

Introduction to Documentation through NLS

Augmentation Research Center

28 MAY 75

Stanford Research Institute
333 Ravenswood Avenue
Menlo Park, California 94025

Introduction to Documentation through NLS

DVN 23-MAY-75 23:28 25931
ARC 13759 Rev. 28 MAY 75

For NSW and other documentation purposes.

Documentation Production through NLS

1

NLS provides the basis for flexible systems of creating, modifying, disseminating, and controlling documentation. NLS has particular advantages in easy modification of master copies, large-scale modification and reorganization of documents either as initial drafts or later for revision after publication, facill detailed editing, and flexibility of printed output, including line drawings. NLS is used as a medium to make printed or microfilm versions of files that are primarily intended for reading online an to publish material that would not otherwise be online.

2

NLS has been used for over six years to produce, reports, small users' guides, proposals, and other technical documents for the Augmentation Research Center. Beginning in 1974 it has been used for publication in other organizations including Airforce dodduments in the range of 1000's of pages.

3

Input:

Input into NLS is through typing directly online at a display terminal or typewriter-like terminals, or offline onto a magnetic medium that is later read into the computer, or through copying online files from other computer systems.

4

To put text directly online, NLS users employ group of commands beginning with "Insert" in the NLS 8.5 editor Subsystem. The basic insert commands are illustrated in the accompanying editing Sample Session.

4a

Input to magnetic media, on the other hand, is normally through the NLS 8.5 DEX (Deferred Execution) system. The present DEX system can operate through several terminals and digital cassette recorders. It is possible to record limited editing during input. A userguide for DEX is available.

4b

Input from other systems may require special-purpose translations programs to format the text into ASCII TENEX files. Insert Sequential Commands in the Editor subsystem convert such files to NLS files with options to preserve their format and/or translate it into NLS hierarchy.

4c

Draft Development:

All NLS files are organized in outline form. A group of commands in the Editor subsystem can rearrange and reorder these outlines more rapidly and flexibly than is the case with paper copy or online online systems that address text line by line. This facility is particularly useful the initial stages of creating a document. Similar commands can transfer or copy files or parts of files according to their outline position or content.

5

Editing:

Copying transfer, and replacement commands that operate on small units of text can greatly increase the productivity of editors. Automatic editing facilities are found in the NLS 8.5 Publish, Modify and Format Subsystem. The Publish Subsystem contains, for example, a command to generate a table of contents. The Modify subsystem contains a command to correct the number of spaces between sentences, and the Format subsystem a command to set up an online file for printing in one of several standard formats. Basic information about editing can be found in the accompanying Editing Sample Sessions.

6

Illustration:

The NLS 8.5 Graphics subsystem allows you to draw and edit simple illustrations, e.g. organization or flow charts, that are part of NLS files. Text and graphics are fully integrated. Users with screens of sufficient resolution may view and edit such drawings and print them through appropriate printers. In the case of half tones and complex line drawings, the user must set aside white space with format directives and strip in the the illustrations during printing in the manner normal to photo offset publication.

7

Output:

Commands in the Editor subsystem allow printing text in a simple draft form (Output Quickprint), or a format with headers, footers, control of top and side margins, etc., in a monospace font on a local printer or terminal (Output Printer), or via output to microfilm and offset plates with a variety of type sizes, fonts, and columnation (Output COM). Coded directives, visible online but not printed, control format via output printer or Output COM. Such directives are most often inserted automatically by use of the Format subsystem or the sendmail subsystem, but may also be inserted by users with special training. The operation of the Format subsystem appears in the accompanying Format Sample Session.

8

Control:

The Automatic numbering and indexing services of the NLS Sendmail subsystem provide a medium for freezing, cataloging, and identifying documents, and recording their standing with respect to updates.

9

Procedures:

NLS offers new freedom to the publications process. Procedures that have in the past been forced on us by the medium, for example limited distribution of drafts, become matters of option. As a result introduction of NLS into a publications operation on more than an occasional basis requires careful planning.

10

Introduction to Documentation through NLS

DVN 23-MAY-75 23:28 25931
ARC 13759 Rev. 28 MAY 75

(J25931) 23-MAY-75 23:28;;; Title: Author(s): Dirk H. Van
Nouhuys/DVN; Distribution: /DIRT([ACTION] please comment) DMB([
ACTION] dirt and dpcs notebook please) DPCS([INFO-ONLY]);
Sub-Collections: SRI-ARC DIRT DPCS; Clerk: DVN; Origin: <
VANNOUHUYS, DOCINTRO,NLS;3, >, 23-MAY-75 23:25 DVN ;;;
####;

Informal Documentation Weekly Report

Kirk

Finished debugging tabs; started on Air Force format.

Wrote the Help for the new tab commands (in the review process now).

Took a good look at <HELP,NLS,> it needs a LOT of work.

POOH

finished revisions on command summary and business cards, received proofs and camera ready copy will be ordered for printing

attended several documentation meetings

worked on references for final report

began looking for a banjo on my knee for alabama

DvN

NSW: Introduction to DPCS through documentation Review, on to DIRT for comment. Met with KIRK, BEV and POOH and ironed out help file names, search algorithm, list of Sample Sessions (which used to be called scenarios). Draft of Works Manager- Help file still hled up in input.

Final Report: Ann put the file in its new order and is working up the references. The editis have been made in the NIC section, noe a separate report, and it will go to Bart Cox and for a COM trail run next week.

Glossary: Priscilla finsihed the copy proof changes Friday. It will need one more read, then to COM next week. I owe addition of instrcution to the introduction.

BEV

Wrote out an outline of the proposed sample sessions for the Secretarial Functions Guide. Revised it in meeting with Dirk, Kirk, Ann.

Met with Ann, Kirk, Dirk to revamp work schedule thru June. Discussed other doc. issues.

wrote first draft of the "Editing Sample Session II."

Revised reviewed copy of "Help Services Sample Session."

Informal Documentation Weekly Report

Met with Development group to discuss work status and problems.

4e

Informal Documentation Weekly Report

(J25932) 23-MAY-75 23:41;;; Title: Author(s): Beverly Boli, Ann
Weinberg, Kirk E. Kelley, Dirk H. Van Nouhuys/BEV POOH KIRK DVN;
Distribution: /DMB([ACTION] dirt notebook please) DIRT([INFO-ONLY]
); Sub-Collections: SFI-ARC DIRT; Clerk: DVN;

CONTACT: Hartness 14Feb75

(Hartness) contact report	1
(DATE) 14 February 1975	1a
(BY) Lieberman	1b
(ATTENDEES)	1c
Roger Hough of SRI	1c1
Dr. Rich Hartness of Boeing Corp.	1c2
Robert Lieberman of SRI-ADC	1c3
(ADDRESSES) Full name of organization, address, and phone number	1d
(MEDIUM) FACE-TO-FACE	1e
(WHERE) Lunch in Menlo Park, CA	1f
(ACTION-ITEMS)	1g
Actions taken, to be taken, etc., dated	1g1
(DISTRIBUTION) ARC-LOG DCE RLL JCN RA3Y	1h
(REFERENCES)	1i
(DOCUMENTS) Hard copy given and received	1j
(GIVEN) Date and documents given	1j1
(RECEIVED) Date and documents received	1j2
(REMARKS)	1k
By coincidence I met Hough and Hartness at lunch. Apparently Hartness is doing some work with us on a communications project.	1k1
I felt his communications project was somewhat related to NLS. After a brief talk on NLS, Hartness seemed interested and indicated he might drop down to see more in the future.	1k2

CONTACT: Hartness 14Feb75

(J25933) 24-MAY-75 22:40;;; Title: Author(s): Robert N.
Lieberman/RLL; Distribution: /ARC-LOG([INFO-ONLY]) DCE([INFO-ONLY
]) RLL([INFO-ONLY]) JCN([INFO-ONLY]) RABY([INFO-ONLY]) ;
Sub-Collections: SRI-ARC ARC-LOG; Clerk: RLL;

CONTACT: SRI, Edwards re WATS servie on 26Mar75

(WATS) contact report 1

(DATE) 26 March 1975 1a

(BY) Lieberman 1b

(ATTENDEES) 1c

Mary Edwards, SRI-Communications Group 1c1

Robert Lieberman of SRI-ARC 1c2

Ed Ressler of Pacific Telephone 1c3

(ADDRESSES) Full name of organization, address, and phone number 1d

Mary Edwards 1d1

X3577 1dia

(MEDIUM) PHONE 1e

(WHERE) Menlo Park, CA 1f

(ACTION-ITEMS) 1g

Actions taken, to be taken, etc., dated 1g1

(DISTRIBUTION) ARC-LOG DCE RLL JCN MEH JHB 1h

(REFERENCES) 25755 25754 1i

(DOCUMENTS) Hard copy given and received 1j

(GIVEN) Date and documents given 1j1

(RECEIVED) Date and documents received 1j2

(REMARKS) 1k

Jeanne Johnson in charge of the group was not in this week. I spoke to Mary Edwards who gave me the costs below. 1k1

For outgoing or incoming WATS service nationwide (Band 5) the cost is \$1700 per month plus 7% tax. This permits up to 240 hours connect time per month. Each additional hour costs \$4.70. 1k2

An installation charge is \$10. per line. 1k2a

CONTACT: SRI, Edwards re WATS servie on 26Mar75

The normal daytime, direct dial rate across country is \$27.10 including tax. The California WATS service is \$800. per month for 100 hours with \$8. for each additional hour.

1k3

For more information on lease lines, Jeanne Johnson will call me back next week. The marketing account manager, Ed Ressler, may know and, if so, will call me back.

1k4

Ed called me back and changed the WATS figures slightly to \$1675 per month and to \$4.65 for extra hours. There is a 10 hour per month service costing \$255 and \$19.10 for each additional hour. He said the cost of a 9600 baud private line would be about \$3000, (no conditioning, no modems.)

1k5

RLL 24-MAY-75 22:42 25934

CONTACT: SRI, Edwards re WATS servie on 26Mar75

(J25934) 24-MAY-75 22:42;;; Title: Author(s): Robert N.
Lieberman/RLL; Distribution: /ARC-LOG([INFO-ONLY]) DCE([INFO-ONLY
]) RLL([INFO-ONLY]) JCN([INFO-ONLY]) MEH([INFO-ONLY]) JHB(
[INFO-ONLY]) ; Sub-Collections: SRI-ARC ARC-LOG; Clerk: RLL;

CONTACT: NSRDC, Brignoli on 14Mar75

(NSRDC) contact report 1

(DATE) 14 Mar 1975 1a

(BY) Lieberman 1b

(ATTENDEES) 1c

Frank Brignoli of NSRDC 1c1

Robert Lieberman of SRI-ARC 1c2

(ADDRESSES) Full name of organization, address, and phone number 1d

(MEDIUM) FACE-TO-FACE. 1e

(WHERE) NSRDC, Carderock, MD 1f

(ACTION-ITEMS) 1g

Actions taken, to be taken, etc., dated 1g1

(DISTRIBUTION) ARC-LOG DCE RLL JCN 1h

(REFERENCES) 25747 1i

(DOCUMENTS) Hard copy given and received 1j

(GIVEN) Date and documents given 1j1

(RECEIVED) Date and documents received 1j2

(REMARKS) 1k

The Navy Laboratory Network is supposed to be up by January 1976, but more likely March 1976. Pete Bono of NAVSEC will be leaving in June 1975. Therefore, the likelihood of NLS being continued at NAVSEC is low. 1k1

Pete is very unhappy about the response and general computer service he is receiving. 1k1a

There is a very real risk that NAVSEC's money for NLS will be dropped in July. Frank has good hopes that some other source will be found to maintain their two slots. 1k1b

At the very least, Frank stressed that he needs to know what is going on about funding and fixing the computer service problems. 1k1c

CONTACT: NSRDC, Brignoli on 14Mar75

Barbara Shultz of NSRDC is in charge of a word processing experiment. 1k2

She is receptive to using NLS in some way. 1k2a

Also, Barbara is a very good person to find others at NSRDC who might be interested in participating. 1k2b

Frank believes they could use four more line processors later this year, at least one in the San Diego area. 1k3

As it stand now, NSRDC has one slot, composed of NAVSEC, NAVSUP project, and NSRDC overhead. 1k4

NAVSEC is interested in Documentation. 1k4a

The NAVSUP project is using NLS for contract monitoring. 1k4b

The overhead, sponsored by Gil Gray, is split between documentation production and word processing experiment. 1k4c

The second slot is funded by the NAVCON project. 1k5

The application here is that of distributed collaboration. 1k5a

NSRDC, New London, Panama City, San Diego (NVC and NELC) and maybe China Lake (NWC) are part of this project. 1k5b

The San Diego labs have a slight problem since they must use the AVTOVON lines to a distant TIP. 1k5b1

CONTACT: NSRDC, Brignoli on 14Mar75

(J25935) 24-MAY-75 22:46;;; Title: Author(s): Robert N.
Lieberman/RLL; Distribution: /ARC-LOG([INFO-ONLY]) DCE([INFO-ONLY
]) RLL([INFO-ONLY]) JCN([INFO-ONLY]) ; Sub-Collections:
SRI-ARC ARC-LOG; Clerk: RLL;

BUG: Unrefreshed bugged character for <CA>

If the character <CA> appears in the text, it is displayed as <CA>. If you bug it the exact character bugged is not refreshed and thus that space is an empty "hole" (maybe a black hole....). E.g. < A> this is for the datamedia terminals, at least; I have not checked it for other terminals.

1

BUG: Unrefreshed bugged character for <CA>

(J25936) 24-MAY-75 22:50;;; Title: Author(s): Robert N.
Lieberman/RLL; Distribution: /FEED([ACTION]) ARC-APP([INFO-ONLY]
) ; Sub-Collections: SRI-ARC ARC-APP; Clerk: RLL;

DPS System Procedures Chart

Introduction	1
This chart presents a view of the DPS system procedures indicating how the various primitives support the various functions to be implemented in the DPS environment.	1a
Catagories:	2
(1) Works Manager	2a
(2) Front End	2b
(3) NLS Back End	2c
(4) Completeness	2d
(5) ISI	2e
(6) Free	2f
(7) File Package	2g
Notation:	3
x ==> the procedure in this row is used by the catagory in this column	3a
- ==> the procedure in this row is a fundamental procedure and is implicitly used by a catagory in this column due to the use of some other procedure by this catagory.	3b

DPS System Procedures Chart

JBP 26-MAY-75 16:10 25937

Procedures:

	1	2	3	4	5	6	7	
CRTPS	x	x			x			4a
DELPS	x	x			x			4b
ITDPS	x							4c
SEPPS	x							4d
GNPK	x	x	x		x			4e
CLSPK				x				4f
CALPE	x	x	x		x			4g
INTPE		x						4h
CRTDT								4i
DELDT								4j
RDDT	x	x	x		x			4k
WRDT	x	x	x		x			4l
LCKDT						x		4m
ULKDT						x		4n
CRTCH	x					x		4o
DELCH				x				4p
CRTSP					x			4q
DELSP					x			4r
CRTPR	x	x			x	x		4s
DELPR	x	x			x	x		4t
SIPR	x	x	x		x			4u
SOPR	x	x	x		x			4v
RDYPR	x	x	x		x			4w
SNDCH						x	x	4x
RCVCH						x	x	4y
CRTLK					x	x		4z
DELLK					x	x		4a@
SETLK	-	-	-	-	x	x		4aa
REMLK	-	-	-	-	x	x		4ab
CRTEV					x	x		4ac
DELEV					x	x		4ad
SIGEV	-	-	-	-	x	x		4ae
ISTEV	-	-	-	-	x	x		4af
WAIEV	x	x	-	-	x	x		4ag
								4ah

Notes:

(1) Works Manager

Uses 19 of the procedures.

DPS System Procedures Chart

	The only user of 3 procedures.	5a2
(2) Front End		5b
	Uses 17 of the procedures.	5b1
	There is no procedure that is only used by the Front End.	5b2
(3) NLS Back End		5c
	Uses 12 of the procedures.	5c1
	There is no procedure that is only used by the NLS Back End.	5c2
(4) Completeness		5d
	There are 2 procedures included for completeness only.	5d1
(5) ISI		5e
	Uses 22 of the procedures.	5e1
	The only user of 6 procedures.	5e2
(6) Free		5f
	Some procedures come for free either because they are functions that are implemented anyway in the implementation of other functions or because they are very small (one or two program statements). In either case making these functions visible to the user has merit and costs little.	5f1
	There are 17 of these "free" procedures: 5 are fundamental to the DPS and are used by most other procedures, 2 are communications primitives and are frequently used by other DPS procedures, 4 are subprocedures in a one to one relationship to more powerful DPS procedures, and 6 are very small procedures included for convenience.	5f2
(7) File Package		5g
	Uses 7 of the procedures.	5g1

the only user of 2 procedures.

592

DPS System Procedures Chart

(J25937) 26-MAY-75 16:10;;; Title: Author(s): Jonathan B.
Postel/JBP; Distribution: /JBP([INFO-ONLY]) RWW([INFO-ONLY]) ;
Sub-Collections: SRI-ARC; Clerk: JBP; Origin: < POSTEL,
DPS-SYSTEM-PROCEDURES.NLS;5, >, 26-MAY-75 15:57 JBP ;;;;####;

Couldn't find it

Dirk, "Set content" in Help and it's menues I picked did not answer
the question in SGR's <32584, 1e1>.

1

Couldn't find it

(J25938) 26-MAY-75 18:08;;; Title: Author(s): Kirk E. Kelley/KIRK;
Distribution: /DVN([INFO-ONLY]) ; Sub-Collections: SRI-ARC; Clerk:
KIRK;

CONTACT: Bechtel, John Ahrends on 27May75 re: meeting and slides request

(Bechtel) A contact report 1

(DATE) 27 May 75 1a

(BY) Lieberman 1b

(ATTENDEES) 1c

 John Ahrends - Bechtel 1c1

 Robert Lieberman - SRI-ARC 1c2

(ADDRESSES) Full name of organization, address, and phone number 1d

 John Ahrends 1d1

 Bechtel 1d1a

 345 Mission Street 1d1b

 San Francisco, CA 94119 1d1c

 For mail use: P.O. 3965 1d1d

 415-768-1031 (special number) 1d1e

 7th floor - cubicle B8 1d1f

(MEDIUM) PHONE 1e

(WHERE) Menlo Park and San Francisco, CA 1f

(ACTION-ITEMS) 1g

 Actions taken, to be taken, etc., dated 1g1

(DISTRIBUTION) ARC-LOG DCE JCN RLL 1h

(REFERENCES) 1i

(DOCUMENTS) Hard copy given and received 1j

 (GIVEN) Date and documents given 1j1

 (RECEIVED) Date and documents received 1j2

(REMARKS) 1k

CONTACT: Bechtel, John Ahrends on 27May75 re: meeting and slides
request

In response to a call from Ahrends to Engelbart, I called John to see why he needed some slides and to set up a meeting with him to discuss NLS.

1k1

He is a member of the Transportation planning group. Wes Heisman also is interested and will be at the meeting with John.

1k2

The purpose of requesting slides is to show them at a course he is giving on computer aided planning and at a conference of Bechtel personnel on community and airport planning.

1k3

He needs pictures of hardware and general environment of a computer augmented working group.

1k4

Perhaps later he can get more interest at Bechtel to have us talk to them.

1k5

Our meeting will be at 11:45 Thursday 29 May 75.

1k6

CONTACT: Bechtel, John Ahrends on 27May75 re: meeting and slides
request

(J25939) 27-MAY-75 16:46;;; Title: Author(s): Robert N.
Lieberman/RLL; Distribution: /ARC-LOG([INFO-ONLY]) DCE([INFO-ONLY
]) JCN([INFO-ONLY]) RLL([INFO-ONLY]) ; Sub-Collections:
SRI-ARC ARC-LOG; Clerk: RLL;

benchmarks at isic and reserving terminals

this thursday (5/29) from 1500 pdt to 2000pdt we will be using 6 elf display terminals to run benchmarks at isic. see rww if this presents unlivabe constraints for you.

1

benchmarks at isic and reserving terminals

(J25940) 27-MAY-75 18:49;;; Title: Author(s): Kenneth E. (Ken)
Victor/KEV; Distribution: /SRI-ARC([ACTION]) ; Sub-Collections:
SRI-ARC; Clerk: KEV;

MLP-900, a powerful microprogrammable processor, will be available to TENEX user programs in ISIC

During my short visit at ISI on Fri 23 May 75, Tom Ellis showed me the MLP-900 processor. It is a very high-powered, soft-code microprogrammed machine. Emulators are now microprogrammed for a number of machines (including a PDP-10). It is tied in to ISIC TENEX and supposedly is available to any users -- although there is some possibility that a Navy user may saturate it completely for the next year.

1

This is part of the Programming Research Instrument (PRIM) project. The PRIM software consists of the MLP-900 Microprogramming Supervisor (Microvisor), the TENEX Driver for the MLP-900, the TENEX MLP-EXEC program, which provides interactive access to PRIM for a user at a TENEX terminal, and a compiler for the General Purpose Microprogramming Language (GPM).

2

I brought back a copy of the PRIM User's Manual (XDOC -- 32493,).

3

MLP-900, a powerful microprogrammable processor, will be available to
TENEX user programs in ISIC

(J25941) 27-MAY-75 19:09;;; Title: Author(s): Douglas C.
Engelbart/DCE; distribution: /SRI-ARC([INFO-ONLY]) ;
Sub-Collections: SRI-ARC; Clerk: DCE; Origin: < ENGELBART,
PRIM,NLS;2, >, 27-MAY-75 18:57 DCE ;;;;####;

LLG 27-MAY-75 21:05 25942

testmessage

This is test of my mail receiving capability

1

LLG 27-MAY-75 21:05 25942

testmessage

(J25942) 27-MAY-75 21:05;;; Title: Author(s): Larry L.
Garlick/LLG; Distribution: /LLG([INFO-ONLY]) ; Sub-Collections;
SRI-ARC;; Clerk: LLG;

Journal Catalog Search Failure on Recent Items

The automatic search through the journal catalogs for a new item (within a day of system processing) often fails due to the catalog file's not yet having been updated (so the item still resides in its partial copy).

1

This file is large so updating it is expensive and a bit dangerous. It usually happens twice a day (around 11:30 AM and 5:30 PM our time).

2

When the catalog search fails, the system doesn't try to decide if the number is an old or recent one and gives the standard message.

3

Journal Catalog Search Failure on Recent Items

(J25944) 28-MAY-75 14:06;;; Title: Author(s): J. D. Hopper/JDH;
Distribution: /DCE([ACTION]) FEED([INFO-ONLY]) ;
Sub-Collections: SRI-ARC; Clerk: JDH; Origin: < HOPPER,
JNUMMESS.NLS;1, >, 28-MAY-75 13:27 JDH ;;;;####;

Update of Outline for Secretarial Functions Guide

This is an updated version of the file outlining proposed sample sessions for the Secretarial functions Guide. Revisions suggested in the May 22nd meeting of the documentation group have been incorporated. The outlines for the sample sessions to be written by Dirk and Kirk are not included in this document.

Update of Outline for Secretarial Functions Guide

Major areas for sample sessions:	1
Modifying	1a
Editing Sample Session I (Memo)	1a1
Editing Sample Session II (Report Draft)	1a2
Editing Sample Session III (Outline)	1a3
Sendmail	1b
Sendmail Sample Session I (Sending a File)	1b1
sendmail Sample Session II (Reading the Mail)	1b2
Sendmail Sample Session III (Using Interrogate and other commands)	1b3
Structuring (using levels effectively)	1c
(See "Editing Sample Session III - Outline")	1c1
Addressing	1d
(See "Editing Sample Session I and II", and "Sendmail Sample Session II")	1d1
Viewing	1e
File-Viewing Sample Session	1e1
(See "Sendmail Sample Session II - Reading the Mail")	1e2
Entering Text (incl. tabular)	1f
Tabular Structuring Sample Session (Creating a Table) (Kirk)	1f1
(See "Editing Sample Session I and II")	1f2
Getting online help	1g
Help Services Sample Session	1g1
Formatting (Dirk)	1h
Formatting Sample Session	1h1
Writing a letter (Kirk)	1i

Update of Outline for Secretarial Functions Guide

Letter Writing Sample Session	111
New sample sessions (breakdown of commands in sample sessions listed above):	2
Modifying Sample Sessions	2a
Editing Sample Session I (Writing a Memo)	2a1
Create File, Load File	2a1a
Jump Address	2a1b
Print Rest, \	2a1c
Insert Statement, Insert Text	2a1d
Delete Statement	2a1e
Substitute Text (using +e, "typein")	2a1f
Editing Sample Session II (Transcribing and Revising a Report Draft)	2a2
Insert Word, Character	2a2a
Delete Word	2a2b
Substitute Word, Branch	2a2c
Move Statement	2a2d
Replace Statement	2a2e
Copy Text	2a2f
Transpose Statement	2a2g
Jump (to) Origin	2a2h
Update File	2a2i
Editing Sample Session III (Writing an Outline)	2a3
Insert Statement (using levels)	2a3a
Delete Branch, Group	2a3b
Move Branch, Group	2a3c

Update of Outline for Secretarial Functions Guide

Break Statement	2a3d
Append Statement	2a3e
Sendmail	2b
Sendmail Sample Session I (Sending a File)	2b1
Goto Sendmail	2b1a
File	2b1b
Title	2b1c
Distribute Action	2b1d
Distribute Information	2b1e
Comment	2b1f
Send	2b1g
Quit	2b1h
Sendmail Sample Session II (Reading the Mail)	2b2
Print Journal	2b2a
Print Branch (at Journal)	2b2b
Print File	2b2c
Jump Link	2b2d
Sendmail Sample Session III (Interrogate and Other Commands)	2b3
Interrogate	2b3a
Author(s)	2b3b
Message	2b3c
Show Record	2b3d
Show Status	2b3e
Viewing	2c
File-Viewing Sample Session	2c1

Update of Outline for Secretarial Functions Guide

Set Viewspecs	2c1a
viewspecs: m/n; I/J; x/w; b; c; r; s; y/z/; G/H	2c1b
Reset Viewspecs	2c1c
Show Viewspec (status)	2c1d
Print STRUCTURE (at) DESTINATION VIEWSPECS (include branch, file, statement; .fr)	2c1e
Line Feed	2c1f
Getting online help	2d
Help Services Sample Session	2d1
Help	2d1a
<CTRL-Q>	2d1b
? (Questionmark)	2d1c
Entering Text (incl. tabular)	2e
Tabular Structuring Sample Session (Creating a Table) (Kirk)	2e1
tab commands	2e1a
Formatting	2f
Formatting Sample Session (Dirk)	2f1
formatting commands, Output Printer, Output Terminal	2f1a
Writing a letter	2g
Letter Writing Sample Session (Kirk)	2g1
commands to use the Letter program	2g1a

Update of Outline for Secretarial Functions Guide

(J25945) 29-MAY-75 11:37;;; Title: Author(s): Beverly Boli/BEV;
Distribution: /DIRT([INFO-ONLY]); Sub-Collections: SRI-ARC DIRT;
Clerk: BEV; Origin: < BOLI, SECFUNC.NLS;4, >, 28-MAY-75 13:36
BEV ;;;;####;

Successful use of CLI first release, and CML compilations.

Charles --

I've been happily running your first-release CLI, and compiling CML, since the day of your announcement of it last week -- I'm sorry I've been late in reporting how well it works. That's a large and impressive piece of work you've done; and from the time records on some of your files and messages, one can see you've been keeping programmer's hours.

Anyhow, I tried running CLI.WM later in the same day after receiving your message announcing its existence, and to within a bug in endtooling (which I saw you had fixed the next day), it worked fine. A day or so later, I undertook to add some further commands, to see if I could manage a compilation of the CML, and after some fussing around, that has worked, too. Rather than go through a blow-by-blow account, I'll describe the current set-up in case you or Dirk need or want to inspect any of the files.

I made my own copy of your < nsw-sources, wm-cml.nls, > to make additions to. [NLS wouldn't let me copy the file, but would let me copy Branch 0!] That file is < sattley, wm-cml.nls, >, it now contains the CML for the additional file commands IMPORT, EXPORT, and TRANSPORT, and it has compiled and run correctly.

Compiling that file in NLS with < nsw-sources, xcml.sav, > works fine, and produces < sattley, wmgram.rel, >. [I deduce from the way things have worked that Compiling a File takes the latest updated file, ignoring anything in the .PC, right?]

For reasons concerned mostly with directory sizes, I've been loading and executing the CLI from REM's directory, rather than my own. Trying to run a copy of your RUNFILE LOADWMCLI.TXT produced a demand for a password to allow connecting to <nsw-sources>; so I edited in the directory name everywhere needed. The loading file is thus < millstein, loadwmcli.txt, >, and it produces < millstein, cli.wm, > which has generally been running well. There have been a few occasions when loading produced undefined symbols, but those seem to have been times when you were making changes to some of the nsw-sources files, and after things settled down again, the loading has worked well.

We'll probably let the wm-cml sit as it is with the present commands until we are well into the interfaced debugging with the WM, and then start putting in the Temporary-Return handlers -- probably in a much simpler form than in FE-CMP5.

Would it be very hard to get our version of CLI to operate with Demand recognition rather than Terse? As a happy NLS user, I like the Terse recognition, but it takes a little while to get used to,

Successful use of CLI first release, and CML compilations.

and that generates negative reactions from inexperienced users. In fact, I'd suggest y'all consider teaching NLS with Demand recognition (or anticipatory, if your response-time is fast enough), and then explain Terse recognition when people are far enough along to appreciate it.

5

Congratulations on the good work.

6

-- Kirk,

7

Successful use of CLI first release, and CML compilations.

(J25946) 30-MAY-75 16:09;;; Title: Author(s): Kirk Sattley/KS;
Distribution: /CHI([ACTION]) WEC([INFO-ONLY]) DVN([INFO-ONLY]
) REM([INFO-ONLY]) ; Sub-Collections: NIC; Clerk: KS;

Progress on Final Report, Glossary, NSW Help Data Bases Limited by
Lack of Clerical workers: Documentation Informal Weekly Report

P00H

ordered camera ready copy of business cards and command summary

more review of cue card

final report final report final report

BEV

Revised outline for sample sessions to be included in the
Secretarial Functions Guide

Worked on COM directives on Editing sample session I and sendmail
Sample Session I. This took much longer than anticipated--two
days rather than two hours. Finally almost got them sent off--as
of 5:15, Fri., waiting for operator.

Met with development group for weekly meeting, and with Dick,
Dirk, and Jon afterwards to discuss budgeted time for
documentation in Nine Month NSW Proposal.

DvN:

NSW: Met with JBP, RWW, and Bev to plan NSW and some other
Development Documentation activity for the nine months following
July and how to get more involvement with LAC and WEC. Met with
KIRK P00H and BEV singly and in various combinations to discuss
transfer of various of my functions to BEV and a way that is
comfortable to everybody. Helped BEV with preparing samples
Sessions for COM. Because of the time-consuming preparations, the
samples sessions she listed above will be the only ones to go to
COM before July. Did a little work on DPCS Help File. Dee only
Friday began typing in the draft of the NSW Front End Help Data
Base I wrote two weeks ago.

Glossary: Priscilla and Pam finally finished putting in the SRI
copy edits. I printed out a copy and spent about a day discovering
more problems. Priscilla is beginning to fix them. This should
be the last round.

Final Report: I am still evaluating SRI's detailed edits. Ann has
been putting in references. Next week we will have a heavy job
of putting in edits.

Problem: All three of the projects listed here are atleast two
weeks behind where they would be if we had sufficient NLS clerical
support.

Progress on Final Report, Glossary, NSW Help Data Bases Limited by
Lack of Clerical Workers: Documentation Informal Weekly Report

KIRK:

4

Finished the AFMFORMAT tool which asks questions for and formats
an Air Force Manual Chapter. Wrote a description of the tool.

4a

Progress on Final Report, Glossary, NSW Help Data Bases Limited by
Lack of Clerical Workers: Documenation Informal weekly Report

(J25947

) 2-JUN-75 00:34;;; Title: Author(s): Dirk H. van Nouhuys, Kirk E.
Kelley, Ann Weinberg, Beverly Boli/DVN KIRK POOH BEV; Distribution:
/JCN([ACTION] see statement named problem) RWW([ACTION] see
statement named problem) JHB([ACTION] see statement named problem)
DMB([ACTION] dirt notebook please) DIRT([INFO-ONLY]) ;
Sub-Collections: SRI-ARC DIRT; Clerk: KIRK;

My DO list

1 The file at <bbnb,kkelley,do,> contains my arc documentation and programming work. Tasks are listed in expected order of execution with time estimates where appropriate. I will try to keep it up to date.

1

KIRK 3-JUN-75 00:26 25950

My DO list

(J25950) 3-JUN-75 00:26;;; Title: Author(s): Kirk E. Kelley/KIRK;
Distribution: /DVN([INFO-ONLY]) BEV([INFO-ONLY]) EKM([
INFO-ONLY]) ; Sub-Collections: SRI-ARC; Clerk: KIRK;

NIC Report and Sample Session Drafts to COM

1 Sunday evening I put the draft of the report on NIC work through June of 1974 (nicrpt.com;1), a draft of the NSW Editing sample session I (edlcom.com;1) and the NSW sendmail sample session (Sendmai-samplesession.com;1) onto tape 120 at ISI. Monday morning I called DDSI and Ted Spires said he would pick it up that day.

1

NIC Report and Sample Session Drafts to COM

(J25951) 3-JUN-75 11:31;;; Title: Author(s): Dirk H. Van
Nouhuys/DVN; Distribution: /DMB([ACTION] dpcs notebook please) &DPCS(
[INFO-ONLY]) BEV([INFO-ONLY]) ; Sub-Collections: SRI-ARC DPCS;
Clerk: DVN;

journal maial test

1 my ident file looks good today. i wonder if it is finally o.k.

1

LLG 3-JUN-75 12:52 25952

Journal maial test

(J25952) 3-JUN-75 12:52;;; Title: Author(s): Larry L. Garlick/LLG;
Distribution: /LLG([INFO-ONLY]) ; Sub-Collections: SRI-ARC; Clerk:
LLG;

Output Processor Handout?

1 Could I see the handout you mention in (32590,)?...I might want to pirate it for NSW..thanks

1

Output Processor Handout?

(J25953) 3-JUN-75 13:11;;; Title: Author(s): Dirk H. Van
Nouhuys/DVN; Distribution: /RH([ACTION]) &DPCS([INFO-ONLY]) DMB(
[INFO-ONLY] DPCS notebook please) SGR([INFO-ONLY]) ;
Sub-Collections: SRI-ARC DPCS; Clerk: DVN;

RL 3-JUN-75 13:53 25954

CONTACT: OSHA, Boyd on 1Jun75 re slot purchase

JCN feels we should send them a proposal anyway.

CONTACT: OSHA, Boyd on 1Jun75 re slot purchase

1 (OSHA) Contact report 1

1a (DATE) 1 June 75 1a

1b (BY) Lieberman 1b

1c (ATTENDEES) 1c

1c1 Dan Boyd - OSHA 1c1

1c2 Robert Lieberman - SRI-ARC 1c2

1d (ADDRESSES) Full name of organization, address, and phone number 1d

1d1 New Address 1d1

1d1a 200 Constitution Ave. 1d1a

1d1b Washington, DC 20010 1d1b

1d1c Room N3718 1d1c

1d1d Phone 202-523-7081 1d1d

1e (MEDIUM) PHONE 1e

1f (WHERE) Washington, DC and Menlo Park, CA 1f

1g (ACTION-ITEMS) 1g

1g1 Actions taken, to be taken, etc., dated 1g1

1h (DISTRIBUTION) ARC-LOG DCE JCN RLL 1h

1i (REFERENCES) 25740 25741 25311 [Franklin phone call] 25263 [Franklin phone call] 25261 [Franklin visit] 1i

1j (DOCUMENTS) Hard copy given and received 1j

1j1 (GIVEN) Date and documents given 1j1

1j2 (RECEIVED) Date and documents received 1j2

1k (REMARKS) 1k

1k1 Finally got a hold of Dan after trying for a month (4 separate calls). He said that he was deliberately delaying in talking to me for two reasons. 1k1

CONTACT: OSHA, Boyd on 1Jun75 re slot purchase

- 1k2 First, OSHA just moved to new location. 1k2
- 1k3 Second, OSHA has be award the \$200k contract that he expected. 1k3
- 1k3a Jeff Franklin of NOL (Naval Ordnance Laboratory) (now called NSWC (Navy Surface Weapons Center)) will be coming to his staff to manage this money. Jeff will be reporting for duty in a week or so and will immediately look at the possibility of using NLS. 1k3a
- 1k4 At the moment, however, Dan does not think NLS would be suitable since NLS is TOO powerful for OSHA needs at the moment. 1k4
- 1k5 He is also very concerned with user acceptance; a powerful system like NLS might have a very low acceptance. 1k5
- 1k6 The \$200k is suppose to support 4 or 5 different things not all of which NLS could serve. 1k6
- 1k6a I do not know if he was trying to tell me NLS was too costly by this statement but he did not say it outright. 1k6a
- 1k7 Dan told me that Jeff would contact us in about a month or so. 1k7
- 1k8 Jeff Franklin was the friend of boyd's that came to ARC for a demo some time ago and recommended to Boyd to look into NLS. 1k8
- 1k8a See Franklin references above. 1k8a

CONTACT: OSHA, Boyd on 1Jun75 re slot purchase

(J25954) 3-JUN-75 13:53;;; Title: Author(s): Robert N.
Lieberman/RLL; Distribution: /ARC-LOG([INFO-ONLY]) DCE([INFO-ONLY
]) JCN([INFO-ONLY]) RLL([INFO-ONLY]) ; Sub-Collections:
SRI-ARC ARC-LOG; Clerk: RLL;

Arc Applications Thursday Meeting

1 Arc-Applications will meet Thursday June 5th from 2:00 to 4:00 p.m. in Conference Room J2077, so we can all discuss things going on in Applications.

1

JOAN 3-JUN-75 14:07 25955

Arc Applications Thursday Meeting

(J25955) 3-JUN-75 14:07;;; Title: Author(s): Joan Hamilton/JOAN;
Distribution: /JOAN([ACTION]) ARC-APP([INFO-ONLY]) ;
Sub-Collections: SRI-ARC ARC-APP; Clerk: JOAN;

ETS Memo formatting Program

1 This message points to Dean's (32621,) for purposes of adding it to the DPCS subcollection.

1

ETS Memo Formatting Program

(J25956) 3-JUN-75 14:53;;; Title: Author(s): Dirk H. Van
Nouhuys/DVN; Distribution: /DMB([ACTION] dpcs notebook please) DPCS(
[INFO-ONLY]) NDM([INFO-ONLY]) DAP([INFO-ONLY]) ;
Sub-Collections: SRI-ARC DPCS; Clerk: DVN;

Looking for Input on NSW Documentation

1 We are concerned that you have not expressed any thoughts on the NSW documentation at this late date. The contract calls for "appropriate documentation", and we are constructing what we think is appropriate. But we do not know all you know and we do not want you to be unpleasantly surprised in July. Therefore we hope you will read (25790,1:wznC) and (GJOURNAL, 25945, 1:w) and offer any comments that occur to you and we hope to discuss these matters with Bill when he is here later this month.

1

Looking for input on NSW Documentation

(J25957) 3-JUN-75 15:33;;; Title: Author(s): Dirk H. Van Nouhuys,
Beverly Boll/DVN BEV; Distribution: /LAC([ACTION]) WEC([ACTION])
DMB([ACTION] dirt notebook please) DIRT([INFO-ONLY]) ;
Sub-Collections: SRI-ARC DIRT; Clerk: DVN;

Visit by John Senders, Consultant to the OSIS office in NSF

1 I spoke this morning on the phone with Bamford at NSF about the visit here by John Senders (that is the correct spelling) of the University of Montreal who was in the group that reviewed the EPC proposal. Bamford did not know of Sender's travel plans, but thought it would be courteous and useful for us to give him some time. What about an appointment with you, Doug, at 10:30 on Monday the 16th? I will try to get him a chance to meet with Pat Whitting-O'Keefe, Tom Humphry if he is in the country, and other interested parties. 1

2 Bamford once again commented "we were crushed" at the possibility that SRI might not do the work and expressed his hope we could get together a new proposal. 2

Visit by John Senders, Consultant to the OSIS office in NSF

(J25958) 4-JUN-75 00:53;;; Title: Author(s): Dirk H. Van
Nouhuys/DVN; Distribution: /DCE([ACTION]) DOCPLAN([INFO-ONLY])
KLM([INFO-ONLY] docplan notebook please) JML([INFO-ONLY]) ;
Sub-Collections: SRI-ARC DOCPLAN; Clerk: DVN;

network-graffiti

i will this be your first mail probably, if i am lucky sez the
instructor

1

SGR 4-JUN-75 15:08 25959

network-graffiti

(J25959) 4-JUN-75 15:08;;; Title: Author(s): Susan Gail
Roetter/SGR; Distribution: /JAC3([INFO-ONLY]) ; Sub-Collections:
SRI-ARC; Clerk: SGR;

DPS Procedure Chart

1 Introduction	1
1a This chart presents a view of the DPS system procedures indicating how the various primitives support the various functions to be implemented in the DPS environment.	1a
2 Categories:	2
2a (1) Works Manager	2a
2b (2) Front End	2b
2c (3) NLS Back End	2c
2d (4) Completeness	2d
2e (5) ISI CotCo Message System	2e
2f (6) Free	2f
2g (7) File Package	2g
2h (8) Multics Tool Bearing Host	2h
3 Notation:	3
3a X ==> the procedure in this row is used by the category in this column	3a
3b + ==> the procedure in this row is a fundamental procedure and is implicitly used by a category in this column due to the use of some other procedure by this category.	3b

DPS Procedure Chart

4 Procedures:

4

	1	2	3	4	5	6	7	8	
4a									4a
4b CRTPS	X	X	.	.	X	.	.	.	4b
4c DELPS	X	X	.	.	X	.	.	.	4c
4d ITDPS	X	.	.	.	.	.	.	.	4d
4e SEPPS	X	.	.	.	.	.	.	.	4e
4f OPNPK	X	X	X	.	X	.	.	.	4f
4g CLSPK	.	.	X	X	.	.	.	.	4g
4h CALPE	X	X	.	.	.	.	.	X	4h
4i INTPE	.	X	.	.	.	.	.	.	4i
4j CRTDT	.	.	.	X	.	.	.	.	4j
4k DELDT	.	.	.	X	.	.	.	.	4k
4l RDDT	X	X	X	.	X	.	.	.	4l
4m WRDT	X	X	X	.	X	.	.	.	4m
4n LCKDT	.	.	.	.	.	X	.	.	4n
4o ULKDT	.	.	.	.	.	X	.	.	4o
4p CRTCH	X	.	.	.	.	.	.	.	4p
4q DELCH	.	.	.	X	.	.	.	.	4q
4r CRTSP	.	.	.	.	X	.	.	.	4r
4s DELSP	.	.	.	.	X	.	.	.	4s
4t CRTPR	X	X	.	.	X	.	.	.	4t
4u DELPR	X	X	.	.	X	.	.	.	4u
4v SIPR	X	X	X	.	X	.	.	.	4v
4w SOPR	X	X	X	.	X	.	.	.	4w
4x RDYPR	X	X	X	.	X	.	.	.	4x
4y SNDCH	+	+	+	.	+	X	X	X	4y
4z RCVCH	+	+	+	.	+	X	X	X	4z
4a@ CRTLK	.	.	.	.	X	.	.	.	4a@
4aa DELLK	.	.	.	.	X	.	.	.	4aa
4ab SETLK	+	+	+	+	X	X	+	.	4ab
4ac REMLK	+	+	+	+	X	X	+	.	4ac
4ad CRTEV	+	+	+	.	X	X	.	X	4ad
4ae DELEV	+	+	+	.	X	X	.	X	4ae
4af SIGEV	+	+	+	+	X	X	+	X	4af
4ag TSTEV	+	+	+	+	X	X	+	X	4ag
4ah WAIEV	X	X	+	+	X	X	+	X	4ah

5 Notes:

5

5a (1) Works Manager

5a

5a1 Uses 23 of the procedures.

5a1

DPS Procedure Chart

5b (2) Front End	5b
5b1 Uses 21 of the procedures.	5b1
5c (3) NLS Back End	5c
5c1 Uses 16 of the procedures.	5c1
5d (4) Completeness	5d
5d1 There are 4 procedures included for completeness only.	5d1
5e (5) ISI	5e
5e1 Uses 23 of the procedures.	5e1
5f (6) Free	5f
5f1 Some procedures come for free either because they are functions that are implemented anyway in the implementation of other functions or because they are very small (one or two program statements). In either case making these functions visible to the user has merit and costs little.	5f1
5f2 There are 11 of these "free" procedures: 9 are fundamental to the DPS are are used by most other procedures, and 2 are very small procedures included for convience.	5f2
5g (7) File Package	5g
5g1 Uses 7 of the procedures.	5g1
5h (8) Multics Tool Bearing Host	5h
5h1 Uses 8 of the procedures.	5h1
5h2 The initial Multics implementation contains the minimum set of procedures for supporting simple tools.	5h2

DPS Procedure Chart

(J25960) 4-JUN-75 16:05;;; Title: Author(s): Jonathan B.
Postel/JBP; Distribution: /RWW([INFO-ONLY]) JEW([INFO-ONLY]) ;
Sub-Collections: SRI-ARC; Clerk: JBP; Origin: < POSTEL,
CHART.NLS;5, >, 4-JUN-75 15:53 JBP ;;;; #####

Comment on Stats on Feedback <32649,>

1 Pam: Great to see this sort of statistics. thanks. I offer one suggestion (somewhat strongly). The addition of a "suggestion" category. It would be nice to have an idea if users are contributing to the workshop evolution, which groups and individuals. Rob

1

Comment on Stats on Feedback <32649,>

(J25961) 4-JUN-75 20:46;;; Title: Author(s): Robert N.
Lieberman/RLL; Distribution: /PKA([ACTION]) SGR([INFO-ONLY])
JHB([INFO-ONLY]) JCN([INFO-ONLY]) FEED([INFO-ONLY]) RA3Y([
INFO-ONLY]) ; Sub-Collections: SRI-ARC; Clerk: RLL;

Bug: no way to keyin '37-tty' command in useroptions

1 Apparently there is no way to keyin the command word options "37-tty" or "35-tty" for the useroption command <>control (characters for terminal) . A "3" will give the 33-tty, a <SP>3 will cause a beep (on the ti735 I am using). I would guess there is a glitch in the CML for command words that are numbers. Rob

1

Bug: no way to keyin '37-tty' command in useroptions

(J25962) 5-JUN-75 01:36;;; Title: Author(s): Robert N.
Lieberman/RLL; Distribution: /FEED([ACTION]) JHB([INFO-ONLY])
JCN([INFO-ONLY]) DCE([INFO-ONLY]) ; Sub-Collections: SRI-ARC;
Clerk: RLL;

Carlson's Visit Schedule

Please review and comment asap.

Carlson's Visit Schedule

1 Carlson's visit	1
1a Monday	1a
1a1 0900-0930	1a1
1a1a welcome (rww jbp)	1a1a
1a2 0930-1000	1a2
1a2a Carlson talks about NSW and what he wants to see during his visit (arc)	1a2a
1a3 1000-1030	1a3
1a3a Overview of arc's NSW project efforts (rww jbp)	1a3a
1a4 1030-1100	1a4
1a4a Status report by each of Protocols (jew), Front End (chi), NLS (ekm), and Documentation (dvn)	1a4a
1a5 1100-1130	1a5
1a5a Description of NLS, breakdown of components (chi)	1a5a
1a6 1130-1200	1a6
1a6a Discussion	1a6a
1a7 1200-1300	1a7
1a7a Lunch	1a7a
1a8 1300-1400	1a8
1a8a Discussion of CML, L10, and Tree Meta (dia, chi)	1a8a
1a8b Demonstration of CLI on 10 and 11 (chi)	1a8b
1a9 1400-1545	1a9
1a9a Discussion and demonstration of programming environment (hgl)	1a9a
1a9b Demonstration of debugging and discussion of new debugger (kev)	1a9b
1a10 1545-1600	1a10

Carlson's Visit Schedule

1a10a Discuss the Network Information Center (jake)	1a10a
1a11 1600-1700	1a11
1a11a Meeting with applications (arc-app)	1a11a
1a11b Followed by dinner with dce jcn rww	1a11b
1b Tuesday	1b
1b1 0900-1000	1b1
1b1a Discussion of Protocol Design (rww jbp jew)	1b1a
1b2 1000-1030	1b2
1b2a Discussion of file system changes (rlb2)	1b2a
1b3 1030-1100	1b3
1b3a Demonstration of Graphics (rlb2 pooh)	1b3a
1b4 1100-1200	1b4
1b4a Discussion of documentation (dvn bev)	1b4a
1b4b Demonstration of document production (kirk)	1b4b
1b5 1200-1300	1b5
1b5a Lunch	1b5a
1b6 1300-1500	1b6
1b6a Discussion of NSW Demo (15 Aug 75) (rww jbp ekm chi pooh)	1b6a
1b7 1500-1700	1b7
1b7a General discussion and summary of the visit (rww jbp)	1b7a

Carlson's Visit Schedule

(J25963) 5-JUN-75 01:39;;; Title: Author(s): Jonathan B.
Postel/JBP; Distribution: /DCE([ACTION]) RWW([ACTION]) JCN([ACTION])
EKM([ACTION]) CHI([ACTION]) DVN([ACTION]) BEV([ACTION])
JEW([ACTION]) JAKE([ACTION]) ; Sub-Collections:
SRI-ARC; Clerk: JBP; Origin: < POSTEL, SCHEDULE.NLS;2, >
5-JUN-75 01:31 JBP ;;;;####;

Current graphics command set.

1	FIGURE =	1
1a	Statement	1a
1b	Rectangle	1b
1c	Point	1c
1d	Line	1d
1e	Triangle	1e
1f	Figure	1f
1g	Diamond	1g
1h	Circle	1h
1i	Arrowhead	1i
2	Copy Group (of figures in the window at) (and) (from) (to) OK	2
3	Copy FIGURE (at) (from) (to) OK	3
4	Copy Diagram (from statement) DESTINATION (to statement) DESTINATION OK	4
5	Create Diagram (at statement) DESTINATION OK	5
6	Delete Edge (at) OK	6
7	Delete Group (of figures in the window at) (and) OK	7
8	Delete FIGURE (at) OK	8
9	Delete diagram (at statement) DESTINATION OK	9
10	Insert Statement (into the window at) (and) CONTENT OK	10
11	Insert Edge (perpendicular to) Center OK	11
12	Insert Edge (perpendicular to) OK	12
13	Insert Circle (center) Horizontally (tangent to) OK	13
14	Insert Circle (center) Vertically (tangent to) OK	14
15	Insert Circle (center) OK	15

Current graphics command set.

16	Insert Triangle (pointing) Right (top) (one base point at) OK	16
17	Insert Triangle (pointing) Left (top) (one base point at) OK	17
18	Insert Triangle (pointing) Down (top) (one base point at) OK	18
19	Insert Triangle (pointing) UP (top) (one base point at) OK	19
20	Insert Arrowhead (pointing) Right (at) OK	20
21	Insert Arrowhead (pointing) Left (at) OK	21
22	Insert Arrowhead (pointing) Down (at) OK	22
23	Insert Arrowhead (pointing) Up (at) OK	23
24	Insert Diamond (top at) (bottom at) (side at) OK	24
25	Insert Rectangle (corner at) (opposite at) OK	25
26	Insert Vertical (line starting at) (ending) OK	26
27	Insert Horizontal (line starting at) (ending) OK	27
28	Insert Line (between) (and) OK	28
29	Insert Point (at) OK	29
30	Move Edge (from) (from) (to) OK	30
31	Move Group (of figures in the window at) (and) (from) (to) OK	31
32	Move FIGURE (at) (from) (to) OK	32
33	Move Diagram (from statement) DESTINATION (to statement) DESTINATION OK	33
34	Portray (diagram at statement) DESTINATION (in graphics window)	34
35	Set Drawspecs CONTENT OK	35
36	Set Grid (size) Tiny OK	36
37	Set Grid (size) Small OK	37
38	Set Grid (size) Medium OK	38
39	Set Grid (size) Large OK	39

Current graphics command set.

40 Set Grid (size) Extra (large) OK	40
41 Set Arrowhead (size) Tiny OK	41
42 Set Arrowhead (size) Small OK	42
43 Set Arrowhead (size) Medium OK	43
44 Set Arrowhead (size) Large OK	44
45 Set Arrowhead (size) Extra (large) OK	45
46 Set Justification Center OK	46
47 Set Justification Right OK	47
48 Set Justification Left OK	48
49 Set Right (margin to) OK	49
50 Set Left (margin to) OK	50
51 Set Bottom (margin to) OK	51
52 Set Top (margin to) OK	52
53 Show Drawspecs OK	53
54 Show Grid (in the window) (other corner) OK	54
55 Test (** Configuration Checkout **) OK	55
56 Transform Group (of figures in the window at) (and) Three (counterclockwise quadrant rotations) OK	56
57 Transform Group (of figures in the window at) (and) Two (counterclockwise quadrant rotations) OK	57
58 Transform Group (of figures in the window at) (and) One (counterclockwise quadrant rotations) OK	58
59 Transform FIGURE (at) (by) Three (counterclockwise quadrant rotations) OK	59
60 Transform FIGURE (at) (by) Two (counterclockwise quadrant rotations) OK	60
61 Transform FIGURE (at) (by) One (counterclockwise quadrant rotations) OK	61

Current graphics command set,

62 Update (graphics display) OK 62
63 Zoom (or move image) In OK 63
64 Zoom (or move image) To (window) (one corner) (other corner) OK 64
65 Zoom (or move image) Full (size of the margins) OK 65
66 Zoom (or move image) Out OK 66
67 Zoom (or move image) (to) Center OK 67
68 Zoom (or move image) (to) OK 68

Current graphics command set.

(J25964) 5-JUN-75 03:12;;; Title: Author(s): Robert Louis
Belleville/RLB2; Distribution: /SRI-ARC([ACTION]) ; Sub-Collections:
SRI-ARC; Clerk: RLB2; Origin: < GRAPHICS, GRAPHICS-SYNTAX.NLS;1,
>, 5-JUN-75 03:00 RLB2 ;;;;####;

Apology for Seeming Prod

I Susan has brought to my attention that our message asking for input on NSW documentation (25957,) arrived to members of the DIRT distribution unmarked whether for action or information. We sent the item for action only to Larry Crain and Bill Carlson, to the rest of you for information only. My apologies to those who may have felt that we were trying to prod them unjustifiably.

1

DVN 5-JUN-75 11:52 25965

Apology for Seeming Prod

(J25965) 5-JUN-75 11:52;;; Title: Author(s): Dirk H. Van
Nouhuys/DVN; Distribution: /DMB([ACTION] dirt notebook please)
FEEDBACK([ACTION] this message is the result of a bug that it
explains) DIRT([INFO-ONLY]); Sub-Collections: SRI-ARC FEEDBACK
DIRT; Clerk: DVN;

1 Introduction	1
1a Data structures may be encoded according to PCPBB when the physical channel allows messages which are streams of 8-bit binary bytes.	1a
1b The first byte of a data structure is a type code, with the type zero having the special interpretation indicating that a key is present for this data structure, non-zero codes indicate element types.	1b
2 Data Structure Encoding	2
2a Key	2a
2a1 FLAG (1 byte) = 0	2a1
2a2 VALUE (any element)	2a2
2b Elements	2b
2b1 CHARSTR	2b1
2b1a TYPE (1 byte) = 1	
2b1b SIZE (1 byte)	
2b1c COUNT (size bytes)	
2b1d TEXT (count bytes)	
2b2 BITSIR	2b2
2b2a TYPE (1 byte) = 2	
2b2b SIZE (1 byte)	
2b2c COUNT (size bytes)	
2b2d BITSTRING (count bits ((count+7)/8) bytes)	
2b3 INTEGER (two's complement) = 3	2b3

2b3a TYPE (1 byte)
2b3b SIZE (1 byte)
2b3c COUNT (size bytes)
2b3d INTEGER (count bits ((count+7)/8) bytes)

2b4 BOOLEAN 2b4
2b4a TYPE (1 byte) = 4
2b4b VALUE (1 byte)
2b4b1 FALSE=0
2b4b2 TRUE =1

2b5 EMPTY 2b5
2b5a TYPE (1 byte) = 5

2b6 LIST 2b6
2b6a TYPE (1 byte) = 6
2b6b SIZE (1 byte)
2b6c COUNT (size bytes)
2b6d REPEAT (1 byte)
2b6d1 SPECIFIEDELEMENTS=0
2b6d1a Count Data Structures
2b6d2 REPEATEDELEMENT=1
2b6d2a One Data Structure (representing count repeated instances)
2b6d3 REPEATEDVALUE=2

2b6d3a One type (size, count, repeat) and count
element values

2b7 INDEX

2b7

2b7a TYPE (1 byte) = 7

2b7b VALUE (2 bytes)

2b7b1 The value represents a positive integer in the
range 1 through $2^{15} - 1$

3 Data Structure Format

3

3a *-----*
datastruc * key * element *

3a

3a1 Key

3a1

3a1a *-----*
key * 0 * element *

 1 x

3a2 element

3a2

3a2a *-----*
charstr * 1 * size * count * text * Network ASCII

 1 1 size count

3a2b *-----*
bitstr * 2 * size * count * bits *

 1 1 size count ((count+7)/8 bytes)

3a2c *-----*
integer * 3 * count * integer * twos complement

 1 1 count

```

3a2d      *-----*
boolean * 4 * 0 or 1 * 0 for FALSE or 1 for TRUE
*-----*
          1      1
  
```

```

3a2e      *-----*
empty    * 5 *
*-----*
          1
  
```

```

3a2f
*-----*
list     * 6 * size * count * repeat * count-structures *
*-----*
          1      1      size      1
  
```

```

3a2g      *-----*
index    * 7 * value * small positive integer
*-----*
          1      2
  
```

4 Examples

4a Character string "ABCDE"

```

4a1 *-----*
* 1 * 1 * 5 * A * B * C * D * E *
*-----*
  
```

4b Bit string "10001111101011"

```

4b1 *-----*
* 2 * 1 * 1100 * 10001111 * 10101100 *
*-----*
  
```

4c Integer "-3"

```

4c1 *-----*
* 3 * 1 * 1 * 1111101 *
*-----*
  
```

4d Boolean "TRUE" 4d

```
4d1 *-----*  
* 4 * 1 *  
*-----*
```

4d1

4e Empty 4e

```
4e1 *-----*  
* 5 *  
*-----*
```

4e1

4f List of a character string "A" and a boolean "FALSE" 4f

```
4f1  
*-----*  
* 6 * 1 * 2 * 0 * 1 * 1 * 1 * A * 4 * 0 *  
*-----*
```

4f1

4g List of three the booleans "TRUE", "FALSE", "TRUE" 4g

```
4g1  
*-----*  
* 6 * 1 * 3 * 0 * 4 * 1 * 4 * 0 * 4 * 1 *  
*-----*
```

4g1

4h or 4h

```
4h1 *-----*  
* 6 * 1 * 3 * 2 * 4 * 1 * 0 * 1 *  
*-----*
```

4h1

4i Index "7" 4i

```
4i1 *-----*  
* 7 * 0 * 7 *  
*-----*
```

4i1

4j Boolean "TRUE" with character string Key "X1"

4j

```
4j1 *-----*  
* 0 * 1 * 1 * 2 * X * 1 * 4 * 1 *  
*-----*
```

4j1

JBP 5-JUN-75 18:04 25966
The PCPB8 format

(J25966) 5-JUN-75 18:04;;; Title: Author(s): Jonathan B.
Postel/JBP; Distribution: /NSW([INFO-ONLY]); Sub-Collections:
SRI-ARC NSW; Clerk: JBP; Origin: < POSTEL, PCPB8,NLS;2, >,
5-JUN-75 17:49 JBP ;;;; #####

Journal Items Found

1 I got your items 32675 and 32674.

1

DVN 5-JUN-75 23:25 25967

Journal Items found

(J25967) 5-JUN-75 23:25;;; Title: Author(s): Dirk H. Van
Nouhuys/DVN; Distribution: /PWO([ACTION]) FEEDBACK([INFO-ONLY])
; Sub-Collections: SRI-ARC FEEDBACK; Clerk: DVN;

Complete Draft of Glossary Goes to DDSI

1 This eveing I put on tape 121 at ISIA a draft of the NLS8 glossary
as (Glossary.ccm;191)

1

Complete Draft of Glossary Goes to DDSI

(J25968) 6-JUN-75 01:01;;; Title: Author(s): Dirk H. Van
Nouhuys/DVN; Distribution: /DMB([ACTION] dirt and dpcs notebooks
please) &DIRT([INFO-ONLY]) &DPCS([INFO-ONLY]) PAW2([INFO-ONLY
]) PKA([INFO-ONLY]) SGR([INFO-ONLY]) POQH([INFO-ONLY]) BEV([INFO-ONLY]) JMB([INFO-ONLY]) KIRK([INFO-ONLY]) RH([INFO-ONLY]) ; Sub-Collections: SRI-ARC DIRT DPCS; Clerk: DVN;

Comments on User Productivity Report (32657,)

- 1 First let say that this is useful report. 1
- 2 A few comments: 2
- 2a I find my best working done by a combination of a display and a line printer. 2a
- 2b I am wary of the recommendations regarding use of the printer. The print load is fairly high with out adding non-arc staff usage. 2b
- 2b1 by the way slow printing via elf is almost entirely due to high load factors at the source of the printfile not at elf. 2b1
- 2c I am not convinced that dex holds significant advantages for entering text. 2c
- 2d I do believe that we need clerical support that seeks to do text entering and simple editing tasks for the professional staff. 2d
- 2e I am suprised to see a statement like "apparently control characters float around in the net quite freely ..." that is not the way i believe the arpanet functions. 2e
- 3 all in all a good set of recoommendations. 3

JBP 6-JUN-75 02:43 25969

Comments on User Productivity Report (32657,)

(J25969) 6-JUN-75 02:43;;; Title: Author(s): Jonathan B.
Postel/JBP; Distribution: /JHB([ACTION]) SRI-ARC([INFO-ONLY]) ;
Sub-Collections: SRI-ARC; Clerk: JBP;

I'm interested in analyses of feedback

What are the numbers of the previous documents containing feedback analyses?

I'm interested in analyses of feedback

1 I would like to be included in the distribution of documents related to the analysis of the "feedback" process such as 32649. Whenever I try to load 32649 I get variously "File not on line use interrogate" or "private file access denied to you".

1

I'm interested in analyses of feedback

(J25970) 6-JUN-75 04:53;;; Title: Author(s): Kirk E. Kelley/KIRK;
Distribution: /PKA([ACTION]) SGR([ACTION]) ; Sub-Collections:
SRI-ARC; Clerk: KIRK;

EDITING SAMPLE SESSION II

Editing Sample Session II

SRI-ARC

6 JUN 75
Augmentation Research Center

STANFORD RESEARCH INSTITUTE
MENLO PARK, CALIFORNIA 94025

EDITING SAMPLE SESSION II

This is the final revision of Editing Sample Session II. Any comments or suggestions for editing changes would be welcome. Dee--would you please put this in the DIRT Notebook. Thanks. Bev

EDITING SAMPLE SESSION II

INTRODUCTION

The online computer system you will be using directly responds to what you type at your terminal. This system has facilities to let you do almost everything you need with text: compose it; edit it; send it to (and receive it from) other persons; file it in one or more categories; cite and easily obtain documents; search for documents by author and subject; search in documents by word or phrase; and print in practically any format. See the "Preface to NLS Tools" for a more complete description of the system.

The "Editing Sample Session II" is designed to build on the skills acquired in the "Editing Sample Session I." You will create a first draft of a report and revise it into a more polished form. To accomplish this, the sample session shows you how to perform specific tasks which can be applied generally whenever you want to modify text online.

Throughout this sample session we spell out the sequence of keys you will strike to make something happen and explain to you what the results should be. Keys that do not print, such as carriage return and altmode (called "escape" on some terminals), are named inside angle brackets, e.g. <CR>, <ALT>. <Sp> represents a space. The control key <CTRL> is used like the shift key. You hold it down while you type the letter that is after the hyphen. The notation for control key is <CTRL-(some character)>.

Some control keys to remember...

- <CTRL-X> aborts commands before you have typed a <CR>.
- <CTRL-O> stops printing.
- <CTRL-A> deletes the character you have just typed.
- <CTRL-W> deletes the word you have just typed.
- <CTRL-Q> provides an explanation of the current location in command space.

When you see <CR>, use the return or carriage return on your keyboard.

EDITING SAMPLE SESSION II

INSTRUCTION

1. To begin this sample session you first need to create a work space. To do so, create a file called "Editing".

```

.....
You type:
        <SP>crfediting<CR>
You see:
        BASE C: Create C: File T: editing
        <DIRECTORYNAME, EDITING.NLS:1,>
.....

```

2. You are going to transcribe, or write, the first draft of an online report on editing commandwords, then polish this draft by using editing commands. You will "write" your initial draft by using the Insert Statement command and the OKINSERT.

```

.....
You type:
        is0<CR><CR>This report will cover a few commands
        we've learned thus far.<CTRL-E>
You see:
        BASE C: Insert C: Statement (to follow) A: 0
        L:
        T: This report will cover a few commands we've
        learned thus far.
.....

```

3. Since you ended your last command with the <CTRL-E>, you can now insert a series of statements without repeating the commandwords. There are some intentional errors in the text which you will be inserting. Try to type in exactly what you see so that you can successfully work through all of the later steps in the sample session.

EDITING SAMPLE SESSION II

.....
 You type:

<CR><CR>Insert: This command allows yu to add, duplicate, or create information in a file. The command Insert Statement was presented in the "Editing Sample Session I." This sample scenario adds Insert word and Character.<CR>

You see:

L:
 I: Insert: This command allows yu to add, duplicate, or create information in a file. The command Insert Statement was presented in the "Editing Sample Session I." This sample scenario adds Insert Word and Character.

.....Continue in this mode,.....
 adding the following six statements:

Replace: This command allows you to erase a STRING or STRUCTURE at a specified DESTINATION and put in some other content.

Delete: Delete erases something that you specify, such as a character or statement, from the DESTINATION you specify. This command was introduced in the "Editing Sample Session I."

Copy: The Copy command is used to reproduce a SOURCE (such as STRING or STRUCTURE) at a specified place.

Substitute: 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. Substitute is the most common editing command used on the typewriter terminal.

Move: This command is being introduced in this sample scenario. Move transfers a specified SOURCE (such as STRING or STRUCTURE) to a DESTINATION you specify.

Transpose: Transpose allows you to make STRINGS or STRUCTURES trade places.

.....

EDITING SAMPLE SESSION II

4. Now that you've written your first draft, you will want to see it. The quickest way to have your whole file printed is through the Print File command.

```
.....
You type:
          pf<CR>
You see:
          BASE C: Print C: File OK:
          < DIRECTORYNAME, EDITING.NLS:1, >
.....
```

Following the origin statement (shown above), appears the contents of your new file. You can now review it for corrections and additions.

5. The first obvious error is in statement 2, where "you" is misspelled. The command Insert Character can correct this error. You type the command with the statement number and the letter "y" for your ADDRESS. The character will be inserted after the last character in your ADDRESS.

```
.....
You type:
          ic2<SP>"y"<CR>o<CR>
You see:
          BASE C: insert C: Character (to follow) A: 2 "y"
          T: o
.....
```

You must always be sure that your ADDRESS is unique to insure that the character is inserted in the right place. In this case "y" was sufficient since there were no other y's in the statement.

6. The next revision you want to make is also in statement 2. To clarify the last sentence, you decide to add the word "insert" after "and". To do so, use the Insert Word command.

```
.....
You type:
          iw2<SP>"<SP>and"<CR>insert<CR>
You see:
          BASE C: insert C: word (to follow) A: 2 " and"
          T: insert
.....
```


EDITING SAMPLE SESSION II

Again, you needed a unique STRING for your ADDRESS. You typed "<SP>and" to distinguish the STRING from the letters "and" in the word "command".

7. Your next correction is in statement 4, where you want to delete the unnecessary word "which". You will use the Delete word command.

.....
You type:

dw4<SP>"which"<CR><CR>

You see:

BASE C: Delete C: Word (at) A: 4 "which"
OK:
.....

8. In statements 2 and 7 you want to substitute the word "session" for "scenario". To make both edits simultaneously, execute the Substitute word (in) Branch command, using your origin statement (statement 0) as your ADDRESS.

.....
You type:

swb0<CR>session<CR>scenario<CR><CR>

You see:

BASE C: Substitute C: Word (in) C: Branch (at)
A:0

(New WORD) T: session

(Old WORD) T: scenario

(Finished?) S/Y/N:

Substitute in Progress

Substitutions made: 2
.....

9. You would like your report to tell which of the command words the user has been introduced to in "Editing Sample Session I." Statements 2 and 4 already include this information, but you have neglected to add it to statement 6. The most efficient way to do this might be to simply copy some appropriate text from statement 2 or 4. The last sentence in statement 4 is suitable.

EDITING SAMPLE SESSION II

```

.....
You type:
          ct4<SP>"y,"<CR>4<SP>+e<CR>6<SP>+e<CR>
You see:
          BASE C: Copy C: Text (from) A: 4 "y,"
          (through) A: 4 +e
          (to follow) A: 6 +e
.....

```

Again, you must be careful to use a unique STRING in your ADDRESS. Notice that this command copies text beginning after the last character in the STRING in your first ADDRESS. By typing "y," you copied the following two blank spaces, providing proper spacing at your DESTINATION.

10. Your next revision is to completely rewrite a statement. Statement 1 may seem inadequate to you, so you want to delete it and put a new one in its place. Replace Statement will do just that.

```

.....
You type:
          rs1<CR>This report defines some of the editing
          commandwords presented in the "Editing Sample
          Sessions I and II,"
You see:
          BASE C: Replace C: Statement (at) A: 1
          (by) T: This report defines some of the editing
          commandwords presented in the "Editing Sample
          Sessions I and II."
.....

```

11. The text looks pretty good to you now, so you examine the STRUCTURE of your report. You decide to reorder your statements according to the commandwords learned in each sample session; the statements defining "insert," "substitute," and "delete" will precede the other statements. First move statement 6 to follow statement 2.

```

.....
You type:
          ms6<CR>2<CR><CR>
You see:
          BASE C: Move C: Statement (from) A: 6
          (to follow) A: 2
.....

```

EDITING SAMPLE SESSION II

L:

.....

EDITING SAMPLE SESSION II

Notice that you are prompted for a level. You can use the <CR> to indicate that you want the level of statement 6 to be the same as statement 2.

12. You need to make one more structural change. This time you can simply switch the order of two statements. However, you must remember that the numbers of some of your statements have changed, since you moved statement 6 to follow 2. The former statement 6 is now statement 3; former statement 3 has become 4, etc.

If you think you might become confused you could print your file beginning with statement 3 by using the Jump command and Print Rest (see "Editing Sample Session I"). However, since you have only made one change at this point, this is probably not necessary.

You now want to transpose the statements beginning with "Replace:" and "Delete:". You make a note of their new statement numbers, and are ready to go.

.....
You type:

ts4<CR>5<CR><CR>

You see:

BASE C: Transpose C: Statement (at) A: 4
(and) A: 5
OK:

.....

13. You have completed your revisions and would like to print your new version at your terminal. One way of doing this is to Jump to the beginning of your file (the origin statement), and use the Print Rest command.

.....
You type:

jo<CR><CR>

You see:

BASE C: Jump (to) C: Origin A: V:

.....

This command asks for an ADDRESS and allows you to change your viewspecs. You type a <CR> to indicate the ADDRESS of the file you have loaded, and another <CR> to keep the same viewspecs.

14. The previous command has taken you to the origin statement of your file. Print Rest will now show you all of the statements after statement 0.

```
.....  
You type: pr<CR>  
You see:  BASE C: Print C: Rest OK:  
          <DIRECTORYNAME, EDITING.NLS;1,> , DATE  
          TIME IDENT ;;;  
.....
```

This is then followed by the contents of your file.

15. Now that you have completed work on your file you will want to do Update File, a command that creates a "new" version of your file by incorporating into it all of the modifications you have made at this time.

```
.....  
You type: uf<CR>  
You see:  BASE C: Update C: File OK/C:  
          <DIRECTORYNAME, EDITING.NLS;2, >  
.....
```

EDITING SAMPLE SESSION II

SAMPLE SESSION SUMMARY

Insert Character:

Inserts a character to follow the last character you specified in the ADDRESS.

Insert Word:

Inserts a word to follow the word that contains the last character in the ADDRESS. Insert word will not break a word in the old text.

Delete Word:

Deletes the word containing the last character in the ADDRESS typein.

Substitute word:

Substitutes a word in one designated STRUCTURE for another word.

Copy Text:

Copies text from the last character in a SOURCE ADDRESS to follow the last character in the DESTINATION ADDRESS.

Replace Statement:

Replaces an existing statement with a new one.

Move Statement:

Transfers a specified statement to a specified ADDRESS.

Transpose Statement:

Changes the order of two designated statements.

EDITING SAMPLE SESSION II

Jump (to) Origin:

Moves you to the origin statement (header) of the file you specify.

Update File:

Creates a new version of a file by incorporating into it all of the modifications made since its creation or the last update.

EDITING SAMPLE SESSION II

(J25971) 6-JUN-75 13:06;;; Title: Author(s): Beverly Boli/BEV;
Distribution: /DIRT([ACTION]); Sub-Collections: SRI-ARC DIRT;
Clerk: BEV; Origin: < BOLI, EDIT2-SS,NLS;6, >, 5-JUN-75 21:01
BEV ;;;;
####;

HELP SERVICES SAMPLE SESSION

BEV 6-JUN-75 13:21 25972

Help Services Sample Session

SRI-ARC

6 JUN 75
Augmentation Research Center

STANFORD RESEARCH INSTITUTE
MENLO PARK, CALIFORNIA 94025

This is the final revision of the Help Services Sample Session. Editing suggestions welcome. Dee--Would you please put this in the Dirt Notebook. Thank you, Bev

HELP SERVICES SAMPLE SESSION

INTRODUCTION

The online computer system you will be using provides direct response to what you have just typed into your terminal. It also provides help services, various types of feedback which you can request for immediate, online information about all aspects of the system. Three help services are:

1. Lists of command alternatives you may use at any point (reached by typing a questionmark).
2. Explanations of these alternatives (reached by typing a <CTRL-Q>).
3. Descriptive information, such as definitions, explanations, and instructions (reached by giving the Help command).

This sample session demonstrates these help services. The process is explained for a typewriter terminal. It is essential that you be at a terminal, typing in commands and text as the scenario describes them.

Throughout this sample session we spell out the sequence of keys you will strike to make something happen and explain to you what the results should be. Keys that do not print, such as carriage return and altmode (called "escape" on some terminals), are named inside angle brackets, e.g. <CR>, <ALT>, <Sp> represents a space. The control key <CTRL> is used like the shift key. You hold it down while you type the letter that is after the hyphen. The notation for control key is <CTRL-(some character)>.

Some control keys to remember...

- <CTRL-X> aborts commands before you have typed a <CR>.
- <CTRL-Q> stops printing.
- <CTRL-A> deletes the character you have just typed.
- <CTRL-W> deletes the word you have just typed.
- <CTRL-Q> gives an explanation of your current location in command space.

When you see <CR>, use the return or carriage return on your keyboard.

INSTRUCTION

1. You have logged in and are ready to use the online system. Let's first use the Help command to see how it describes itself.

To execute the Help command you type "h" for Help, and then the term you want to have explained. In this case, you want to learn more about the command "Help."

.....
You type:

nhelp<CR>

You see:

BASE C: Help OK/T: T: help
.....

This command will produce an explanation of Help at your terminal, followed by a list of items called a "menu" which you can use to obtain further information. Below the menu you will see the following line:

(HELP)</T: T:

As explained in your Help typeout, this line prompts you to ask Help for more information.

2. Let's use the menu to learn more about help services. Menu item 4 looks like it will supply us with this information.

.....
You type:

4<CR>

You see:

Help </T: T: 4
.....

This time an explanation in the form of instructions appears, followed by more menu items. You are informed about two other help services: <CTRL-Q> and questionmark. This sample session will also demonstrate these services.

3. Now let's try a practical exercise with the Help command to aid us in working online. After having read the "Preface to NLS Tools" you know that you need a workspace called a file. You can use Help to discover how to set up your own files.

.....
 You type:

files<CR>

You see:

(Help) </T: T: files

.....

This is followed by an explanation about files, called "File STRUCTURE." Notice that the title of the explanation is not exactly what you typed in. "File STRUCTURE" is the most general explanation of files in Help. For more specific details refer to the menu items, or type in a term discussed in the explanation.

4. Since you want to know how to go about creating a file, and none of the menu items directly refers to this kind of information, you need to look for a new term to type in. The description of File STRUCTURE mentions a command that creates a file. You might choose to type in this command name.

.....
 You type:

create<SP>file<SP>command<CR>

You see:

(Help) </T: T: create file command

.....

This produces the syntax of the command, followed by an explanation of how the command works, references, and a menu. If you type a l<CR>, you can see an example of how the command looks when implemented at your terminal. Note: You could have left off the words "file command" in this case, but sometimes they are necessary.

5. You now have enough information create a file. To leave Help, type a <CTRL-X>.

HELP SERVICES SAMPLE SESSION

```

.....
You type:
          <CTRL-X>
You see:
          (Help) </T:
          BASE C:
.....

```

The control-X key <CTRL-X> takes you back to Base, as indicated by the prompt "BASE C:".

6. You create a file by use of the information you have learned, and name the file FIRST-AID.

```

.....
You type:
          <SP>crffirst-aid<CR>
You see:
          BASE C: Create  C: File T: first-aid
          <DIRECTORYNAME, FIRST-AID,NLS;1,>
.....

```

7. Now you have a workspace, but what can you do next? You can see a list of your current possible alternatives if you type a questionmark.

```

.....
You type:
          ?
You see:
          BASE C:
          Current Alternatives are:
.....

```

Below the heading appears a long list of commandwords (the "Vero" type) that you may use at this time.

8. Scanning the commandwords, Insert looks like the most promising choice. Notice that a broken line has ended the list. At this point you can type the first letter or a space and the first letter of one of the commands and it will become part of your command. If you type <CR>, you return to where you were before you typed a questionmark.

HELP SERVICES SAMPLE SESSION

.....
 You type:

1
 You see: ---Insert C:

You now have another prompt (C:) telling you that another commandword is necessary. Again, you can type a questionmark to see the commands available to you.

.....
 You type:

?
 You see: ---Insert C:
 Current Alternatives are:

This heading is followed by a list of commandwords, this time the "noun" type.

9. You choose the word Statement since you know that a statement is the basic component of the online system files.

.....
 You type:

s
 You see: ---Statement (to Follow) A:

You are again prompted to continue your command, this time with an A:, which you recognize is the prompt for ADDRESS. You type in a 0, since you want your statement to follow the header (name of the file) which is always statement 0.

.....
 You type:

U<CR>
 You see: ---Statement (to follow) A: 0
 L:

10. After you type in your address, another prompt appears (L:) which does not look familiar to you. Having had so much luck with using the ?, you try it once again.

```

.....
You type:
          ?
You see:
          L:
          Please type a LEVEL-ADJUST String:
.....

```

11. Alternatives follow the line requesting a LEVEL-ADJUST, but this time you probably do not know enough about the alternatives for them to be helpful to you. There is a help service that provides a way to get detailed information about the command you are using at the moment. You can obtain this information by typing a <CTRL-Q>.

```

.....
You type:
          <CTRL-Q>
You see:
          BASE
          ( )
          LEVEL-ADJUST:
.....

```

This is followed by a Help description which both explains the term and tells you what to do when presented with the prompt L:. You can now complete your command.

12. When you use <CTRL-Q> you are taken into a Help description and placed in the Help command. To return to Base from the Help command, you must now type the same <CTRL-X> that you used in step 5.

```

.....
You type:
          <CTRL-X>
You see:
          (Help) </T:
          BASE C:
.....

```


HELP SERVICES SAMPLE SESSION

13. Typing <CTRL-Q> aborts any command you were typing in when you hit <CTRL-Q>. Therefore you are now back at BASE C:, ready to insert a statement.

```

.....
You type:
        is0<CR><CR>You can get Help by typing an h
        at the herald or at BASE C:, followed by a
        term.<CR>
You see:
        BASE C: Insert C: Statement (to follow) A: 0
        L:
        T: You can get Help by typing an h at the
        herald or at BASE C:, followed by a term.
.....

```

14. After considering your first statement, you decide to add more to it. You know that Insert is the correct first term in your command, but you do not want to begin a new statement. To check other alternatives:

```

.....
You type:
        I?
You see:
        BASE C: Insert C:
        Current Alternatives are:
.....

```

15. Scanning the alternatives, Text looks like the most likely choice, but you are not sure what its effect will be. Two ways to obtain this information are available. The first, illustrated here, is to type a "t" for Text, then hit the <CTRL-Q>. An explanation of the command will follow.

```

.....
You type:
        t<CTRL-Q>
You see:
        ---Text (to follow) A:
        BASE
        ()
        TEXT: Insert Text (to follow) DESTINATION CONTENT
        OK:
.....

```

The second way to obtain this information is to type a <CTRL-X>, then use the Help command, typing in the words "insert text". Try this if you want more practice.

16. You return to Base and implement your command. You add text in the form of a sentence to statement 1 that will tell more about using help services.

.....
You type:

```
<CTRL-X>itl<SP>Using CTRL-Q also takes you to
Help, whereas typing a ? shows you a list of
Current Alternatives.
```

You see:

```
BASE C: Insert C: Text (to follow) A: 1
T: Using CTRL-Q also takes you to Help, whereas
typing a ? shows you a list of Current
Alternatives.
```

.....
To see how the completed statement now looks, type a \.

.....
You type:

\

You see:

```
BASE C: \
You can get Help by typing an h at the herald
or at Base C:, followed by a term. Using
CTRL-Q also takes you to Help, whereas typing
a ? shows you a list of Current Alternatives.
```

.....
17. You have completed the sample session and are familiar with help services. You can now delete your First-Aid file.

.....
You type:

```
cdfirst-aid<CR><CR>
```

You see:

```
BASE C: Delete C: File T: first-aid
OK:
```

```
Deleted Files Are:
<DIRECTORYNAME,FIRST-AIDE,NLS;1,> and its
partial copy
```

HELP SERVICES SAMPLE SESSION

SAMPLE SESSION SUMMARY

To be placed in the Help command:*

Type h for Help followed by the term to be defined.

Type <CTRL-Q> at any point to receive an explanation of what you are currently doing.

To return from Help to your current subsystem (e.g. Base):

Type <CTRL-X>.

To see a list of Current Alternatives:

Type ? after the prompt of the subsystem you are in (e.g. at BASE C:), or at any point during a command.

To find out the effects of any command:

Type h (for Help), followed by the command words, or type a <CTRL-Q> at some point in the command.

*NOTE: A printed version of the responses in the Help command is available, entitled "The NLS-8 Glossary." The Glossary differs somewhat from what you see at your terminal because it has been reformatted for printing. It may also differ because the online file has been updated since the last printing of the Glossary.

HELP SERVICES SAMPLE SESSION

(J25972) 6-JUN-75 13:21;;; Title: Author(s): Beverly Boli/BEV;
Distribution: /DIRT([ACTION]) ; Sub-Collections: SRI-ARC DIRT;
Clerk: BEV; Origin: < BOLI, HELP/SCENARIO.NLS;12, >, 5-JUN-75
18:10 BEV ;;;;
####;

EDITING SAMPLE SESSION II

Editing Sample Session II

SRI-ARC

6 JUN 75
Augmentation Research Center

STANFORD RESEARCH INSTITUTE
MENLO PARK, CALIFORNIA 94025

EDITING SAMPLE SESSION II

This journal item supercedes the earlier one on Editing Sample Session II. A spacing problem slipped by in the first Final Version. Dee--would you please put this Version in the Dirt Notebook, rather than the other. (Should be NLS;7 rather than NLS;6.) Thanks.

EDITING SAMPLE SESSION II

INTRODUCTION

The online computer system you will be using directly responds to what you type at your terminal. This system has facilities to let you do almost everything you need with text: compose it; edit it; send it to (and receive it from) other persons; file it in one or more categories; cite and easily obtain documents; search for documents by author and subject; search in documents by word or phrase; and print in practically any format. See the "Preface to NLS Tools" for a more complete description of the system.

The "Editing Sample Session II" is designed to build on the skills acquired in the "Editing Sample Session I." You will create a first draft of a report and revise it into a more polished form. To accomplish this, the sample session shows you how to perform specific tasks which can be applied generally whenever you want to modify text online.

Throughout this sample session we spell out the sequence of keys you will strike to make something happen and explain to you what the results should be. Keys that do not print, such as carriage return and altmode (called "escape" on some terminals), are named inside angle brackets, e.g. <CR>, <ALT>. <Sp> represents a space. The control key <CTRL> is used like the shift key. You hold it down while you type the letter that is after the hyphen. The notation for control key is <CTRL-(some character)>.

Some control keys to remember...

- <CTRL-X> aborts commands before you have typed a <CR>.
- <CTRL-O> stops printing.
- <CTRL-A> deletes the character you have just typed.
- <CTRL-W> deletes the word you have just typed.
- <CTRL-G> provides an explanation of the current location in command space.

When you see <CR>, use the return or carriage return on your keyboard.

EDITING SAMPLE SESSION II

INSTRUCTION

1. To begin this sample session you first need to create a work space. To do so, create a file called "Editing".

```

.....
You type:
          <SF>crfediting<CR>
You see:
          BASE C: Create C: File T: editing
          <DIRECTORYNAME, EDITING.NLS;1,>
.....

```

2. You are going to transcribe, or write, the first draft of an online report on editing commandwords, then polish this draft by using editing commands. You will "write" your initial draft by using the Insert Statement command and the OKINSERT.

```

.....
You type:
          is0<CR><CR>This report will cover a few commands
          we've learned thus far.<CTRL-E>
You see:
          BASE C: Insert C: Statement (to follow) A: 0
          L:
          T: This report will cover a few commands we've
          learned thus far.
.....

```

3. Since you ended your last command with the <CTRL-E>, you can now insert a series of statements without repeating the commandwords. There are some intentional errors in the text which you will be inserting. Try to type in exactly what you see so that you can successfully work through all of the later steps in the sample session.

.....
 You type:

<CR><CR>Insert: This command allows yu to add, duplicate, or create information in a file. The command Insert Statement was presented in the "Editing Sample Session I." This sample scenario adds Insert word and Character.<CR>

You see:

L:
 I: Insert: This command allows yu to add, duplicate, or create information in a file. The command Insert Statement was presented in the "Editing Sample Session I." This sample scenario adds Insert word and Character.

.....Continue in this mode,.....
 adding the following six statements:

Replace: This command allows you to erase a STRING or STRUCTURE at a specified DESTINATION and put in some other content.

Delete: Delete erases something that you specify, such as a character or statement, from the DESTINATION you specify. This command was introduced in the "Editing Sample Session I."

Copy: The Copy command is used to reproduce a SOURCE (such as STRING or STRUCTURE) at a specified place.

Substitute: 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. Substitute is the most common editing command used on the typewriter terminal.

Move: This command is being introduced in this sample scenario. Move transfers a specified SOURCE (such as STRING or STRUCTURE) to a DESTINATION you specify.

Transpose: Transpose allows you to make STRINGS or STRUCTURES trade places.

.....

EDITING SAMPLE SESSION II

4. Now that you've written your first draft, you will want to see it. The quickest way to have your whole file printed is through the Print File command.

```
.....
You type:
          pf<CR>
You see:
          BASE C: Print C: File OK:
          < DIRECTORYNAME, EDITING.NLS;1, >
.....
```

Following the origin statement (shown above), appears the contents of your new file. You can now review it for corrections and additions.

5. The first obvious error is in statement 2, where "you" is misspelled. The command Insert Character can correct this error. You type the command with the statement number and the letter "y" for your ADDRESS. The character will be inserted after the last character in your ADDRESS.

```
.....
You type:
          ic2<SP>"y"<CR>o<CR>
You see:
          BASE C: Insert C: Character (to follow) A: 2 "y"
          T: o
.....
```

You must always be sure that your ADDRESS is unique to insure that the character is inserted in the right place. In this case "y" was sufficient since there were no other y's in the statement.

6. The next revision you want to make is also in statement 2. To clarify the last sentence, you decide to add the word "Insert" after "and". To do so, use the Insert Word command.

```
.....
You type:
          iw2<SP>"<SP>and"<CR>insert<CR>
You see:
          BASE C: insert C: word (to follow) A: 2 " and"
          T: insert
.....
```

EDITING SAMPLE SESSION II

Again, you needed a unique STRING for your ADDRESS. You typed "<SP>and" to distinguish the STRING from the letters "and" in the word "command".

7. Your next correction is in statement 4, where you want to delete the unnecessary word "which". You will use the Delete Word command.

.....
You type:

dw4<SP>"which"<CR><CR>

You see:

BASE C: Delete C: Word (at) A: 4 "which"
OK:

.....

8. In statements 2 and 7 you want to substitute the word "session" for "scenario". To make both edits simultaneously, execute the Substitute Word (in) Branch command, using your origin statement (statement 0) as your ADDRESS.

.....
You type:

swb0<CR>session<CR>scenario<CR><CR>

You see:

BASE C: Substitute C: Word (in) C: Branch (at)
A:0

(New WORD) T: session

(Old WORD) T: scenario

(Finished?) S/Y/N:

Substitute in Progress

Substitutions made: 2

.....

9. You would like your report to tell which of the command words the user has been introduced to in "Editing Sample Session I." Statements 2 and 4 already include this information, but you have neglected to add it to statement 6. The most efficient way to do this might be to simply copy some appropriate text from statement 2 or 4. The last sentence in statement 4 is suitable.

EDITING SAMPLE SESSION II

```

.....
You type:          ct4<SP>"y."<CR>4<SP>+e<CR>6<SP>+e<CR>
You see:          BASE C: Copy C: Text (from) A: 4 "y."
                  (through) A: 4 +e
                  (to follow) A: 6 +e
.....

```

Again, you must be careful to use a unique STRING in the ADDRESS. Notice that this command copies text beginning after the last character in the first ADDRESS STRING. By typing "y," you copied the following two blank spaces, providing proper spacing at the DESTINATION.

10. The next revision is to completely rewrite statement 1, which may seem inadequate to you. You will delete it and put a new one in its place by using Replace Statement.

```

.....
You type:          rs1<CR>This report defines some of the editing
                  commandwords presented in the "Editing Sample
                  Sessions I and II."
You see:          BASE C: Replace C: Statement (at) A: 1
                  (by) T: This report defines some of the editing
                  commandwords presented in the "Editing Sample
                  Sessions I and II."
.....

```

11. The text looks pretty good to you now, so you examine the structure of your report. You decide to reorder your statements according to the commandwords learned in each sample session; the statements defining "insert," "substitute," and "delete" will precede the other statements. First move statement 6 to follow statement 2.

```

.....
You type:          ms6<CR>2<CR><CR>
You see:          BASE C: Move C: Statement (from) A: 6
                  (to follow) A: 2
                  L:
.....

```

EDITING SAMPLE SESSION II

Notice that you are prompted for a level. You can use the <CR> to indicate that you want the level of statement 6 to be the same as statement 2.

12. You need to make one more structural change. This time you can simply switch the order of two statements. However, you must remember that the numbers of some of your statements have changed, since you moved statement 6 to follow 2. The former statement 6 is now statement 3; former statement 3 has become 4, etc.

If you think you might become confused you could print your file beginning with statement 3 by using the Jump command and Print Rest (see "Editing Sample Session I"). However, since you have only made one change at this point, this is probably not necessary.

You now want to transpose the statements beginning with "Replace:" and "Delete:". You make a note of their new statement numbers, and are ready to go.

.....
You type:

ts4<CR>5<CR><CR>

You see:

BASE C: Transpose C: Statement (at) A: 4
(and) A: 5
OK:
.....

13. You have completed your revisions and would like to print your new version at your terminal. One way of doing this is to Jump to the beginning of your file (the origin statement), and use the Print Rest command.

.....
You type:

jo<CR><CR>

You see:

BASE C: Jump (to) C: Origin A: V:
.....

This command asks for an ADDRESS and allows you to change your viewspecs. You type a <CR> to indicate the ADDRESS of the file you have loaded, and another <CR> to keep the same viewspecs.

EDITING SAMPLE SESSION II

14. The previous command has taken you to the origin statement of your file. Print Rest will now show you all of the statements after statement 0.

```
.....
You type:
          pr<CR>
You see:
          BASE C: Print C: Rest OK:
          <DIRECTORYNAME, EDITING.NLS;1,> , DATE
          TIME IDENT ;;;
.....
```

This is then followed by the contents of your file.

15. Now that you have completed work on your file you will want to do Update File, a command that creates a "new" version of your file by incorporating into it all of the modifications you have made at this time.

```
.....
You type:
          uf<CR>
You see:
          BASE C: Update C: File OK/C:
          <DIRECTORYNAME, EDITING.NLS;2, >
.....
```

EDITING SAMPLE SESSION II

SAMPLE SESSION SUMMARY

Insert Character:

Inserts a character to follow the last character you specified in the ADDRESS.

Insert Word:

Inserts a word to follow the word that contains the last character in the ADDRESS. Insert Word will not break a word in the old text.

Delete Word:

Deletes the word containing the last character in the ADDRESS typein.

Substitute Word:

Substitutes a word in one designated STRUCTURE for another word.

Copy Text:

Copies text from the last character in a SOURCE ADDRESS to follow the last character in the DESTINATION ADDRESS.

Replace Statement:

Replaces an existing statement with a new one.

Move Statement:

Transfers a specified statement to a specified ADDRESS.

Transpose Statement:

Changes the order of two designated statements.

EDITING SAMPLE SESSION II

Jump (to) Origin:

Moves you to the origin statement (header) of the file you specify.

Update File:

Creates a new version of a file by incorporating into it all of the modifications made since its creation or the last update.

EDITING SAMPLE SESSION II

(J25973) 6-JUN-75 14:38;;; Title: Author(s): Beverly Boli/BEV;
Distribution: /DIRT([ACTION]) ; Sub-Collections: SRI-ARC DIRT;
Clerk: BEV; Origin: < BOLI, EDIT2-SS.NLS;7, >, 6-JUN-75 14:28
BEV ;;;;
####;

Recommendation on Configuration and Operation of the ISIC System for
ARC

1 Introduction

1

1a Since March 1 ARC has been obtaining its PDP-10 Tenex computer support from BBN over the ARPANET accessed through a PDP-11 running ELF. The results have been very unsatisfactory. Working with BBN uncovered a number of problems with the ARPANET and its configuration. Some of these have been resolved, others have not. We were the first large scale ELF users and had to invest fairly heavily in its debugging and stabilization. Tenex 1.33 with its pie slice scheduler has not been distributing its power fairly, proportional to dollar purchase amounts for the job mix running at BBNB. For example, there are only four people sharing a 40% pie slice, the load average is close to 20 and it has taken me three hours to do a 45 minute job of preparing this note. Some doubts exist in our minds as to the adequacy of a disk swapping system for swap oriented user systems such as NLS. Reliability problems have also been high for periods of time.

1a

1b Other problems have existed, primarily administrative, in trying to do system development work without being able to have an ARC person with the appropriate wheel level status.

1b

1c Throughout this period all parties at BBN, ISI, and SCRL with whom we have worked have been very cooperative and have done what they could within their resource limits to work on the above problems.

1c

1d On July 1 we will be moving the bulk of our development activity to an ARPA owned PDP-10 Tenex (ISIC) at USC-ISI. We desperately need to improve the quality of responsiveness and support we are receiving if we are to meet our ARPA NSW commitments.

1d

2 Recommendations

2

2a 1) Provide support to BBN to improve the Tenex 1.33 scheduler to more fairly distribute critical resources to swap as well as compute bound classes of jobs. We believe that the small investment will be repaid several times over from the Tenex user community's improved productivity.

2a

2b 2) Provide a minimum 512K core 3 3330 type disk drive ISIC system (we think a two controller system with 2-3 drives on each probably even better).

2b

2c 3) Allow at least one ARC person "wheel" status.

2c

Recommendation on Configuration and Operation of the ISIC System for
ARC

2d 4) Until the extra memory arrives allow ARC more than the "50%" of the system it is scheduled to have.

2d

2e 5) Operate the group allocation system to limit users in each pie slice until BBN demonstrates their improved scheduler provides adequate protection between user groups in different pie slices.

2e

3 Tests Leading to 512K Core Recommendation

3

3a There is no developed methodology for interactive system benchmarking (this is an area worthy of research support). Therefore, we consider our tests somewhat crude, and the amount of data gathered somewhat sparse given the two evenings available for the tests. In spite of these qualifications we think the data indicative enough to go out on a limb and recommend that it is better to run 512K core for a system with a swap oriented NLS load than with disk only or drum swapping. The raw data will be supplied in a separate message to follow this one and an additional set of tests are planned to be run at BBNB within the next week or two.

3a

3b The test consisted of the following methodology. The same tests were run at SRI-AI (256K core and large Bryant swapping drum) and ISIC (512K core 2 disk drive swapping, and 256K 2 disk drive swapping). The data from the latter test is incomplete because of hardware problems.

3b

3c Three sample NLS sessions were recorded. These were run for each test from our PDP-11 ELF through the ARPANET. Two dummy jobs were created to drive up the load. One created additional compute bound forks; the other created a heavy swapping load by touching many pages. All jobs were logged into a single pie slice and we were the only user. Under the heavy swapping load the tests tend to show the 256K ISI system saturating with the five minute load average between 4-6, the SRI-AI system saturating with load average between 6-8, and the 512K ISI system while increasing job completion time as the load increased, not saturating until out around a load average of 10 or greater. Saturation is probably the incorrect term for the 512K ISI case as the curves do not show the sharp upward sweep of the others, but job completion time and subjective real user judgment showed that response was unacceptable beyond this point (for whatever meaning load average still has under the pie slice scheduler, load averages at BBNB tend to run between 10 and 20 a very high percentage of the time).

3c

3d Under the compute bound load we have no good data for the 256K ISI configuration as our PDP-11 developed hardware troubles at

Recommendation on Configuration and Operation of the ISIC System for
ARC

this point. The data for two sessions run on the 512K ISI and SRI-AI systems show improved performance for the ISI system out to around a load average of 8 and then a cross over with the SRI-AI system showing better performance beyond. A third test showed better ISI performance as the load increased.

3d

3e we collected several types of data during the test, elapsed time, CPU time for each session, disk drum reads and writes, time to specify various phases of NLS commands, etc. For one session the following elapsed time versus 5 minute load average data was collected. It is typical of the other two. The data is given as pairs (five minute load average, elapsed time in minutes to complete session).

3e

3f Swap Load

3f

3g ISI 256K (2.3,5) (4.5,8) (5.6,10) (7,17)

3g

3h ISI 512K (2.5,5) (4.2,7) (8.1,13) (10.5,17)

3h

3i SRI-AI (3.6,6) (5,9) (8,19)

3i

3j Compute Load

3j

3k ISI 256K No data

3k

3l ISI 512K (2.5,5) (5.5,6) (8.5,12) (10.2,15)

3l

3m SRI-AI (3.6,6) (7,9) (8.5,11)

3m

3n CPU time tended to be almost constant under increasing compute bound load. Under swap bound load two cases showed the CPU time increasing and then leveling off for the 512K ISI case and monotonically increasing for the SRI-AI case. The third case showed the reverse, which I am at a loss to explain.

3n

3o Ideally we would want to duplicate the tests, run them on BBNB, run the load averages up higher and possibly wait for the improvements in the scheduler BBN thinks possible and run them again. However, given the short time until July, and the general usefulness of gaining real operational experience on a 512K system and because of the possible value this may have for other PDP-10 Tenexes, I feel that going to the 512K system is valid at this point. If later tests should show that 256K with more disk drives and improved scheduler are truly equivalent, then the extra 256K can be used on some new PDP-10 being brought up by ARPA or an ARPA contractor.

3o

RWW 6-JUN-75 14:42 25974

Recommendation on Configuration and Operation of the ISIC System for
ARC

(J25974) 6-JUN-75 14:42;;; Title: Author(s): Richard W. Watson/RWW;
Distribution: /SRI-ARC([INFO-ONLY]) ; Sub-Collections: SRI-ARC;
Clerk: RWW; Origin: < WATSON, ISIC.NLS;6, >, 6-JUN-75 13:55 RWW
;;;####;

Proposed Outline for Documentation Presentation June 10

This is the proposed outline of what the documentation group will show to, and discuss with, Carlson on June 10.

Proposed Outline for Documentation Presentation June 10

1 OUTLINE FOR DOCUMENTATION PRESENTATIONNN FOR CARLSON'S VISIT, TUES. JUNE 10.	1
1a NSW User Documentation--Sample documents and discussion	1a
1a1 Offline	1a1
1a1a Sample sessions	
Copy of Secretarial Functions Guide outline	
Glossary	
Introductions to tools	
Preface to NLS Tools	1a1a
1a2 Online	1a2
1a2a Ask if they want to see a demo of Help. If so, discuss what still needs to be done to improve Help. Also, discuss the multifile Help system.	1a2a
1b Documentation Production (using NLS)	1b
1b1 Demonstrations	1b1
1b1a Air Force format	
Modify command	
Tabs (if time)	1b1a
1b2 Dirk will discuss complexity of introducing NLS production in an environment not familiar with the system.	1b2
1b3 Show segment of Videotape on WUC (mainly to illustrate a rapid system)	1b3

Proposed Outline for Documentation Presentation June 10

(J25975) 6-JUN-75 15:30;;; Title: Author(s): Kirk E. Kelley, Dirk
H. Van Nouhuys, Beverly Boli/KIRK DVN BEV; Sub-Collections: SRI-ARC;
Clerk: BEV; Origin: < BOLI, DEMO.NLS;2, >, 6-JUN-75 15:11 BEV
;;;#####

Visitors June 9-13

1 Carlson's visit	1
1a Introduction	1a
1a1 We will be hosting three visitors monday and tuesday: Bill Carlson (ARPA-IPTC), Norm Rasmussen (MIT), Larry Crain (AF-DSDC). There are many many things to talk about and do so it will be difficult to show all the things we want. It is important to allow the demos and discussions scheduled to be directed by our visitors questions.	1a1
1b Monday	1b
1b1 0900-0930	1b1
1b1a welcome (rww jbp)	1b1a
1b2 0930-1000	1b2
1b2a Carlson talks about NSW and what he wants to see during his visit (arc)	1b2a
1b3 1000-1030	1b3
1b3a Overview of arc's NSW project efforts (rww jbp)	1b3a
1b4 1030-1100	1b4
1b4a Status report by each of Protocols (jew), Front End (chi), NLS (ekm), and Documentation (dvn)	1b4a
1b5 1100-1130	1b5
1b5a Description of NLS, breakdown of components (chi)	1b5a
1b6 1130-1200	1b6
1b6a Discussion	1b6a
1b7 1200-1300	1b7
1b7a Lunch	1b7a
1b8 1300-1400	1b8
1b8a Discussion of CML, L10, and Tree Meta (dia, chi)	1b8a
1b8b Demonstration of CLI on 10 and 11 (chi)	1b8b

Visitors June 9-13

1b9 1400-1545	1b9
1b9a Discussion and demonstration of programming environment (hq1)	1b9a
1b9b Demonstration of debugging and discussion of new debugger (kev)	1b9b
1b10 1545-1600	1b10
1b10a Discuss the Network Information Center (jake)	1b10a
1b11 1600-1700	1b11
1b11a Meeting with applications (arc-app)	1b11a
1b11b Followed by dinner with dce jcn rww	1b11b
1c Tuesday	1c
1c1 0900-1000	1c1
1c1a Discussion of Protocol Design (rww jbp jew)	1c1a
1c2 1000-1030	1c2
1c2a Discussion of file system changes (rlb2)	1c2a
1c3 1030-1100	1c3
1c3a Demonstration of Graphics (rlb2 pooh)	1c3a
1c4 1100-1200	1c4
1c4a Discussion of documentation (dvn bev)	1c4a
1c4b Demonstration of document production (kirk)	1c4b
1c5 1200-1300	1c5
1c5a Lunch	1c5a
1c6 1300-1500	1c6
1c6a Discussion of NSW Demo (15 Aug 75) (rww jbp ekm chi pooh)	1c6a
1c7 1500-1700	1c7

Visitors June 9-13

1c7a General discussion and summary of the visit (rww jbp)

1c7a

2 Protocol Meeting

2

2a We will be hosting a NSW Protocol meeting on wednesday, thursday, and friday. There will be about 12 people attending this meeting. ARC people also attending will be rww jbp jew llg and (part of the time) chi.

2a

2b These visitors will be primarily involved in the meeting, but will also be interested in our latest developments, we should be prepared to demonstrate on short notice graphics, debugging, and partially working NSW things (i.e. CLI, middle-end).

2b

2c These people will also want to use terminals now and then to read their mail and send messages, so we should be prepared to help them do so.

2c

JBP 6-JUN-75 18:14 25976

Visitors June 9-13

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