

Journal Accession Number: 33991

COURSE OUTLINE:
INTRODUCTION TO THE DISPLAY ON-LINE SYSTEM (DNLS)

ARC-ADG

12 FEB 76

Applications Development

Augmentation Research Center
Stanford Research Institute
Menlo Park, California 94025

INTRODUCTION TO NLS

AKW = Augmented Knowledge Workshop

PURPOSE OF SYSTEM: Augmentation of Knowledge Work

GOAL: To provide computer based tools to accomplish all aspects of knowledge work with an emphasis on collaboration.

OVERVIEW of system

NLS = on Line System

DNLS = Display Version

CAPABILITIES OF SYSTEM:

Composing

Editing

Studying

Structuring

Browsing - viewing

Printing

Publishing

Communicating -

sending and receiving mail, messages, documents;
teleconferencing; etc.

Storing and retrieving -

record keeping, library services, data bases, searching, etc.

Calculating

Organization of NLS Courses

COURSE LEVELS:

NLS training is divided into course levels for ease of learning. Three are concerned with TNLS (typewriter version) and one treats DNLS. Each level corresponds to what can be covered at one time. The information introduced at each level is determined by difficulty, usefulness, complexity, and quantity (i.e., so that there is not an excessive amount to cover at any one time and to provide an opportunity for practice between courses).

Each level in the series of NLS courses contains most of the commands from the previous level for review in addition to the commands to be introduced (which are marked by an *).

BASIC TNLS:

This is the first course level which covers those commands necessary to enter, edit, and "mail" typewritten information. It has a special organization.

INTRODUCTION TO TNLS STRUCTURE AND VIEWING:

This is the second course which introduces NLS structure (hierarchical) and special tools for viewing structured information ("viewspecs") in addition to expanding upon the Basic course.

*INTRODUCTION TO DNLS:

This is the first course dealing with the display version of NLS. It introduces the equipment and its use, and deals with the commands necessary to edit, view, address and communicate in DNLS. This course introduces commands which are new to users who have completed TNLS Courses I and II. It is important to complete these prerequisite courses and to have had sufficient time to practice the commands that have been introduced before taking this course.

This course is divided into sections with the headings shown below. The commands under each heading can be used to perform the general operation denoted by the heading, e.g., "editing" includes commands that allow text to be changed in various ways.

COURSE HEADINGS:

1. INTERFACING TO DNLS
2. STRUCTURE
3. ADDRESSING AND VIEWING
4. EDITING
5. COMMUNICATING
6. LEAVING NLS
7. TROUBLE SHOOTING AND HELP

*1. INTERFACING TO DNLS

THE WORKSTATION

*The Lineprocessor: (See The Lineprocessor User's Guide;)

A microcomputer which processes coordinates of the location of each character on the screen.

Allows the display to run in DNLS.

The four silver toggles on the front of the lineprocessor should all be down.

*The Keyboard:

Letters and numbers are arranged as on a standard typewriter.

On the Datamedia terminals, there are special keys which control the display such as DPLX, BREAK, MSTR CLEAR, ERASE, ROLL, TAPE and UNLOCK. These keys change the display function and should not be used once they are properly set.

OK or CA (Command Accept): Used to terminate TYPIN and viewspecs, in the pointing process, or to give a confirmation.

CMD DEL (Command Delete): Used to abort a command sentence.

BACK SPACE (Backspace Character): Used to delete one character from input.

BACK SPACE WORD: Used to delete one word from input.

RETURN (Carriage Return): Used to enter a carriage return into text and to terminate Tenex commands.

ESC (Escape): Used to complete command words and filenames in Tenex and filenames in NLS.

***The Keypad (OPTIONAL):**

An alternative to the keyboard; used in conjunction with the mouse.

See the viewspec card for key codes

[Key codes follow a logical order according to the alphabet.]

***The Mouse:**

[See Figure 2;]

***One Button Alone:**

Right button alone - OK, CA or bugging

Center button alone - CD (<CTRL-X>)

Left button alone - BC (<CTRL-A>)

***Buttons Used in Combination:**

Right and center buttons - OK/REPEAT (<CTRL-B>)

Left and center buttons - BW (<CTRL-W>)

Right and left buttons - ESCAPE or ALTMODE

***Holding Down Buttons While Typing Characters:**

Left and center buttons while typing characters

- lowercase viewspec

[Type a viewspec "f" to recreate the screen or the view will not change until after the next command is completed.]

All three buttons while typing characters

- capital viewspec

[Type a viewspec "f" to recreate the screen or the view will not change until after the next command is completed.]

Center button while typing a letter - capital letter

Left button while typing a character

- number or non-alphabetic character

***The Display Terminal:**

Ensure that the display is set to online mode, full duplex.

CONNECTING TO NLS [See the Lineprocessor User's Guide for detailed instructions.]

***Using a Display Terminal Connected to a TIP:**

@I <SP> 25 CR

[Changes the TIP intercept character from @ to <CTRL-Y> (unless it has already been changed).]

<CTRL-Y> 0 <SP> 43 CR [For Office-1;]
[<CTRL-Y> 0 <SP> 49 CR [For BBNB;]

LOG USERNAME <SP> PASSWORD <SP> CR

NO RAISE CR [For BBNB only;]

TERMINAL LINEPROCESSOR CR [Without this command you will get TNLS.]

NLS CR

***Using A Display Terminal Connected To An ELF System:**

<CTRL-C> [To get ELF's attention;]

LOG <SP> USERNAME <SP> PASSWORD CR

TELNET CR

ESCAPE CHARACTER = <CTRL-Y> CR
[Changes the Telnet intercept character from <CTRL-Z> to <CTRL-Y>; in some later versions of ELF this is not necessary.]

OFFICE-1 CR [Or BBNB CR;]

LOG USERNAME <SP> PASSWORD <SP> CR

NO RAISE CR [For BBNB only;]

TERMINAL LINEPROCESSOR CR

NLS CR

THE DISPLAY

See Figure 3

*Feedback Area: [A minimum of 6 lines at the top of the screen, divided into 5 windows.]

*1. Viewspec Window:

Indicates the current status of certain viewspecs; this section of the screen will flash or be underlined when the viewspecs can be changed.

Displayed viewspecs: [The default settings indicate that nothing is filtered or left out.]

Number of levels; number of lines

[The first two numbers or the words "ALL ALL";]

h - show all branches

j - don't filter statements

u - recreate display after each change

C - show statement names

P - user sequence generator off

*2. Typewriter Simulation Window:

This area provides feedback, and shows interaction with Tenex. It is used for error messages, system messages and the name of the file being loaded. It will remain empty if there is no information. If Tenex is called with a <CTRL-C>, interaction is shown here.

*3. Subsystem Name: Displays the name of the subsystem being used.

***4. Command Feedback Window:**

Displays the current command phrase with noise words and prompts:

A: Address
C: Command word
T: Typin
L: Level
V: Viewspecs
OK: Command Accept
Y/N: Yes or No
B: Bug [point with the mouse and press OK]
...> Executing command

***5. Type In Feedback Window:**

Displays the typein or address as it will be accepted after an OK

***File Window:**

Contains files or parts of files which can be pointed to with the mouse. Differs from the feedback windows in that you can point to it.

***Moving Bug or Cursor:**

A traveling mark on the screen which can be controlled with the mouse. [It is controlled by the Lineprocessor independently from the host.]

2. ORGANIZATION OF THE SYSTEM

FILES & DIRECTORIES

Information in the origin ("parent") statement of a file:
The origin statement contains the file name, version number, the date and time of last modification, the ident of the last person to modify the file, and 4 semicolons. The statement should not be edited (except to add output processor directives or status information).

File names

Types of files [indicated by filename extensions;]

TXT = sequential file which can be copied into NLS
COPY = a temporary sequential file, usually a message

User creation of files:

<SP>Create File FILENAME OK

To see a list of all your files:

<SP>Show Directory (of) OK OK

*Copy Directory (of) BUG/TYPEIN (to follow) BUG/ADDRESS LEVELADJUST OK

[Provides a useful list of links to your files - you can easily Jump to each file by pointing to the links.]

Load File FILENAME OK

[Use the Jump to Link command instead; an <ESC> will finish any filename when enough characters are typed to be uniquely recognized.]

3. ADDRESSING and VIEWING: [To control the view of stored information.]

*BUGGING

Instead of typing in an address as you would in TNLS, the mouse can be used to point to a specific position on the screen by depressing the right-most mouse button in response to the prompt B:. A "bugmark" will mark the character pointed to with either a circle, an underline, a blot-out, or a character video inversion. This indicates that the host computer knows the position you selected.

*JUMP COMMANDS (changing the information that is being viewed):

MOST COMMONLY USED JUMP COMMANDS:

*Jump (to) BUG VIEWSPECS OK

This command positions the statement pointed at to the top of the screen.

*Jump (to) Item BUG/ADDRESS VIEWSPECS OK

This command positions the statement addressed or pointed at to the top of the screen.

*Jump (to) Back BUG/ADDRESS VIEWSPECS OK

This command positions the statement back one from the statement pointed at to the top of the screen.

BACK refers to the statement immediately preceding the statement pointed at, regardless of level or source.

*Jump (to) <SP> Next BUG/ADDRESS VIEWSPECS OK

This command positions the statement immediately following the statement pointed at, regardless of level or source, to the top of the screen.

NEXT refers to the statement immediately following the statement pointed at, regardless of level or source.

Jump (to) Origin BUG/ADDRESS VIEWSPECS OK

This command positions statement 0 at the top of the screen.

Jump (to) Return OK ANSWER OK

This command flashes back the last line within the current file that was at the top of the screen. If "n" is typed for ANSWER, the line that was at the top of the screen before that will be flashed back. When "y" is typed for ANSWER, the view will be returned, beginning with the chosen flash-backed line, to the display.

VIEWSPECS: To specify how the information is displayed, use the characters below when prompted with a V:

w = Default, all lines & levels (show all of the text)
 m/n = numbers on/off
 y/z = blank lines on/off

To clip levels and lines, use lower case viewspecs including:

- a/b - show one level less/more
- c/d - show all levels/show first level
- e - show referenced statement level
- *f - recreates display
- g/h - show branch only/show all branches
- *o/p - frozen statements on/frozen statements off
- q/r - show one line less/more
- s/t - show all lines/show first lines only
- w/x - show all lines, all levels/show one line, one level
- *F - forces the display to recreate when there is some problem preventing it

*If viewspecs are set using the mouse an "f" (recreate display) must be typed before releasing the mouse buttons. [If for some reason the display does not recreate with viewspec "f", try viewspec "F".]

In DNLS it is more efficient, in most cases, to bug a location rather than address it, permitting you to work with viewspec "n" rather than "m". Viespec "m" will cause the screen to refresh after each structural change made to the file. [This is necessary to ensure that statement number changes due to editing are displayed.]

LESS USED JUMP COMMANDS: (OPTIONAL)

***Jump (to) Successor BUG/ADDRESS VIEWSPECS OK**

This command positions the successor of the statement pointed at to the top of the screen.

SUCCESSOR refers to the statement immediately following the current statement at the same level and with the same source.

***Jump (to) Predecessor BUG/ADDRESS VIEWSPECS OK**

This command positions the predecessor of the statement pointed at to the top of the screen.

PREDECESSOR refers to the statement immediately preceding the current statement at the same level and with the same source.

***Jump (to) Head BUG/ADDRESS VIEWSPECS OK**

This command positions the head of a specified plex to the top of the screen.

HEAD refers to the first statement of a plex.

***Jump (to) Tail BUG/ADDRESS VIEWSPECS OK**

This command positions the last statement pointed at to the top of the screen.

TAIL refers to the last statement of a plex at the level pointed to.

Jump (to) End (of branch) BUG/ADDRESS VIEWSPECS OK

This command positions the end of the branch pointed at to the top of the screen.

END refers to the last statement of a branch.

***Jump (to) Up BUG/ADDRESS VIEWSPECS OK**

This command positions the statement one level up from the statement pointed at to the top of the screen.

UP refers to the statement one level up from the current statement.

***Jump (to) Down BUG/ADDRESS VIEWSPECS OK**

This command positions the statement one level down from the statement pointed at to the top of the screen.

DOWN refers to the statement one level down from the current statement, if there is one.

*Jump (to) Address (relative to) BUG/ADDRESS
ADDRESS VIEWSPECS OK

The second ADDRESS is evaluated starting at the first BUG/ADDRESS. The statement pointed to by the last address given moves to the top of the screen.

TO FIND A WORD OR STRING OF CHARACTERS [no quotes]:

Jump (to) Word First BUG/TYPEIN VIEWSPECS OK

Jump (to) Word Next BUG/TYPEIN VIEWSPECS OK

Jump (to) Content First BUG/TYPEIN VIEWSPECS OK

Jump (to) Content Next BUG/TYPEIN VIEWSPECS OK

[Type a <CTRL-B> instead of BUG/TYPEIN to continue searching for the same content.]

TO JUMP USING A LINK:

*Jump (to) Link BUG/TYPEIN OK

[Note: The Jump to Link command uses the prompt B/T: which means that you may alternatively type in a link rather than pointing to it in the text of a statement.]

Links: Special forms of text that may be used for addressing and other purposes.

Characteristics of Links:

- it is text in a statement rather than typed in after the A:
- must be surrounded by angle brackets < > (or parentheses).
- may contain any logical Address.
- it may include viewspecs that will take effect at the address in the link.
- must be in one of the following forms:

<DIRECTORY,FILENAME,IN-FILE-ADDRESS:VIEWSPECS>

[Without optional Viewspecs:]
<DIRECTORY,FILENAME,IN-FILE-ADDRESS>

[or in current directory:]
<FILENAME,IN-FILE-ADDRESS>

[or in current file:]
<IN-FILE-ADDRESS>

[or:] <:VIEWSPECS> [Only the viewspecs will be changed.]

Note that the different fields default to the current value if not specified (the same as addresses).

-- may include things other than addresses and/or viewspecs [which will be covered in more advanced courses;]

JUMPING BETWEEN FILES AND DIRECTORIES:

To address another file in your directory you need to add the FILENAME to the address within a file. To address a file in another directory, you need to add the DIRECTORY name as well as the filename. FILENAME and DIRECTORY must be followed by commas.

To address another file:

FILENAME, IN-FILE-ADDRESS OK

[If the IN-FILE ADDRESS is not specified it will be statement 0.]

To address another user's file:

DIRECTORY, FILENAME, IN-FILE-ADDRESS OK

[e.g., Copy Branch (from BAIR,JHB,1 OK (to) 3a OK]

TO GO BACK TO PREVIOUS FILES:

Jump (to) File Return OK ANSWER OK

[Flashes back the name of the last file you were in. If "n" is typed for ANSWER, the name of the file you were in before that will be flashed back. When "y" is typed for ANSWER, you will return to the last view of that file.]

4. EDITING

[Changes occur on the screen as you execute commands.]

Syntax: VERB NOUN B/A: BUG/ADDRESS(ES) (V:VIEWSPECS) (L:LEVEL)
(B/T: BUG/TYPERIN) OK (OK? OK)

[Consistently, commands will have a VERB then a NOUN. Then optionally, ADDRESSES, VIEWSPECS and LEVEL precede the final OK. See the specific command for complete syntax.]

STRING and STRUCTURE = "nouns":

STRING [One of the following command words which refer to part of a statement]:

Character

Word [Note that the system readjusts spaces;]

Text [Two bug marks/addresses necessary;]

STRUCTURE [One of the following command words that refers to one or more statements]:

Statement - the basic element of structure in a file.

Branch - a statement plus substructure (if any).

Group - a set of contiguous branches at the same level and with the same source.

[Two bug marks/addresses necessary;]

*Plex - a complete list of branches at the same level with the same source, i.e., all the branches in the source branch. Especially useful when a list does not fit on the screen and you want to move, copy or delete it.

EDITING COMMANDS = "verbs":

[Note that in DNLS you usually "bug" items instead of typing in an address. The commands are the same as in the Second TNLS course.]

LEVEL-ADJUST determines the level of a statement at a new location -- it must be ended by an OK

Just an OK = same level

u (position up a level from referenced statement)

d (position down a level from referenced statement)

INSERT

Insert Statement (to follow) BUG/ADDRESS LEVEL-ADJUST
BUG/TYPIN OK

Insert STRING (to follow) BUG/ADDRESS BUG/TYPIN OK

Continue to insert: <CTRL-E> instead of a final OK puts you in the Enter statement mode, type a CD to get out. Some terminals have an insert key which can be used.

[Text will be echoed in the typin feedback window as it is typed in, before being added to the file.]

DELETE

Delete File BUG/TYPIN OK

[The deleted filename(s) will be displayed. Type an OK to continue. When your screen refreshes after an OK, the deleted file will still appear, but should not be edited - the file will be deleted after you leave it.]

Delete STRUCTURE (at) BUG/ADDRESS OK

Delete STRING (at) BUG/ADDRESS OK

MOVE

Move STRUCTURE (from) BUG/ADDRESS (to follow) BUG/ADDRESS
LEVEL-ADJUST OK

Move STRING (from) BUG/ADDRESS (to follow) BUG/ADDRESS OK

COPY

Copy STRUCTURE (from) BUG/ADDRESS (to follow) BUG/ADDRESS
LEVEL-ADJUST OK

Copy STRING (from) BUG/ADDRESS (to follow) BUG/ADDRESS OK

*Copy Directory (of) BUG/TYPEIN OK (to follow) BUG/ADDRESS
LEVEL-ADJUST OK

[Provides a useful list of links to your files - you
can easily Jump to each by pointing to the links.]

REPLACE

Replace STRUCTURE (at) BUG/ADDRESS (by) BUG/TYPEIN OK

*Replace STRING (at) BUG/ADDRESS (by) BUG/TYPEIN OK

TRANSPOSE

Transpose STRUCTURE (at) BUG/ADDRESS (and) BUG/ADDRESS OK

*Transpose STRING (at) BUG/ADDRESS (and) BUG/ADDRESS OK

BREAK

Break Statement (at) BUG/ADDRESS LEVEL-ADJUST OK

[Used to break a statement into two statements after the
character pointed to; it is often used if a statement is
longer than fits on the screen.]

APPEND

Append Statement (at) BUG/ADDRESS (to) BUG/ADDRESS
(join with) BUG/TYPEIN OK

[Used to join two statements together to form one
statement; BUG/TYPEIN is text that will be added
where the old and new statements join. Use <CTRL-N>
if no BUG/TYPEIN is desired.]

SUBSTITUTE

Substitute STRING (in) STRUCTURE (at) BUG/ADDRESS OK
(New STRING) T: BUG/TYPEIN OK
(Old STRING) T: BUG/TYPEIN OK (Finished?) S/Y/N: Y [for yes]
(Substitutions made: Number)

[Will replace the old STRING with new STRING every time it finds it in the STRUCTURE. If you type S for Show, the screen will recreate to show the substitutions to be made. A CA will return you to your previous view.]

UPDATE FILE [Not imperative, but good practice;]

Update File Compact OK

Update File OK

*EDGES (OPTIONAL)

*Insert Edge (perpendicular to) MARGIN EDGE OK

[Inserts imaginary lines dividing the screen into as many as 8 parts or "windows" so different information can be viewed or edited in each window.]

*Move Edge (from) BUG/ADDRESS (to) BUG/ADDRESS OK

*Delete Edge (at) BUG/ADDRESS OK

*FROZEN STATEMENTS (OPTIONAL)

*Freeze Statement (at) BUG/ADDRESS VIEWSPECS OK

[Keeps the specified (bugged) statement(s) at the top of the screen when viewspec o is on; viewspec p will make the frozen statements invisible - similar to split screen in capability.]

*Release Frozen (statement at) BUG/ADDRESS OK

["Unfreezes" a specified statement.]

*Release All (frozen statements) OK

5. COMMUNICATING with other users

SENDMAIL SUBSYSTEM and the Journal

*The Initial file is automatically loaded when NLS is entered; the Journal branch of this file acts as a mailbox for incoming Journal mail. When NLS is called the phrase "You Have New Journal Mail" is flashed in the typewriter window if a new delivery has been made.

*You can load a file where information is contained; Goto Sendmail and bug the message, title, etc., in response to the questions below [up to 6 bug/marks maximum]. The currently loaded file will stay on the screen while in Sendmail.

Goto (subsystem) Sendmail OK

Interrogate Command

Interrogate OK

(distribute for action to:) IDENT(s) or .LASTNAME

(distribute for information-only to:) IDENT(s) or .LASTNAME

(title:) BUG/TYPEIN

(type of source:) Message BUG/TYPEIN or

STRUCTURE (at) BUG/ADDRESS or

File (at) BUG/ADDRESS

(show status?) ANSWER

[Will recreate the screen, type OK to continue with
this command;]

(distribute the mail now?) ANSWER

Individual commands: instead of Interrogate, specify by using
the following:

Title BUG/TYPEIN OK

Distribute (for) Information (Only) (to)
IDENT(s) or .LASTNAME OK

Distribute (for) Action (to) IDENT(s) or .LASTNAME OK

Comment BUG/TYPEIN OK

To send a message or statement:

Message BUG/TYPEIN OK

<SP>Statement (at) BUG/ADDRESS OK

To send a structure or file:

<SP>Group (at) BUG/ADDRESS OK

Branch (at) BUG/ADDRESS OK

File BUG/ADDRESS OK

<SP> Plex (at) BUG/ADDRESS OK

<SP>SHow Status OK

Send (the mail) OK

To identify a user by lastname or ident:

<SP>SHow Record (for ident) .LASTNAME OK
[precede the lastname by a period;]

<SP>SHow Record (for ident) IDENT OK

[The entire display area of the screen
is used to show the information.]

To leave the Sendmail subsystem when you are done:

Quit OK [Returns you to Base;]

CALLING TENEX

- *1. Goto (Subsystem) Tenex OK
[Clears the screen and simulates a typewriter terminal - Use for SNDMSG.]

QUIT CR
[Returns you to DNLS.]

- *2. Quit Nls OK
[Clears the screen and simulates a typewriter terminal - as when you logged in]

CONTINUE CR
[Returns you to DNLS]

- *3. <CTRL-C>
[Gives a 2-line typewriter simulation window at the top of the screen which may be used for interaction with Tenex.]

CONTINUE CR
[Returns to DNLS, no prompt is given.]

SEND MESSAGE (Tenex)

Goto (subsystem) Tenex OK

SNDMSG CR [The system will prompt you:]
(To (? for help):) TYPEIN CR [Lastnames separated by comma;]
(cc (? for help):) TYPEIN CR [Lastnames separated by comma;]
(subject:) TYPEIN CR [Subject of your message;]
(message:) TYPEIN

*<CTRL-S> [OPTIONAL] [Allows you to see a message before sending it;]

<CTRL-Z> CR [To terminate and send the message;]

QU CR [To return to NLS;]

Linking (Tenex)

First: Goto (subsystem) Tenex OK, Quit OK or <CTRL-C>
[You can use either the entire screen or the typewriter simulation window (no three line limit in the typewriter window when linking.) You do not have to go to Tenex to respond to a link, merely type a ";".]

WHE<ESC>re (is user) USERNAME CR [Do not link when user is in SNDMSG, OUTPRC, NOUTPRC, or XLIST.]

LIN<ESC>k (to) USERNAME CR [Precede each comment with a ; end with a CR, repeat every 3 lines.]

BR CR [To break the link;]

QU CR [Returns you to NLS;]

6. LEAVING NLS

For TIP Users:

<SP>Logout OK

<CTRL-Y> c
[Closes the TIP connection;]

For ELF Users:

<SP>Logout OK

<CTRL-Y>
[Recalls Telnet;]

QUIT CR or DISCONNECT CR

LOGO CR

7. TROUBLE SHOOTING AND HELP

See the Lineprocessor User's Guide for detailed instructions concerning the workstation.

*The Error Light on the lineprocessor indicates hardware problems. Push the left button to reset, and continue working.

Immediate assistance from the system:

Type ? for commands or needed information after any prompt.

HELP:

Type <CTRL-Q> for help concerning what you are doing or type H for the Help command (after typing H you can type any word in NLS you wish to know about). The screen will recreate to show help. <CTRL-X> gets you out of help and back to where you were.

Help TYPEIN OK

Help OK

System Status:

Two <CTRL-T>'s

[Note the words RUNNING or WAIT -- WAIT means the computer is waiting for you to do something. The message will appear in the typewriter simulation window.]

<SP>SHow <SP>Disk (space status) OK

Send a message or sendmail item to: FEEDBACK

Call SRI/ARC, (415 326-6200, ext.3630)

Link to FEEDBACK

Remedies:

<CTRL-C>
RESET CR
NLS CR

If over allocation:

<SP>Trim Directory (no. of versions to keep) BUG/TYPERIN OK (really?)
OK

<SP>Expunge Directory OK

Update File Compact OK [Re-stores file more efficiently
in the computer.]

Delete Modifications (to file) OK (Really?) OK
[Destroys all changes since the last update!]

If your connection is broken:

Repeat login procedure to get to your host

To check if you are detached, use the "where" command:

WHERE <SP> USERNAME CR

If you are detached, instead of logging in, type:

ATT <SP> USERNAME <SP> PASSWORD <SP> CR

<CTRL-C>

NO RAISE [BBNB Only]

TERMINAL LINEPROCESSOR

NLS CR [to start over again]

Line Processor Trouble:

*Lineprocessor Halts:

Shows as flashing status lights and indicates transmission or
program error.

If you are in DNLS when the lights flash, wait for the LPR light
on the EP connection to stop flashing, then push in the System
Reset button. If only 1 light is on after you have reset, you are
not in DNLS.

*Host Crashes:

TIP sends the message HOST NOT RESPONDING.

Type <CTRL-C> periodically

[The TIP may maintain the connection but it doesn't tell
you when the system is back.]

When you get an @ from Tenex, repeat the Login to TENEX and NLS

OTHER AVAILABLE COURSES:

INTERMEDIATE TNLS

This is the third course and level of expertise, and represents significant experience with the system. The Programs and Useroptions subsystems are introduced as well as Output Processing for printer formatting. Topics introduced in the Third TNLS Course are useful in DNLS.

EXAMPLE OF STRUCTURE:

< BAIR, MENU.NLS;1, >, 28-JAN-75 17:29 JHB ;;;;

1 SOUP

1A VEGETABLE

1B CREAM OF MUSHROOM

2 ENTREE

2A FRIED CHICKEN

2B SALMON

2B1 WITH CREAM SAUCE

2C PRIME RIBS

3 DESSERT

3A PIE

3A1 APPLE

3A1A A LA MODE

3A2 BLUEBERRY

3B ICE CREAM

3B1 VANILLA

3B2 PEPPERMINT

3B3 MAPLENUT

3B4 CHOCOLATE

4 BEVERAGE

4A TEA

4B COFFEE

DEFINITIONS FOR THE COURSE OUTLINE

COMMANDS = You type some characters to tell the computer what to do. The characters you type are represented by the uppercase letters in each "command word".

<SP> = You type a space.

Uppercase words = You type in the appropriate information for that command phrase, e.g., BUG/TYPERIN.

CTRL = hold down the control (CTRL) key WHILE typing the specified character.

OK, B, or CA = you type a Command Accept.

<esc> = the ESC or escape key on your terminal (sometimes labeled "alt mode").

TYPERIN and BUG/TYPERIN = a string of characters from the keyboard, or keyset ending with an OK, prompted by T:. [TYPERIN has a special form when a FILE ADDRESS or Link or Ident is called for (You can tell from the noise words)].

LEVELADJUST: specifies level relative to addressed statement -- type any number of u's [for up], d's [for down], or an OK for the same level, prompted by L:.

EDGE: Imaginary lines which can divide the display into as many as 8 parts, allowing a different view in each part.

VIEWSPECS: a string of one or more viewspec characters followed by OK, prompted by V: [type OK if no viewspecs are to be entered]

STRING: Character or Word or Text, prompted by C:

STRUCTURE: Statement or Branch or Group or plex, prompted by C:

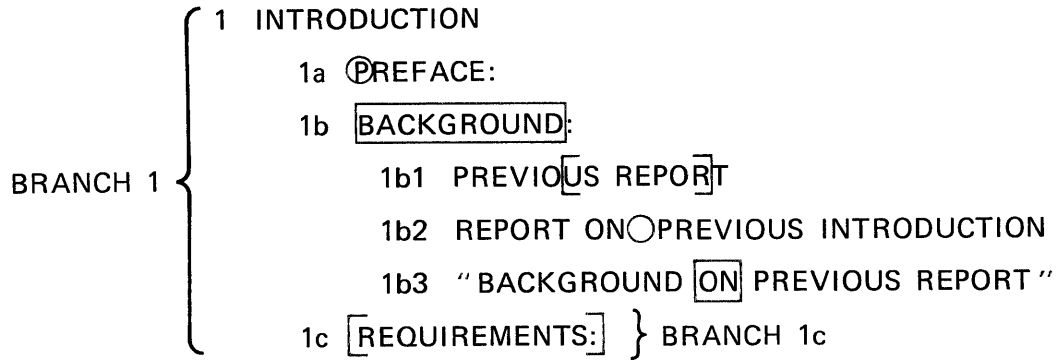
BUG: hit OK on mouse when cursor is positioned. Prompted by B:

CURSOR: The moving dash on display when in DNLS

BUG/TYPERIN: A string of characters from the keyboard, keyset, or bugged with the mouse, ended by an OK, prompted by B/T.

<CTRL-N>: Used in DNLS to specify null or no CONTENT

0 < REPORT, OUTLINE.NLS; 1, > 1-FEB-74 08:30



2 PERSPECTIVE:

- 2a DEFINITION:
- 2b ASPIRATIONS: } BRANCH 2b
 - 2b1 FUTURE

3 ENVIRONMENT:

- 3a ENVIRONMENT DEFINED:
- 3b RELEVANT FACTORS IN ENVIRONMENT:
 - 3b1 DEFINITIONS OF RELEVANT ENVIRONMENTS
 - 3b2 REPORTS ON OTHER RELEVANT DEFINITIONS
 - 3b3 FACTORS IN RELEVANCE
- 3c REQUIREMENTS:

KEY:

CHARACTERS ARE ENCLOSED IN CIRCLES
WORDS ARE ENCLOSED IN RECTANGLES
TEXT IS ENCLOSED IN SQUARE BRACKETS
STATEMENTS ARE ENCLOSED IN QUOTES

FIGURE 1