (BASE), 19bd1

verifying files: See verify, 19bd2

steps in using a content-analyzer: Use the BASE subsystem command "Set Content" to typein a pattern; or the Programs subsystem command "Compile File" to compile a

program or the Programs subsystem command "Load Program" to load a compiled program with the extension ,CA.

Use the BASE subsystem command "Set Viewspeccs" and type in i to turn the content-analyzer on, and j to turn it off. In DNLS, follow i or j with f to recreate the window.

19be

Stop Record (of session) OK: The command "Stop Record" stops recording your NLS session on the file you had designated to record your interactions. At that point, the file will be closed and no more commands will be recorded.

19bf

TNLS example:

BASE C: Stop C: Record (of session) OK:
BASE C:

19bf1

Start Record of session command: See start.

19bf2

Playback Record of session command: See playback.

19bf3

storage: See directory.

19bg

STRING: one or more consecutive characters making up a single statement. When STRING is used in command syntax notation, it means one of the following commandwords prompted by "C:". See also: file, STRUCTURE, INFILEADDRESS, STRINGPOSITION.

19bh

Character: See Character.

19bh1

Number: See Number.

19bh2

Word: See Word.

19bh3

Visible: See Visible.

19bh4

Invisible: See Invisible.

19bh5

Text: See Text.

19bh6

Link: See Link.

19bh7

STRINGPOSITION: within one statement (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. These elements will only operate within the statement where you are.

19bi

c skip character: See character.

19bi1

e skip to end (last character) of statement: See statement.

19bi2

f skip to front (first character) of statement: See statement.

19bi3

i skip invisible: See invisible.

19bi4

S

- l skip link: See link, 19b15
- n skip number: See number, 19b16
- v skip visible: See visible, 19b17
- w skip word: See word, 19b18

structural relationships within files: We refer to statements according to how they stand in relation to other statements in the file. The definitions of relationships found below often refer to an illustration available in Help. See also: illustration, STRUCTURE, 19bj

- level: See level, 19bj1
- origin: statement--Statement zero See origin, 19bj2
- source: See source, 19bj3
- substatement: See substatement, 19bj4
- successor: See successor, 19bj5
- predecessor: See predecessor, 19bj6
- head: See head, 19bj7
- tail: See tail, 19bj8
- end: See end, 19bj9
- up: See up, 19bj10
- down: See down, 19bj11
- next: See next, 19bj12
- back: See back, 19bj13
- return: See return, 19bj14

STRUCTURE; the organization of an NLS file. When STRUCTURE is used in command syntax notation, it means one of the following commandwords. See also: structural, file, 19bk

- Statement: See Statement, 19bk1
- Branch: See Branch, 19bk2
- Group: See Group, 19bk3
- Plex: See Plex, 19bk4

Subcollections CONTENT OK: The Sendmail subsystem command "Subcollections" enables you to change the default subcollection assignment for cataloging of your item. CONTENT wants IDENTs which are groups of idents. If the item has an RFC number, it will automatically appear in the NIC and NWG subcollections. In general NIC numbers come from people outside ARC. See also: Numbering, 19b1

GROUP-IDENT: See group-ident. 19b11

CONTENT: See content. 19b12

NIC: See NIC. 19b13

NWG: Acronym for Network Working Group. 19b14

Subnet: The array of IMPs, TIPS and communication circuits which deliver messages from one host to another. 19bm

substatement: a statement that is one level lower than the one you are referring to. In the illustration, statements 1, 2, and 3 are each a substatement of the origin statement (0). Statements 1a and 1b are the substatements of statement 1. Statement 3cia is the only substatement of 3c1 shown. Substatements are always one level lower than the one referred to as the source. Statements (such as statement 2) do not always have substatements. See also: illustration, 19bn

Substitute STRING (in) [(Filtered:) FILTER] STRUCTURE (at) DESTINATION (new STRING) CONTENT (old STRING) CONTENT (Finished?) S/Y/N OK: 19bo

The command "Substitute" allows you to put a new STRING in the place of an old STRING everywhere it appears in the STRUCTURE you specify. This is the most common editing command in TNLS.

TNLS example:
BASE C: Substitute C: Visible (in) C: Branch (at) A: 0
(New VISIBLE) T: \$1000,50
(Old visible) T: \$1,50
Finished? Y/N/S: Yes OK;
Substitute In Progress
Substitutions made: 8
BASE C: 19bo1

Effects S/Y/N: Substitute is easier than Replace when you want to make the same replacement in more than one location. TYPEIN the new and old text for CONTENT. If you're in TNLS and want to substitute nothing for the old STRING, just give a Command Accept for CONTENT. In DNLS use <CTRL-N>. S/Y/N gives you the choice of seeing your current substitution list status or cycling through the command again (you are back at "new") and making another substitution in that STRUCTURE. You are limited to 30 substitutions with a maximum of 600 total characters typed in by you, 19bo2

S

- FILTER option: enter VIEWSPECS: See filter. 19bo3
- STRING: character, word, text, visible, invisible, number, link: See STRING. 19bo4
- STRUCTURE: statement, branch, group, plex: See STRUCTURE. 19bo5

.SUBSYS; An L10 program written to support a CML program: A filename with this extension points to a compiled L10 program. The Load Program command will place the L10 program in your buffer and then search for a file with the same name but with extension .CML;. When it finds such a file, it will automatically load that program as well and automatically attach it as a subsystem if it is formatted for that. See also: CML, filename, loading, L10, buffer, programs. 19bp

SUBSYSTEM: a subordinate system that with others makes up a whole system. The subsystems that divide the commands in the Online System (NLS) are listed below. When the variable SUBSYSTEM is found in a command syntax expression, it stands for one of these (or an attached usersubsystem) as a commandword. By default, you are in the BASE subsystem when you enter NLS. In TNLS, heralds tell you your current SUBSYSTEM. In DNLS the name of your current SUBSYSTEM is in an upper corner of your screen. See also: systems, user-subsystems. 19bq

- Base: See base. 19bq1
- Calculator: See calculator. 19bq2
- Programs: See programs. 19bq3
- Sendmail: See sendmail. 19bq4
- TENEX Timesharing System: See TENEX. 19bq5
- Useroptions: See useroptions. 19bq6
- User-subsystems: See usersubsystems. 19bq7
- Attaching subsystems: See attach. 19bq8
- Stack: Subsystem Stack See Stack. 19bq9
- Heralds: See heralds. 19bq10

Subtract CONTENT OK: The Calculator subsystem command "Subtract" subtracts the value of the accumulator by the number you specify for CONTENT. See also: operators, accumulator, CONTENT, OK. 19br

successor: the statement following a given statement at the same level and having the same source. In the illustration, the successor of 3a is 3b; 1b3 is the successor of 1b2 (which is called the predecessor). Statements either have one successor or none (such as

1b). The origin statement NEVER has a successor. See also:
illustration. 19bs

suggestions (about NLS): See reporting. 19bt

Supervisor: See universal. 19bu

Superwatch: a group of programs that measures the loads on different
pieces of hardware and on subsystems of TENEX and NLS. 19bv

Syntax (of command) COMMANDVERB OK: The command "Syntax" is
available in all subsystems. Use it to see a short description of
the COMMANDVERB you specify. See notation. 19bw

Systems: entering and leaving: To login to NLS online, you need to
first call a timesharing system, TENEX. Then you call NLS from
TENEX. When you enter NLS, you begin in the BASE subsystem. A
number of other SUBSYSTEMS are available. To leave NLS or any other
SUBSYSTEM, use the Quit command. To goto another NLS SUBSYSTEM, use
the Goto SUBSYSTEM command. See also: SUBSYSTEM. 19bx

login to TENEX: See login. 19bx1

NLS: See entering=NLS. 19bx2

reaching subsystems: See reaching. 19bx3

reporting bugs and making suggestions: See reporting. 19bx4

Hardware: See Hardware. 19bx5

Software: See Software. 19bx6

Documentation: See Documentation. 19bx7

commands in most NLS subsystems: See universal. 19bx8

systems=commands: See universal. 19by

Process (commands from) STRUCTURE OK: See process. 19by1

Logout OK: See Logout. 19by2

terminal commands: See terminal=commands. 19by3

T

T

- t Viewspec: show first lines only: "Show only one line of each statement." Normally, all lines of each statement appear (standard viewspecs w and s); t changes your view to one line. Unlike x, it does not affect the number of levels shown. Example: view only 3 lines by using the string trr. Viewspec t changes viewspecs w, s, r, and q.

20
- T-colon: T: TYPEIN: See typein.

20a
- TAB:

The tab command: See tab-command.

20b
- TAB-command: Typing the TAB character at the herald in the BASE subsystem moves you to the next occurrence (from your present location) of the last character, word, or content search you specified as an ADDRESS element. See also: TAB, k.

20c
- TNLS example:
 BASE C: .n
 BASE C: .n"elephant"=c
 BASE C: Print CA:/C;
 My elephant eats granola.
 BASE C:

20c1
- Effects: If you have not previously used a content search, you will get the message "<tab> valid only to repeat a previous search". On most terminals, the character for the function TAB is <CTRL-I> (which you can augment with Useroptions' Control command). No OK is required for the execution of this command. See also: Control (USEROPTIONS).

20d
- character search in an ADDRESS: See characteraddress.

20d1
- word or content search in an ADDRESS: See contentaddress.

20d2
- Jump (to) Word command: See Jump Word.

20d3
- Jump (to) Content command: See Jump Content.

20d4
- Tabbing in text: See <TAB>.

20d5
- <TAB>: Typing a TAB during TYPEIN creates an invisible in the file, which causes the text to skip to the next tabstop on the line and resume printing there. <CTRL-I> creates a TAB; you can define an

20d6
- <TAB>: Typing a TAB during TYPEIN creates an invisible in the file, which causes the text to skip to the next tabstop on the line and resume printing there. <CTRL-I> creates a TAB; you can define an

20d7

additional character for TAB with the Useroptions' Control characters command. The default tabstops are columns 8,16,24,32,40,48,56,64,72,80,88,96,104. Changing the tabstops is done with the Useroptions subsystems Printoptions Tab command. If you change tabstops while working on one file, they will also be changed for all other files you load. They will not, however, be changed for other users who may be working in the same files as you. When a character for TAB is typed at the herald in BASE subsystem, it is a command with a different special function. 20e

Useroptions' Control characters command: See control (USEROPTIONS). 20e1

Useroptions' Printoptions Tab stop settings command: See printoptions tab (USEROPTIONS). 20e2

User Programs: See programs. 20e3

The TAB command in BASE subsystem: See tab-command. 20e4

Setting tabstops: See printoptions tab (USEROPTIONS). 20e5

Table: data displayed in graphs or columns and rows. 20f

tail: the last statement at the same level having the same source as a given statement. In the illustration, the tail of 3a is 3c; the tail of 3c1 is 3c1 itself. The origin statement has no tail. See also: plex, illustration. 20g

TELNET: In the ARPA Computer network, the software that allows a user at one site access to a timesharing system at another site. User Telnet is the software at the user's site; Server Telnet is the software at the remote site. 20h

temporary modification: You can set the modification mode to allow modifications that are not permanent with the Set Temporary modifications command. This device is sometimes called Browse Mode. After making modifications while in this mode, you are given a chance to keep them. Use the Reset Temporary modifications command if you do not wish to keep the modifications; the modification file in which they are located will be deleted, and the modification mode is set back to normal for the given file. See also: modification. 20i

Set Temporary (modifications) command: See Set Temporary. 20i1

Reset Temporary (modifications) command: See Reset Temporary. 20i2

TENEX Timesharing System: the timesharing system that supports NLS on the PDP-10. NLS runs as a subsystem of TENEX (which is called the "superior Executive" at this top level) and draws extensively on TENEX's file handling. In turn, TENEX is available as a subsystem of NLS via the Goto TENEX command. Execute TENEX doesn't work. 20j

T

leaving NLS to TENEX: To return to the TENEX timesharing system from NLS use the Quit NLS command. After that, you can type "con" followed by carriage return at the TENEX herald to return to NLS. To break contact with TENEX entirely use the Logout command in TENEX or NLS. To leave NLS anytime for an excursion in TENEX, use the Goto TENEX command. This command issues to you a second copy of TENEX called "inferior exec". To return from this second copy to NLS, use the TENEX Quit command. 20j1

login: See login. 20j2

questionmark command: See questionmark. 20j3

recognition-TENEX: (recognition of commands in TENEX): Commands in TENEX, either the Executive or a subsystem of NLS, are recognized in the Demand mode. See demand. 20j4

files: See files. 20j5

filenames in TENEX: See filenames. 20j6

SNDMSG: See sndmsg. 20j7

TENEX as a subsystem of NLS: See inferior. 20j8

TENEX-herald: the "@" at the margin. It shows that you are talking to the timesharing system that supports NLS and TENEX is ready to accept commands. 20k

terminal-commands: 20l

Accept Connect (from terminal number) (for) CONTENT OK: See Accept. 20l1

Disconnect Terminal OK: see Disconnect. 20l2

Simulate terminal type TYPE OK: See Simulate. 20l3

semicolon: See Semicolon. 20l4

Connect to TTY: See Connect TTY. 20l5

Connect to Display: See Connect Display. 20l6

Clear TTY simulation window: See Clear. 20l7

Terminals: Devices more or less like typewriter keyboards with either paper or screens which people use to type in and read output from computers. See: DNLS, TNLS. 20m

connecting terminals: [linking] See connecting. 20m1

Tip Settings: See settings. 20m2

terminal commands: See terminal-commands. 20m3

Terse: a recognition mode that recognizes one commandword for each single character. To recognize other commands beginning with the same character, you must first type a space (represented by <> in the list of commands in questionmark) and then these commands will become available in a secondary mode. See also: commandword. Four secondary recognition modes are available in Terse after the space. These secondary modes work like they do when they are primary modes. 20n

Terse: See Terse. 20n1

Anticipatory: See anticipatory. 20n2

Demand: See demand. 20n3

Fixed: See fixed. 20n4

Terse: Terse Secondary mode works like Anticipatory except it contains only those words that are not recognized with one character before you type the space. With the rest of the secondary modes, after you type the space you have the choice of all words beginning with that letter. See also: ANTICIPATORY. 20o

Text: any continuous STRING of characters within a STATEMENT. To point to Text, you must point to both the beginning and the end characters. 20p

pointing: See pointing. 20p1

TIP: Terminal IMP: An IMP which is augmented by additional memory and a multiline controller. The TIP contains a network control program and a TELNET program within it to permit terminals to reach the network directly through it. See also: IMP. 20q

settings: See settings. 20q1

Title CONTENT OK: The Sendmail subsystem command "Title" allows you to enter a title which will be used in journal citations, hardcopy printouts of the document, catalog listings and indexes including the title-word index. 20r

document: See document. 20r1

hardcopy: See hardcopy. 20r2

indexes: See indexes. 20r3

word: title-word indexes: See catalogs. 20r4

- T
- title-word: See catalogs. 20s
- TNLS: Typewriter onLine System. See also: DNLS. 20t
 - onLine system: See NLS. 20t1
 - simulation: TNLS simulation: See simulate. 20t2
- To-get-DNLS: If you have told TENEX you are using an Imlac or Lineprocessor by the Terminal type command after logging into TENEX, to get into NLS type NLS after the TENEX herald. See also: login, entering-NLS. 20u
 - TENEX's Terminal type command: See terminal-type. 20u1
- TODAS: Acronym for Typewriter Oriented Documentation Aid System. The version of NLS used from typewriter-like terminals prior to 1971. See also: TNLS. 20v
- Total OK: The calculator subsystem command "Total" copies current accumulator value to the end of the Calculator file. The formatted value will be typed. See also: file, accumulator. 20w
- Transpose: The command "Transpose" allows you to make NLS entities change places. 20x
 - STRING: Transpose STRING (at) DESTINATION (and) DESTINATION OK: This group of "Transpose" commands makes two STRINGS of the same kind replace each other. 20x1
 - TNLS example:
 - BASE C: Transpose C: Word (at) A: 1
 - and A: 1 +e
 - OK:
 - BASE C: 20x1a
 - Effects: After execution, you are at the first character of the STRING you selected first. 20x1b
 - STRING: Character, Text, Word, Visible, Invisible, Number, or Link: See string. 20x1c
 - STRUCTURE: Transpose STRUCTURE (at) DESTINATION (and) DESTINATION [FILTER] OK
 - This group of "Transpose" commands makes two STRUCTURES of the same kind replace each other. 20x2
 - TNLS example:
 - BASE C: Transpose C: Statement (at) A: 1a
 - and A: 1
 - OK:
 - BASE C: 20x2a

Effects: After execution, you are at the first character of the STRUCTURE you selected first. 20x2b

FILTER option: enter VIEWSPECS: This option transposes only statements that "pass" certain viewspecs you can specify as a string of character codes. Type the OPTION character first and then enter any combination of the following viewspecs: for level--a, b, c, d, e, w, x; for content analyzer--i, j, k; for sequence generator--O, P. If the filtering leaves statements somewhere without a source, substatements will move up in level. 20x2c

STRUCTURE: Statement, Branch, Plex, or Group: See structure. 20x2d

Trick: When NLS is searching for the boundaries of a word, visible, or invisible, etc., the character you actually address or bug is ignored. For example, if you point to the space between two words, both words will be effected by your command. 20y

Trim Directory (no. versions to keep) CONTENT OK (really?) OK: The command "Trim Directory" will delete any extra versions of each file so that there are no more than the given number of versions. If you have write access to the directory (either by definition or having connected to it), you don't need to type the password. If you don't specify a directory, it will trim the directory to which you are connected; the password won't be necessary. 20z

TNLS example:
BASE C: Trim C: Directory (no. versions to keep) T: 1
(really?) OK:
Trimmed Files are:
(DOE, WONDER.NLS,) 2 files deleted
BASE C: 20z1

versions: See versions. 20z2

TTY-simulation window: The TTY-simulation window normally occupies 2 lines at the very top of your DNLS screen. It shows the last two lines of what you would see if you went into TENEX via Goto, Execute, or <CTRL-C>. If you want to see more than these two lines, do one of the above, or move the window to one of your larger file display windows. Some kinds of information that will appear in this window are: general status info (like the name of a file loaded or updated), TENEX status response to <CTRL-T>, error messages, system messages, notification of connected terminals, semicolon (comment) commands, response to slash and backslash in ADDRESSES. If you were in TNLS, you would see all this included among your NLS feedback and printing. 20a@

to make the TTY window blank again: use the Clear (TTY Window) command. 20a@1

T

moving your TTY window to a file display window: use the Set TTY (simulation for window) command, 20a@2

to move your TTY window back to top of screen: use the Reset TTY (window) command, 20a@3

Connected terminals for DNLS users: See connected, 20a@4

TTY: See terminals, 20aa

window: See display, 20aa1

.TXT; represents: a sequential file unloadable in NLS. See sequential, 20ab

TYPEIN: any string of characters from the keyboard, terminated by an OK. When prompting is on and NLS is waiting for you to type in either text, a FILEADDRESS, or an Ident, it prompts you with "T", 20ac

U

u Viewspec: recreate display after each change: "Re-create display screen whenever the user's location or contents on the screen change." Viewspec u always displays on your screen the current view of your current location. The display is automatically re-created after an editing operation or changing views, etc. Viewspec u turns off viewspec v, but does not affect any other viewspec. This is a default viewspec. See also: DNLS, viewing, re-creating, f, v, 21a

<UKC>: UnKnown Character: could be an underline, or overline, or just about any very special character not in the ASCII standard 72 character set. See also: sort, loading (PROGRAMS). 21b

Undelete: to bring back one of the following that has been deleted but not expunged. 21c

File: Undelete File CONTENT OK: The command "Undelete File" returns to normal use the file you specify for CONTENT that has been deleted. 21c1

TNLS example:
 BASE C: Undelete C: File T: neargone,NLS;4
 Undeleted Files are:
 (YOU, NEARGONE,NLS;4,)
 BASE C: 21c1a

Effects: Once a file has been deleted it will be erased permanently from the system if you use the Expunge command, if the operator runs a program to expunge deleted files, or if you log out. You may restore the file from the deleted file list back to normal status at any time before it is expunged. See also: Show Directory, undeleted (BASE). 21c1b

Expunge Directory command: See Expunge Directory. 21c1b1

Delete File command: See Delete File. 21c1b2

Filename: See fileaddress. 21c1b3

Show Directory: See Show Directory: 21c1b4

Modifications: Undelete Modifications (to file) OK: Modifications (made with editing commands, programs...) to a file are kept separate until merged into the file with an Update. All modifications since the last Update can be thrown away with the Delete Modifications command. Deleted modifications can, until

U

you begin making new modifications, be restored with the Restore Modifications command, 21c2

TNLS example:
 BASE C: Undelete C: Modifications to file OK:
 BASE C: 21c2a

modifications files: See modifications: 21c2b

Delete Modifications command: See Delete Modifications, 21c2c

Update File command: See Update, 21c2d

unexpanded: See restricted, 21d

Universal (supervisor) subsystem: contains commands available in all subsystems, 21e

Execute (command in) SUBSYSTEM: See Execute, 21e1

Goto (subsystem) SUBSYSTEM OK: See Goto, 21e2

Help TYPEIN/OK: See Help, 21e3

Jump: See Jump, 21e4

Quit OK: See Quit, 21e5

<CTRL-Q>: See <CTRL-Q>, 21e6

Questionmark: (?) See Questionmark, 21e7

Syntax (of command) COMMANDVERB OK: The command "Syntax" is available in all subsystems. Use it to see a short description of the COMMANDVERB you specify, See notation, 21e8

semicolon: ; TYPEIN OK See semicolon, 21e9

lessthan symbol: < Subsystem Stack, See lessthan, 21e10

greaterthan symbol: > current subsystem, See greaterthan, 21e11

OKREPEAT <CTRL-B>: See OKREPEAT, 21e12

Unrecorded ANSWER: The Sendmail subsystem command "Unrecorded" is not completely implemented. Items marked "Unrecorded" may be left out of journal catalogs when they are generated. Eventually such an item will not be given a Journal number and not be recorded in the Journal, 21f

up: the statement one level higher and preceding a given statement (i.e., its source). In the illustration, statement 1b is one up from

- 1b3; statement 1 is two up from 1b3; the origin is three up; four up would still refer to the origin. See also: illustration. 21g
- uparrow: ^ 21h
- when ^ appears in an expression like: ^Y: it refers to a control character See CTRL-character. 21h1
- The uparrow command: ^ [TNLS only]: Typing the character ^ (uparrow) at the herald in the BASE subsystem will print the statement that is back from the statement where you are located. 21h2
- TNLS example:
BASE C: ^
3b Of shoes and ships and ceiling wax, of cabbages
and kings,
BASE C: 21h2a
- Effects: NO OK is required for the execution of this command. After execution, you are located at the first character of the statement printed. 21h2b
- The uparrow command in Help (for advanced users): See uparrow (HELP). 21h3
- Uparrow to expand Sendmail distribution: See expanded (SENDMAIL). 21h4
- Update File: The command "Update" incorporates your modifications into your file. 21i
- OK: Update File OK: The command "Update File" permanently incorporates the changes you have made in a file. A new version of the file is created that includes the changes you have made. The old version will look as the file did after the previous update. At any time, before you use the Update command, you may discard all changes with the Delete Modifications command. 21i1
- Delete Modifications command: See Delete Modifications. 21i1a
- Compact: Update File Compact OK: The command "Update File Compact" updates your file in such a way as to use the file space efficiently. This saves on disk pages, but takes more computer time to execute. See also: file, modifications, version. 21i2
- TNLS example:
BASE C: Update C: File OK/C: Compact OK:
BASE C: 21i2a
- Old: Update File Old (version) OK: The command "Update File Old" incorporates the changes you have made into the old version. This is a bit dangerous; if any problems occur during the Update,

U

you may not have a prior version to back up to. It is useful if you are short on disk space. See also: file, modifications, version, 2113

Rename: Update File Rename (filename) CONTENT OK: The command "Update File Rename" allows you to update to a file with new name instead of a new version of the current file. You must specify a name for the new file. See also: file, modifications, version, 2114

Effects: You may duplicate a file in another directory by giving it a name that begins with the name of the second directory. This will only work if you have the right to write on that directory. See also: access, 2114a

Update (to item number(s)) CONTENT OK: The Sendmail subsystem command "Update" allows you to inform the Journal catalog system that this item updates another already in the Journal catalog. Type in the number of the old document for CONTENT, 21j

Journal number: See number (SENDMAIL), 21j1

CONTENT: See content, 21j2

Use: See also: How, 21k

Accumulator: Use Accumulator (number) CONTENT OK: Use the Calculator subsystem command "Use Accumulator" to specify the number accumulator you wish to use for CONTENT. The calculator's Show Accumulator command will tell you the number. See also: accumulator, Show Accumulator (CALCULATOR), CONTENT, 21k1

Saved: Use Saved (Accumulators) OK: Use the Calculator subsystem command "Use Saved" to insert a number calculated in your last calculator session instead of the current session. See also: accumulator, 21k2

User computer: A computer site on the ARPANET that is not a Server. See Server, 211

user-profile: A record of how NLS is fitted to your use patterns in various ways. A user-profile is a data structure used by a command interpreter while interacting with the user, which describes to the interpreter how the system should appear to this user, 21m

User: 21n

Name: Username: See directory, 21n1

USER C: Useroptions SUBSYSTEM: See useroptions, 21n2

userprograms: See programs, 21n3

user computer on the ARPANET: See user,	21n4
userguides: The directory "userguides" houses hardcopy formatted source files for user guides and the locator file,	21o
locator file: The file named <userguides, locator, > is an outline of documents. In Locator, links are arranged to lead you easily to useful views of actual documents. Branch 1 of locator instructs you how to use locator. Further guidance appears as needed in the subject files. You cannot currently access the locator file with the Help command. In TNLS, say "Print Branch userguides, locator, 1 .1" followed by a carriage return. In DNLS say "Jump (to) Link userguides, locator, " followed by CA,	21o1
username: See directory,	21p
Useroptions subsystem: You can alter how you interact with NLS to fit your own equipment, use patterns, and style by specifying the parameters controlled by the Useroptions subsystem. The effects of Useroptions commands hold for future NLS sessions, until you use the commands again to change them specifically. See also: SUBSYSTEM, Heralds,	21q
Commands available in the useroptions subsystem--	21q1
Control characters: See Control (USEROPTIONS),	21q2
Currentcontext (length) NUMBER OK: See Currentcontext (USEROPTIONS),	21q3
Entry Subsystem/Program ... : See Entry (USEROPTIONS),	21q4
Exclude Subsystem/Program ... : See Exclude (USEROPTIONS),	21q5
Execute (command in) SUBSYSTEM: See execute,	21q6
External (names link file address) CONTENT OK: See External (USEROPTIONS),	21q7
Feedback FEEDSPECS OK: See Feedback (USEROPTIONS),	21q8
Goto SUBSYSTEM OK: See Goto,	21q9
Herald [affects TNLS only]: HERALDSPECS OK: See Herald (USEROPTIONS),	21q10
Include Subsystem/Program ... : See Include (USEROPTIONS),	21q11
Return (ring entries) CONTENT OK: See Return (USEROPTIONS),	21q12
Filereturn (ring entries) CONTENT OK: See filereturn (USEROPTIONS),	21q13

U

Name (delimiters defaults): See Name (USEROPTIONS),	21q14
OKREPEAT <CTRL-B>: See OKREPEAT,	21q15
Printoptions PRINTSPECS CONTENT OK: See Printoptions (USEROPTIONS),	21q16
Prompt OK: See Prompt (USEROPTIONS),	21q17
Quit: See Quit,	21q18
Recognition (mode) RMODE OK: See Recognition (USEROPTIONS),	21q19
Reset: See Reset (USEROPTIONS),	21q20
Show: See Show (USEROPTIONS),	21q21
semicolon: See semicolon,	21q22
Startup (commands branch address) CONTENT OK: See Startup (USEROPTIONS),	21q23
Viewspecs Default VIEWSPECS OK: See Viewspecs (USEROPTIONS),	21q24

userprograms library: In directory PROGRAMS certain compiled user-program files are supported and maintained by ARC staff. By using the Load Program Command in the Programs Subsystem, you can make user-subsystems to add to your NLS commands, content-analyzers to add to your filtering capabilities, and sort-keys to increase your ways of sorting. If any of these programs does not work, send a message to FEEDBACK. See also: programs, loading. 21r

Usersubsystems library: See Usersubsystems, 21r1

Content-analyzers: See Content-analyzers, 21r2

Runnable Programs (REL files): See Runnable, 21r3

Sort-Keys library: See Sort-Keys, 21r4

Attachable subsystems already loaded: See Attachable, 21r5

Sequence Generators: See Sequence, 21r6

Class-II and III user-programs: in Directory XPROGRAMS See Class-II, 21r7

Usersubsystems library: The list of user-programs in directory "programs" that can be loaded as additional subsystems. See also: loading (PROGRAMS), 21s

Format: See Format, 21s1

Message: See Message,	21s2
Modify: See Modify,	21s3
Publish: See Publish,	21s4

V

V

- v Viewspec: defer recreating display: "Do not re-create display screen when the contents change." v defers display re-creation until you use the f viewspec. The suppression of re-creation continues until you change back to viewspec u. This viewspec saves time when the response is slow, but be cautious; you must edit from the bottom of the screen to the top or it may look like you are at a different place than you really are. See also: DNLS, u, f.

22

22a

- V-colon: V: VIEWSPECS: The prompt V: asks you to specify viewspecs by typing one or more single-letter codes that control the appearance of your view. When you have typed all the viewspecs you want, conclude with CA. If you do not want to change your view of your file, type a CA without any viewspecs. You can turn the VIEWSPEC field off in all commands by the Useroptions Viewspecs Off command.

22b

- VIEWSPECS: See viewspecs.

22b1

- Useroptions Viewspecs Off command: See viewspecs (USEROPTIONS).

22b2

- VARIABLES: ALL CAPITAL LETTERS: words used in the command syntax notation that tell you the alternatives for that part of the command. Some stand for a list of nominals, others for a list of two-to-three alternative operands. For example, the variable STRUCTURE is a nominal which could be a statement, branch, group, etc. The variable SOURCE is an operand (such as file) that you specify to show where you want something to happen. See also: nominal, operand.

22c

- SUBSYSTEM: See subsystem.

22c1

- DESTINATION: See destination.

22c2

- SOURCE: See source.

22c3

- CONTENT: See content.

22c4

- ADDRESS: See address.

22c5

- TYPEIN: See typein.

22c6

- STRING: See string.

22c7

- STRUCTURE: See structure.

22c8

- LEVEL-ADJUST: See level-adjust.

22c9

VIEWSPECS: See viewspecs, 22c10
 OPTION: See optional, 22c11
 BUG: See bug, 22c12
 OK: See ok, 22c13

verb-nominal: a term to describe the verb followed by a nominal (noun-like word) combination that begins NLS Base commands. When you are prompted with a C: , type a verb-nominal specifying "do this" followed by operands which specify "to what and where." See also: prompts, operands, 22d

verbs in the BASE subsystem by classes: See commands (BASE), 22d1

nominals: See nominals, 22d2

verb-noun: See verb-nominal, 22e

verb: See verb-nominal, 22f

Verify File OK: The command "Verify File" will check certain aspects of your loaded file. If the file is bad, the message Bad File will appear. Sometimes this message appears when a command cannot be executed because of file difficulties. The Verify file command does not check every problem with the file, but when it reports a bad file, you have serious problems. If the file is not bad, it will say "Successful, internal structure is OK". 22g

BAD FILE: If this message is printed, immediately type "control-C reset carriage-return": <CTRL-C>reset<CR> and try the following. In TENEX, type NLS<CR> , Load the file and use the Update File Compact command. If the Verify File command still says BAD FILE, two courses of action are listed here. See also: TENEX, 22g1

Load an old version: You may have to undelete the old version. You can undelete old versions by using the Undelete File command or you can get them from the nightly dump tape by linking or sending a message to the computer operator. The deleted option in the Show Directory command lists files deleted but still online (not yet expunged). If the Verify File command does not say BAD FILE on the old version, then type <CTRL-C>reset<CR> and delete the BAD versions. The old version will not contain changes you have made since the last time you used the Update command. See also: Undelete, Show Directory, Expunge, 22g1a

files: See files, 22g1a1

version: See version, 22g1a2

Delete File command: See Delete File, 22g1a3

V

Create a new empty file and copy into it the good structure from the bad file.

Check to make sure all structures you pointed to were copied into the new file. Use the Update File Compact command on the file just created. If the Verify File command still says BAD FILE, type <CTRL-C>NLS<CR> and load one of the bad files. Try to determine the location of the bad spot by reading selected portions. Often the problem is in a single statement, usually one you have recently written on. If you can isolate that statement and copy the good parts of the file to a new file, you can save your work. If you use the command Output Terminal, the file should stop printing at the spot that is bad. In DNLS, if the file is so bad that it will not display, you must Simulate TNLS to do this process. In general, use Update File Compact and <CTRL-C>NLS<CR> a lot in the process of saving a bad file.

22g1b

TNLS example:

```
BASE C: Verify C: File OK:
File Verify in Progress
Successful, internal structure is OK
BASE C:
or it could look like:
BASE C: Verify C: File
File Verify in Progress
BAD FILE
BASE C:
```

22g2

VERSION: serial numbers attached to successive updates of the same file. A new version is usually created with the Update File command and can be created with the Copy and Move File commands. Only two consecutive versions are kept in a directory. The oldest version is automatically deleted. The version number follows the semicolon in filenames. See also: FILENAME,

22h

Update File command: See Update.

22h1

Copy File command: See Copy File.

22h2

Move File command: See Move File.

22h3

viewing contents of files on DNLS screen: see also: reading. When you enter DNLS, your initial file will appear in your file display area, starting with the origin statement and displaying as much as will fit on the screen. Every time you go to a new location in some file (by loading or creating a file or by jumping), the display will start at that location and display as much of the text as fits, when you have a particular view on the screen, you can, with NLS commands, operate upon the text in view by pointing with BUG or by giving an ADDRESS. You can operate on the text not in view by giving an ADDRESS. A new window can be made by inserting an edge,

You get around in files, i.e., change your view, by jumping. See also: initial, window, accessing, Load, pointing, BUG. 22i

Entering DNLS: See to-get-DNLS. 2211

The view you get of a place is controlled by viewspecs: You can change the kind of view you want by manipulating these: See viewspecs. 2212

Jumping in DNLS: See Jumping. 2213

Beginning statement in work area and your location: After you Jump or Load (or delete the statement at the top), the work area starts with the new statement pointed to as soon as the screen is re-created, except when a content filter pattern obscures that statement. In the latter case, the first statement that passes the filter appears at the top of the screen. See also: content-pattern, filters. 2214

re-creating the display: See re-creating. 2215

viewing-commands: jumping, printing, reading, etc. See also: show. 22j

<LINEFEED>: <CTRL-J>: See LINEFEED. 22j1

Load File CONTENT OK: See Load. 22j2

Output: See Output. 22j3

Print (in TNLS): See Print. 22j4

Jump (in DNLS): See jump. 22j5

Reset Content (pattern): See Reset Content. 22j6

Reset Viewspecs: See Reset Viewspecs. 22j7

Set Content (pattern): See Set Content. 22j8

Set Viewspecs: See Set Viewspecs. 22j9

Show Viewspecs: See Show Viewspecs (BASE). 22j10

TAB-command: See TAB-command. 22j11

uparrow ^ [TNLS only]: See uparrow. 22j12

These 3 commands show where you are: 22j13

backslash [TNLS only]: see backslash. 22j14

period [TNLS only]: See period. 22j15

slash [TNLS only]: See slash. 22j16

V

VIEWSPECS: single-letter codes that control the appearance or "view" of your files. When VIEWSPECS are allowed in a command, you are prompted by "V:". You may type a string of any of the viewspec codes, terminated by OK. Type just an OK if you don't want to change the viewspecs. Uppercase viewspecs do different things than lowercase viewspecs. To see in the Help command the definitions of lowercase viewspecs, type the viewspec. To see upper-case viewspecs, precede the viewspec with the word "capital-". For instance, capital-B. 22k

changing: ways of changing viewspecs. See changing. 22k1

viewspec categories and lists-- 22k2

clipping viewspecs: cut off lines or levels. See clipping. 22k2a

formatting viewspecs: change layout. See formatting. 22k2b

display-control viewspecs: DNLS only. See display-control. 22k2c

FILTER viewspecs: See FILTER. 22k2d

content-analysis and sequence generator viewspecs: See content-analysis. 22k2e

codes: list of viewspecs in alphabetical order. See the NLS cue card. 22k2f

Viewspecs Default VIEWSPECS OK: The Useroptions' subsystem command "Viewspecs" allows you to select which particular viewspecs you want to be in force when you begin your next NLS sessions. See also: Show Viewspecs (USEROPTIONS), Reset Viewspecs (USEROPTIONS). 22k3

Effects: You select the viewspecs to be in effect at the beginning of your NLS sessions. The Base command Set Viewspecs will change viewspecs, but they will then revert to the "Default" set next time you login. The command Reset Viewspecs will return viewspecs immediately to that same status. Useroptions Reset Viewspecs command will return your "Default" viewspecs to hjupmwyACEHJLP. 22k3a

Showing status of Viewspecs: The command "Show Viewspecs" will allow you to see the viewspecs presently in force in the current session. The Useroptions' subsystem command "Show Viewspecs" shows the initial viewspecs for successive NLS sessions (established in Useroptions). 22k3a1

Visible: a continuous STRING of printing characters (which excludes, for example, spaces and carriage returns). Pointing to any character position within the visible will serve to point to the entire visible. 221

trick: See trick.

2211

W

W

- w Viewspec: show all lines and all levels: "show all levels and all lines of each statement," Viewspec w changes viewspecs x, a, b, d, e, g, r, and t. w = c (show all levels) plus s (show all lines). This is a default viewspec,

23
23a

- Where command in TENEX: The TENEX command "Where" reveals the terminal (here referred to as "TTY") number, job number, and current subsystem of any user currently logged in. The command is:
 Where (is user) USERNAME <CR>

USERNAME = type the person's login name.

<CR> = the Carriage Return key on the keyboard.

TENEX has commandwords and noisewords similar to NLS. See notation.

recognition of TENEX commands: See recognition-TENEX.

Linking may have bad effects on the jobs of users in--: NDNLS, OUTPRC, or other special subsystems; EXEC (TENEX), TNLS, NTNLS, or DNLS are usually safe for linking. Don't connect terminals with Printer, Background, System, or users who are detached (DET).

23b
23b1
23b2
23b3
23b4
23b5

- window: See display,

23c

- Windowing and DNLS viewing: See viewing,

23d

- word-search: "word"=w: an address element that moves you 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. See also:
 TAB-command,

further goodies-- "word"=2ws: The "w" may be preceded by a number N, indicating the Nth occurrence of the word. The search will take place only within N statements if w is followed by a Number N and an "s". The example on the top line would specify: "Jump to the 2nd occurrence of word as a word in this statement only (1 statement is the default if Number is omitted before "s").

23e
23e1

Word: a continuous string of letters and/or numbers. Pointing to any character within the word will serve to point to the word. 23f

Trick: See trick. 23f1

word: Backspace Word: BW: The key you type <CTRL-W> to delete (roughly speaking) the word you just typed in. More exactly, to back up through the following types of characters in the order listed: any invisible characters, any punctuation or special characters, and then any numbers and letters. In TNLS, BW will show up typed as a backarrow `_`. In DNLS (some DNLS keyboards have a BACK SPACE WORD key which serves for BW) the word simply disappears. Down and up on the two leftmost buttons of the mouse specifies a BW. You may use BW as many times as you like. See also: control-character. 23g

workstation: a human engineered combination of desk, display(s), input and pointing devices, (perhaps integrated telephone and intercom systems, audio input/output devices, micro-film readers) and so forth. 23h

write access to files: the capability of writing on a file. Whether or not other people initially have the capability to write on one of your files varies with the NLS system. At Office-1, initially only you can write on your files. If you want to open files to others for writing, you must use the command Set NLS (protection for files) Public. You may ask the operator to open all files in your directory to a group of co-workers or to all users. In that case, you can protect a particular file with the command Set NLS (protection for files) private. See also: writing, write (CALCULATOR), privacy. 23i

Write (new) File CONTENT OK: The Calculator subsystem command "Write" will create a new file named whatever FILEADDRESS you specify for CONTENT. It will be an exact copy of your Calculator file. The Calculator depends on the information, structure, and format in the Calculator file. It is not possible to use the Calculator if this structure or format has been changed in any way. A new file may be edited in any way you desire. "Write File" also clears the Calculator file of all entries. Therefore any subsequent "Write File" makes a new file containing only those entries since the most previous "Write File". See also: File (CALCULATOR), CONTENT, FILEADDRESS, file. 23j

Writing, creating and modifying information: In NLS, you can create new files, copy all or selected parts of existing files, insert text by typing into existing files, and edit existing text. Access for these operations may be restricted. See also: information. 23k

Use the Insert command to add, duplicate, or create information. See insert. 23k1

handling whole files: NLS provides many commands that deal with whole files allowing you to make changes, erase changes made,

W

send files to people, delete them, and transfer files from one directory or site to another, and return to recent files you have accessed. 23k2

Updating modifications: See Update. 23k3

correcting errors: See correcting. 23k4

privacy provisions: See privacy. 23k5

commands: See modifying-commands. 23k6

writing programs: Programs are written in the BASE subsystem. There are two ways of writing a program. One is by inserting a list of commands to be processed by the BASE subsystem's Process Commands command. The other is by using the L10 and CML software languages in which NLS is written. The "Process Commands" program does not allow conditional "IF" type functions. With L10, you can write simple content-analyzer patterns for use with FILTERS or you can write whole systems. 231

The Process (commands in) STRUCTURE command: See Process (BASE). 2311

content-analyzer: See content-analyzer. 2312

source-code: See source-code. 2313

L10: programming language See L10. 2314

CML: Command Meta Language See CML. 2315

Procedures (routines) you can use to write programs: Procedures are sub-routines which can be "called" by any program to do it's thing. See also: Procedure, NLS, xprocs. 2316

X

x Viewspec: show one line and one level only: "Show only one level and one line of each statement." Normally, all levels and lines appear (standard viewspec w); x changes your view to the first line only of top-level statements only. Example: show the first two lines of 3 levels by using the string xbbr. Also, x frequently gives a handy table of contents of a document. 24a

X: x command: See multiply. 24b

XDOC: acronym for external document: (as opposed to a document journalized via the Sendmail Subsystem online). You may reserve XDOC numbers for items that will be indexed in the ARC Catalog

system, but will not appear as an online file in the Journal. See also: Numbering (SENDMAIL). 24c

XPROGRAMS: See class-ii. 24d

xxx: (for Wheels and Operators only, not documented here): a special subsystem of NLS. 24e

Y

y Viewspec: blank line between statements on: "Place a blank line between statements." Invoking viewspec z removes blank lines. 25
25a

Z

z Viewspec: blank line between statements off: "Don't place a blank line between statements." This turns off viewspec y (blank lines on). This is a default viewspec. 26
26a

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