SLJ 30-OCT-74 12:50 24362

text editor demo

at approximately 10:00 am tomorrow (thursday) there will be a demo in our conference room of a 3M cassette device with built-in editing capabilities. It uses a TI type terminal, and also has a 2400 baud modem interface. ---MEH

1

SLJ 30-OCT-74 12:50 24362

text editor demo

(J24362) 30-OCT-74 12:50;;;; Title: Author(s): Sandy L. Johnson/SLJ; Distribution: /SRI-ARC( [ ACTION ] ) ; Sub-Collections: SRI-ARC; Clerk: SLJ;

DCE 30-OCT-74 14:42 24363

McKenzie and Rehbehn of NAVCOSSACT to visit on 5 Nov 74

Dick Watson will be main host

McKenzie and Rehbehn of NAVCOSSACT to visit on 5 Nov 74

Visitors: Doug McKenzie and John Rehbehn, NAVCOSSACT
(Rehbehn is McKenzie's "boss's boss") 1

Date of visit: 5 Nov 74, Tuesday, all day. 1a

Slated to be main host: Dick Watson (McKenzie will ask for him -- I will be in Washington) 1b

McKenzie's phone: (202) 433-3522 1c

Doug McKenzie called today; he had planned on a visit to ARC since my last meeting with him, in Washington, at SRI-DC on 19 Sep 74 (see the page and a half of notes in -- MJOURNAL, 24142,). This call was to make final arrangements for that visit. 2

Relationship of this NAvCOSSACT activity with NSW: 3

During our previous visit, I had given him Bill Carlson's name, suggestng that NAVCOSSACT might well consider following its "software augmenting" plan by joining into the ARPA-coordinated, DOD-community, NSW cooperative. The next day I gave McKenzie's name to Bill Carlson (see my notes on talking with Carlson -- MJOURNAL, 24136, 9:wg). 3a

McKenzie told me that Carlson had subsequenly called him about NSW participation. It seems, though, that NAVCOSSACT had previouly been approached, by Steve Crocker, about NSW particpation, but had decided for some reason not to participate in NSW but rather to pursue its indpendent way of boosting software productivity (as outlined to me by McKenzie and Sorkowitz -- 24142,). 3b

As per my previously cited discussion with Carlson, we are free then to participate with NAVCOSSACT in its venture in any way we and the might work out -- including their buying from our Utility any of the NSW services that we wish to provide. (I assume that we will do all we can, for our SEAS Community, to make available to our Utility clients almost any of the signifiant tools generally being made available to NSW participants.) 3c

I explained to Doug McK, about the division of responsibilities between Dick Watson and Jim Norton. Although they may well begin any business dealings with us by buying Utility service, it seems that specialized talk about software application and workshop development with ARC Development staff is what should occupy most of this coming visit. Dick should see that Jim Norton has whatever get-acquainted time he'd like with the visitors during the day. 4

McKenzie and Rehbehn of NAVCOSSACT to visit on 5 Nov 74

McKenzie mentioned that they didn't anticipate launching any significant activity until FY 76 (beginning next July). 5

Note: It seems appropriate for them to give a group briefing of NAVCOSSACT activities and plans to ARC. 6

I'd like Dirk to be included -- special DPCS problems and discussions may be appropriate, and can be worked out between Dick and Dirk. 6a

DCE 30-OCT-74 14:42 24363

McKenzie and Renbenn of NAVCOSSACT to visit on 5 Nov 74

(J24363) 30-OCT-74 14:42;;;; Title: Author(s): Douglas C. Engelbart/DCE; Distribution: /RWW( [ ACTION ] ) JCN( [ ACTION ] ) DVN( [ ACTION ] ) SRI-ARC( [ INFO-ONLY ] ) ; Sub-Collections: SRI-ARC; Clerk: DCE;

CHI 30-OCT-74 17:52 24364

Patches needed to bring NLS up at ISI

Things I had to do to bring nls up at ISI-b: 1

change getuident to ask user for ident and not use <system>group.index for ident checking. 1a

change checklibe to return a zero 1b

changed maywrt and ckdira to avoid issuing CHKAC jsysy 1c

changed ddt so it would not use TSNDA jsys 1d

changed nlcrms to return immediatley 1e

changed jsubmit to call err with msg saying journal not enabled for this host 1f

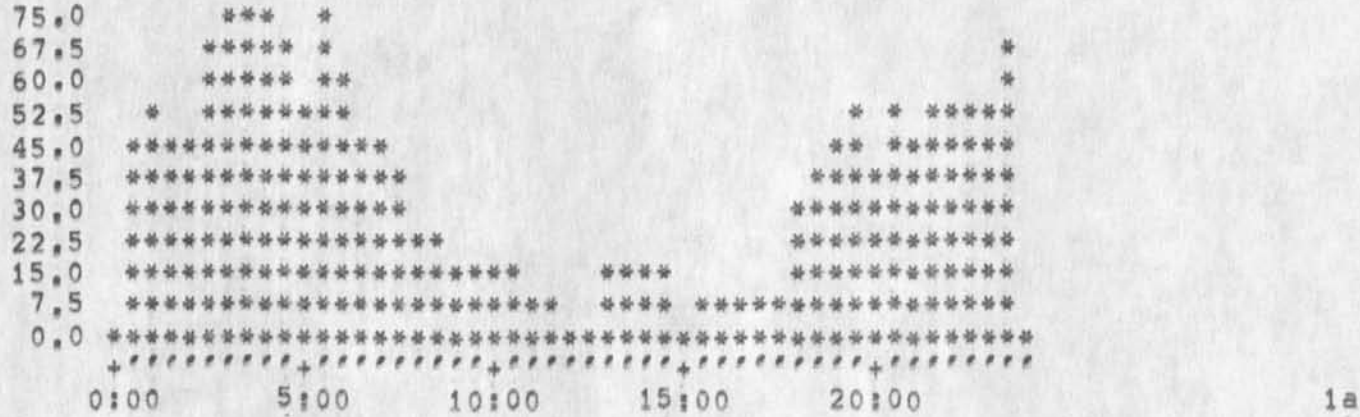
CHI 30-OCT-74 17:52 24364

Patches needed to bring NLS up at ISI

(J24364) 30-OCT-74 17:52;;;; Title: Author(s): Charles H. IrbY/CHI;
Distribution: /NPG( [ INFO-ONLY ] ) JDH( [ INFO-ONLY ] ) ;
Sub-Collections: SRI-ARC NPG; Clerk: CHI;

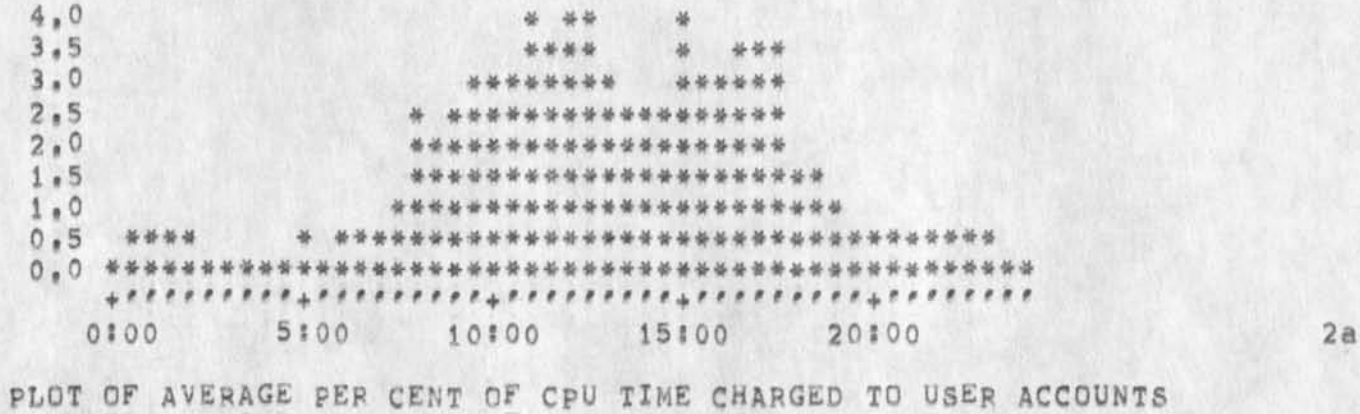
Superwatch Average Graphs for Week of 9/22/74

TIME PLOT OF AVERAGE IDLE TIME FOR WEEK OF 9/22/74
x axis labeled in units of hr:min, xunit = 30 minutes 1



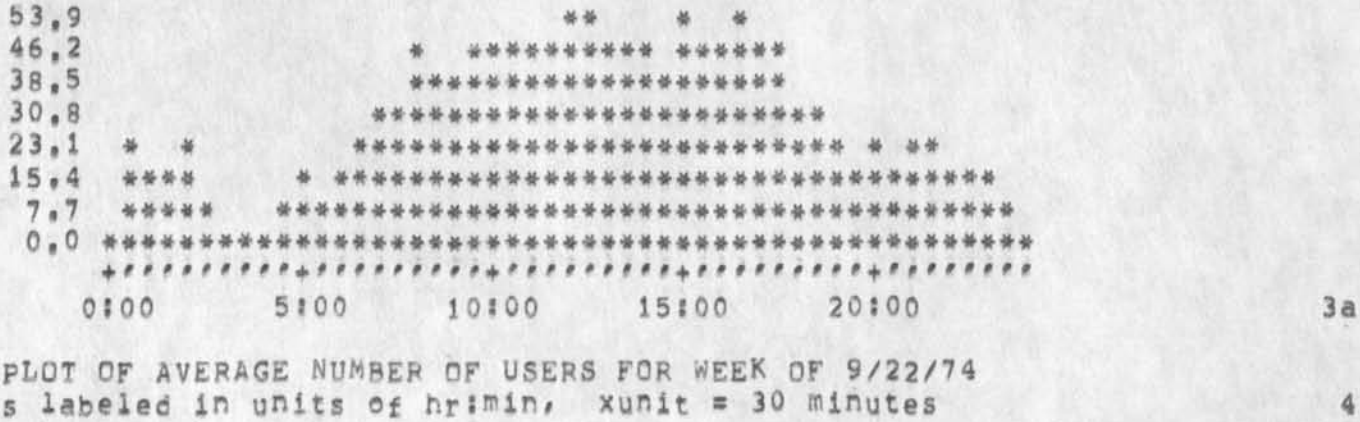

1a

TIME PLOT OF AVERAGE NUMBER OF GO JOBS FOR WEEK OF 9/22/74
x axis labeled in units of hr:min, xunit = 30 minutes 2




2a

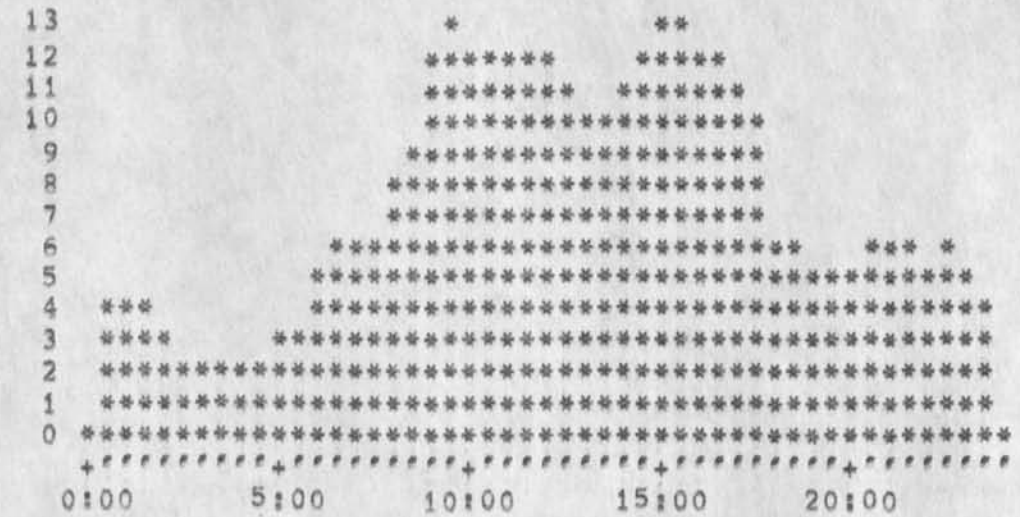
TIME PLOT OF AVERAGE PER CENT OF CPU TIME CHARGED TO USER ACCOUNTS
FOR WEEK OF 9/22/74
x axis labeled in units of hr:min, xunit = 30 minutes 3




3a

TIME PLOT OF AVERAGE NUMBER OF USERS FOR WEEK OF 9/22/74
x axis labeled in units of hr:min, xunit = 30 minutes 4

Superwatch Average Graphs for Week of 9/22/74




4a

TIME PLOT OF AVERAGE NUMBER OF NETWORK USERS FOR WEEK OF 9/22/74
x axis labeled in units of hr:min, xunit = 30 minutes

5


5a

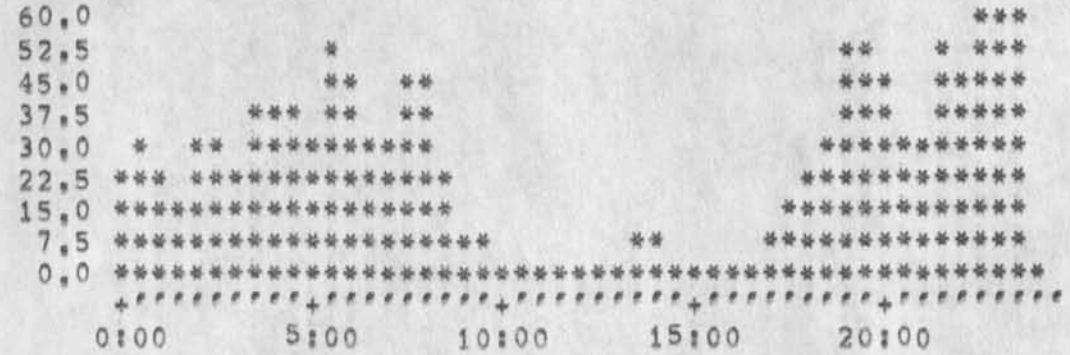
SRL 31-OCT-74 06:11 24365

Superwatch Average Graphs for Week of 9/22/74

(J24365) 31-OCT-74 06:11;;;; Title: Author(s): Susan R. Lee/SRL;
Distribution: /JCN( [ INFO-ONLY ] ) RWW( [ INFO-ONLY ] ) DCE( [
INFO-ONLY ] ) JCP( [ INFO-ONLY ] ) DVN( [ INFO-ONLY ] ) JAKE( [
INFO-ONLY ] ) DLS( [ INFO-ONLY ] ) DSM( [ INFO-ONLY ] ) CSM( [ INFO-ONLY
] ) RLL( [ INFO-ONLY ] ) ; Sub-Collections: SRI-ARC; Clerk: SRL;
Origin: < LEE, WEEK9/22GRAPHS,NLS;2, >, 3-OCT-74 07:46 SRL
;;;;<LEE>WEEK9/22GRAPHS,NLS;1, 2-OCT-74 13:12 SRL ;####;

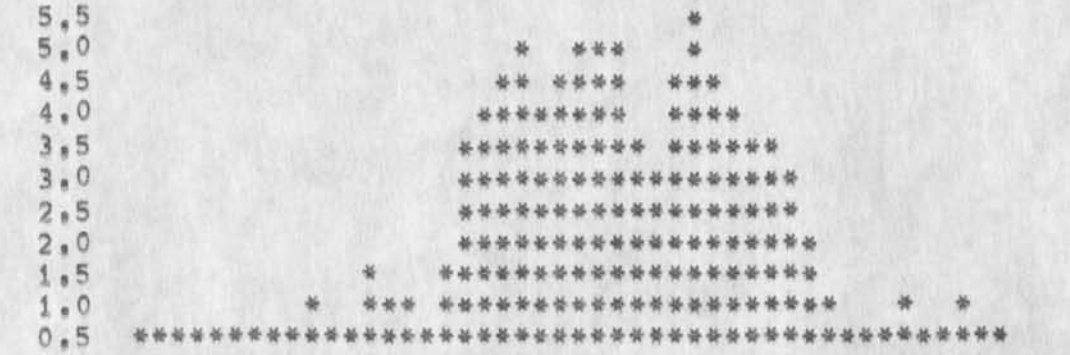
Superwatch Average Graphs for Week of 10/20/74

TIME PLOT OF AVERAGE IDLE TIME FOR WEEK OF 10/20/74
x axis labeled in units of hr:min, xunit = 30 minutes 1



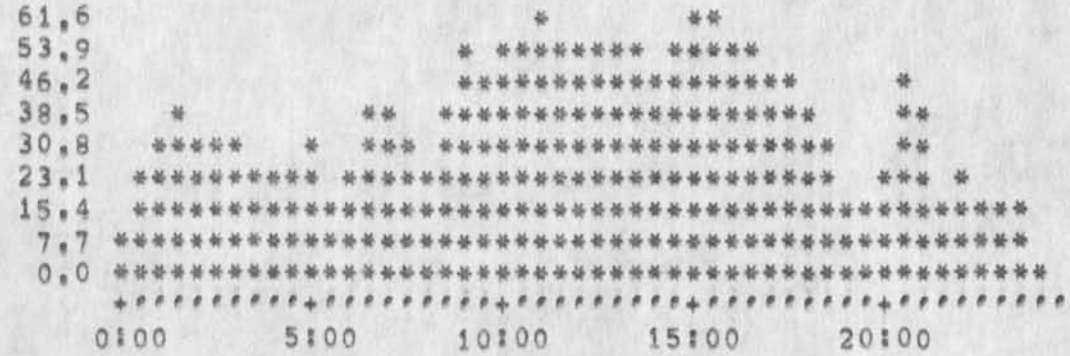

1a

TIME PLOT OF AVERAGE NUMBER OF GO JOBS FOR WEEK OF 10/20/74
x axis labeled in units of hr:min, xunit = 30 minutes 2




2a

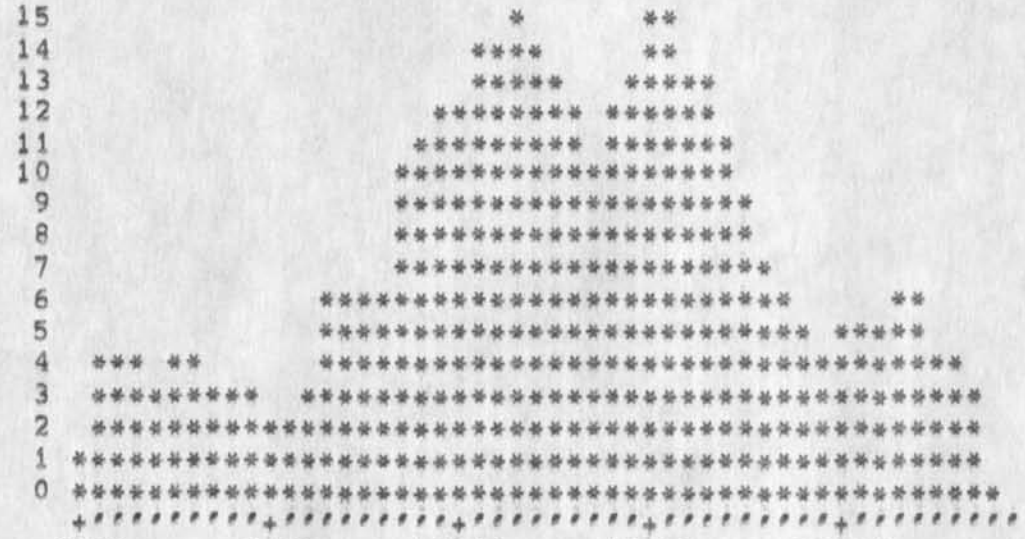
TIME PLOT OF AVERAGE PER CENT OF CPU TIME CHARGED TO USER ACCOUNTS
FOR WEEK OF 10/20/74
x axis labeled in units of hr:min, xunit = 30 minutes 3




3a

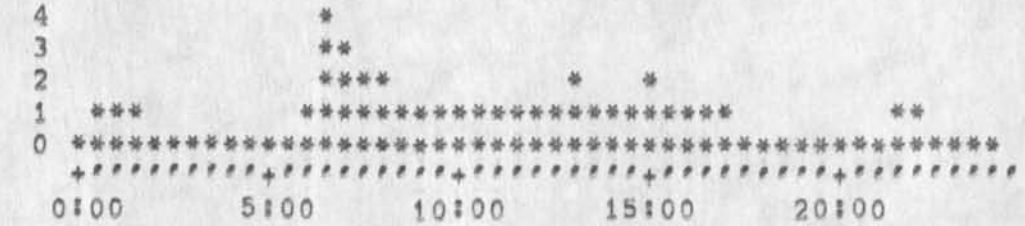
Superwatch Average Graphs for Week of 10/20/74

TIME PLOT OF AVERAGE NUMBER OF USERS FOR WEEK OF 10/20/74
x axis labeled in units of hr:min, xunit = 30 minutes 4



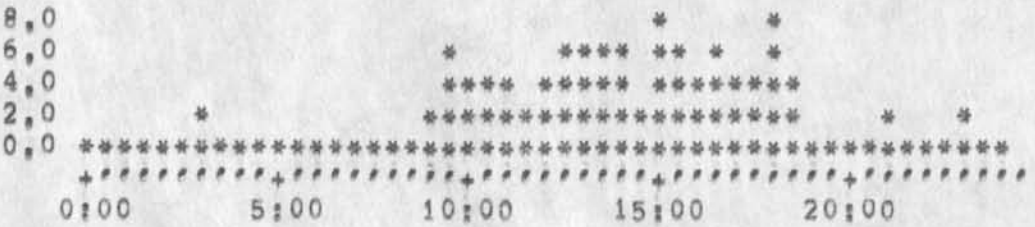

4a

TIME PLOT OF AVERAGE NUMBER OF NETWORK USERS FOR WEEK OF 10/20/74
x axis labeled in units of hr:min, xunit = 30 minutes 5




5a

TIME PLOT OF AVERAGE PER CENT OF SYSTEM USED IN OLDDNLS (?) FOR WEEK OF 10/20/74
x axis labeled in units of hr:min, xunit = 30 minutes 6




6a

SRL 31-OCT-74 08:04 24366

Superwatch Average Graphs for Week of 10/20/74

(J24366) 31-OCT-74 08:04;;;; Title: Author(s): Susan R. Lee/SRL;
Distribution: /RWW( [ INFO-ONLY ] ) JCN( [ INFO-ONLY ] ) DCE( [
INFO-ONLY ] ) JCP( [ INFO-ONLY ] ) DVN( [ INFO-ONLY ] ) JAKE( [
INFO-ONLY ] ) DLS( [ INFO-ONLY ] ) DSM( [ INFO-ONLY ] ) CSM( [ INFO-ONLY
] ) RLL( [ INFO-ONLY ] ) ; Sub-Collections: SRI-ARC; Clerk: SRL;
Origin: < LEE, WEEK10/20GRAPHS.NLS;1, >, 31-OCT-74 08:02 SRL
;;;;<LEE>WEEK10/20GRAPHS.NLS;1, 31-OCT-74 07:52 SRL ;####;

DVN 31-OCT-74 09:11 24367

Question about Conformation of the Lineprocessor User's Guide to Specificatons

Particularlly in organization, the Lineprocessor User's Guide does not conform to the specifications set out in (journal,24335,lb, Don, since 24335 was the first I learned of those specifications but I have spoken to you several times in the intervening weeks, I wonder if you think the guide fulfilles users' needs except as we noted in our last conversation? 1

DVN 31-OCT-74 09:11 24367

Question about Conformation of the Lineprocessor User's Guide to Specificatons

(J24367) 31-OCT-74 09:11;;;; Title: Author(s): Dirk H. Van Nouhuys/DVN; Distribution: /DIA( [ ACTION ] ) JOAN( [ ACTION ] for DIRT notebook) DIRT( [ INFO-ONLY ] ) ; Sub-Collections: SRI-ARC DIRT; Clerk: DVN;

DVN 31-OCT-74 09:42 24368

Your Help With <vannouhuys,septline,>

It looks neat tom me, I am going to circulate this version to Don and Martin.....While we're at it, I would appreciate your thoughts on a draft of a brief document on INLS addressing, in <hamilton,tnisaddressing,>.

1

DVN 31-OCT-74 09:42 24368

Your Help with <vannouhuys,septline,>

(J24368) 31-OCT-74 09:42;;;; Title: Author(s): Dirk H. Van Nouhuys/DVN; Distribution: /JOAN( [ ACTION ] dirt and DPCS notebooks please) JMB( [ ACTION ] ) ; Sub-Collections: SRI-ARC; Clerk: DVN;

JAKE 31-OCT-74 11:16 24369

Now we are official

Hi, Ho, everybody! In answer to a request from some of our erstwhile members I have set up the ident APOP for the SRI-ARC Applications and Operations Group. Since I may not have included everybody, will you all take a look at the membership and let me know who is missing. (Marcia, as you can see I got past 'exceed capacity' glitch.) Jake 1

JAKE 31-OCT-74 11:16 24369

Now we are official

(J24369) 31-OCT-74 11:16;;;; Title: Author(s): Elizabeth J. (Jake) Feinler/JAKE; Distribution: /APOP( [ INFO-ONLY ] ) ; Sub-Collections: SRI-ARC APOP; Clerk: JAKE;

JHB 31-OCT-74 11:28 24370

Need for an OK in the Sendmil Command: Send the Mail.

I support RLL's request (24232,) and note that other users have had the same problem: that I like to do a show status command in sendmail before sending the item, however, if I forget the space and continue to type without looking (SH <CA>) I have found out that I have sent the mail. My recommendation is to have an additional <CA> (as a OK) needed to send the mail.( This is one of the few times I am in favor of aditional strokes.)

1

JHB 31-OCT-74 11:28 24370

Need for an OK in the sendmil Command: Send the Mail.

(J24370) 31-OCT-74 11:28;;;; Title: Author(s): James H. Bair/JHB; Distribution: /FDBK( [ ACTION ] ) FEEDBACK( [ ACTION ] ) FEED( [ ACTION ] ) JDH( [ INFO-ONLY ] ) RLL( [ INFO-ONLY ] ) JCN( [ INFO-ONLY ] ) DSM( [ INFO-ONLY ] ) ; Sub-Collections: SRI-ARC FEEDBACK; Clerk: JHB;

JCN 31-OCT-74 11:40 24371

All ARC Meeting: NLS-8 at Office-1: Whats Going on

There will be a meeting tomorrow Friday Nov 1st in the ARC conference room at 2pm on the subject of what Applications has been doing and seeing as NLS-8 is being introduced to Office-1 users. As we have expected all along, there is considerable interest in the new and changed features of NLS. I have encouraged Jim Bair to gather his notes and recollections...both positive and negative...about what users are saying and doing. If he doesnt come up with at least some user-expressed criticisms, I'll know he's hiding something. On the whole, though, it sure appears were winning. 1

JCN 31-OCT-74 11:40 24371

All ARC Meeting: NLS-8 at Office-1: Whats Going on

(J24371) 31-OCT-74 11:40;;;; Title: Author(s): James C. Norton/JCN; Distribution: /SRI-ARC( [ ACTION ] ) ; Sub-Collections: SRI-ARC; Clerk: JCN;

JAKE 31-OCT-74 11:43 24372

Liaison for ARPA-DMS

Connie, I just received a message from Phil Lynch asking me to put him and Vandenburgh on the Liaison list as well as keep your name on the list. This means there will be three liaison for ARPA-DMS and our usual ground rule is only one per host. I am wondering if these guys are really referring to the RFC list (maintained by Jon Postel) or if they truly mean the Liaison list. I would prefer not to have three liaison for one host, but will of course make an exception for the ARPA office if that is your wish. I also still have Craig Fields as ARPA-TIP liaison for your information. Could you let me know how you would like this handled. Thanks, Jake. 1

JAKE 31-OCT-74 11:43 24372

Liaison for ARPA-DMS

(J24372) 31-OCT-74 11:43;;;; Title: Author(s): Elizabeth J. (Jake) Feinler/JAKE; Distribution: /CKM( [ ACTION ] ) ; Sub-Collections: SRI-ARC; Clerk: JAKE;

JHB 31-OCT-74 11:50 24373

Re RLL 24230, to KWAC asking for Feedback

Just a quicky thought.

JHB 31-OCT-74 11:50 24373

Re RLL 24230, to KWAC asking for Feedback

It seems o me that your Journal itm to KWAC could confuse users by interjecting an alternative to Feedback. How will they know who should get their particular commant? I f they send t to feedback, you'll have complete accesss to it anyway (in the cntext of other problems too). I note the "copy to Feedback" thing which is good, but I still think this kind of commincation should be handled through a single channel. 1

JHB 31-OCT-74 11:50 24373

Re RLL 24230, to KWAC asking for Feedback

(J24373) 31-OCT-74 11:50;;;; Title: Author(s): James H. Bair/JHB; Distribution: /RLL( [ ACTION ] ) JCN( [ INFO-ONLY ] ) ; Sub-Collections: SRI-ARC; Clerk: JHB;

JAKE 31-OCT-74 11:56 24374

FEEDBACK/FEED test

I am sending this message to JHB FEEDBACK and FEED to see if all of these are working. If they are not could you please let me know. 1

JAKE 31-OCT-74 11:56 24374

FEEDBACK/FEED test

(J24374) 31-OCT-74 11:56;;;; Title: Author(s): Elizabeth J. (Jake) Feinler/JAKE; Distribution: /JHB( [ ACTION ] ) FEED( [ ACTION ] ) FEEDBACK( [ ACTION ] ) ; Sub-Collections: SRI-ARC FEEDBACK; Clerk: JAKE;

JHB 31-OCT-74 12:39 24376

? Should show CTRL-X as an alternative.

Just in case you thought your sug had sunk into the abys of the ocean beneath the ARC, I agree!! 1

JHB 31-OCT-74 12:39 24376

? Should show CTRL-X as an alternative.

(J24376) 31-OCT-74 12:39;;;; Title: Author(s): James H. Bair/JHB; Distribution: /JOAN( [ ACTION ] ) FEEDBACK( [ INFO-ONLY ] ) FDBK( [ INFO-ONLY ] ) ; Sub-Collections: SRI-ARC FEEDBACK; Clerk: JHB;

JHB 31-OCT-74 13:28 24377

Status of Documentation for Office-1 Clients (KWAC)

This list includes the titles and numbers of documents mailed to KWAC to support NLS-8. Blanks indicate that particular item has been delivered. Please address any requests for additional documentation to Feedback@office-1. Number desired for the documentation not yet completed would be helpful and serve to prevent us from not inundating you with unnecessary paper. Documentation in general is designed to supplement the online questionmark and Help facilities.

Status of Documentation for Office-1 Clients (KWAC)

NLS8 DOCUMENTATION to be mailed: 30-OCT-74 1

Brignoli, Frank G,
Naval Ship Research and Development Center
Code 1833
Bethesda, Maryland 20034 1a

TNLS Primers 10 1a1

Command Summaries 15 1a2

TNLS Quick References 15 1a3

Old -New Command Lists 5 1a4

Not completed yet (various stages of development): 1a5

Line-Processor Guides 5 1a6

Glossaries 1a7

NLS Preface 1a8

TNLS Addressing Intro 1a9

Intro to How to Use NLS 1a10

Crain Lt,Lawrence
AFDSDC/SYOA Bld 325
Gunter AFB,Ala, 36114 1b

| | | |
|---|---|---|
| TNLS Primer | 10 | |
| Command Summar y | 10 | |
| NLS7 - 8 Transition Outline | 5 | |
| Basic TNLS Course Outline | 10 | (Get from JHB) |
| Old - New NLS Command Lists | 5 | |
| TNLS Quick Reference Guides | 15 | |

1b1

Not completed yet (various stages of development): 1b2

Line-Processor Guides 5 1b3

Glossaries 1b4

NLS Preface 1b5

TNLS Addressing Intro 1b6

Status of Documentation for Office-1 Clients (KWAC)

| | | |
|---|---|---|
| Intro to How to Use NLS | | 1b7 |

Mattiuz, Inez
Room 1105
620 Belmont St.
Montreal, Quebec CANADA
H3C 3G4
Canada

| | | |
|---|---|---|
| | | 1c |
| TNLS Primers | 5 | 1c1 |
| Command Summaries | 15 | 1c2 |
| TNLS Quick References | 20 | 1c3 |
| Old -New Command Lists | 10 | 1c4 |
| Not completed yet (various stages of development): | | 1c5 |
| Line-processor Guides | 5 | 1c6 |
| Glossaries | | 1c7 |
| NLS Preface | | 1c8 |
| TNLS Addressing Intro | | 1c9 |
| Intro to How to Use NLS | | 1c10 |

McLindon, Connie K,
Phone: (202) 694-3506;
Advanced Research Projects Agency
1400 Wilson Boulevard
Arlington, Virginia 22209

| | | |
|---|---|---|
| | | 1d |
| TNLS Primers | 20 | 1d1 |
| Command Summaries | 40 | 1d2 |
| TNLS Quick References | 50 | 1d3 |
| Old -New Command Lists | 25 | 1d4 |
| Not Completed yet (various stages of development): | | 1d5 |
| Line-Processor Guides | 20 | 1d6 |
| Glossaries | | 1d7 |

Status of Documentation for Office-1 Clients (KWAC)

| | | |
|---|---|---|
| NLS Preface | | 1d8 |
| TNLS Addressing Intro | | 1d9 |
| Intro to How to Use NLS | | 1d10 |

Rudy L. Ruggles, Jr.
Hudson Institute
Croton-on-Hudson,
New York 10520 1e

| | | |
|---|---|---|
| TNLS Primers | 4 | 1e1 |
| Command summaries | 5 | 1e2 |
| TNLS Quick References | 10 | 1e3 |
| Old -New Command Lists | 2 | 1e4 |
| Not Completed yet (various stages of development): | | 1e5 |
| Line-Processor Guides | 5 | 1e6 |
| Glossaries | | 1e7 |
| NLS Preface | | 1e8 |
| TNLS Addressing Intro | | 1e9 |
| Intro to How to Use NLS | | 1e10 |

Sheppard, Robert M.
Lincoln Labs Seismic Group
42 Carlton St.
Cambridge, MA 02142
LLANTS Phone: (617) 523-7856; 1f

| | | |
|---|---|---|
| TNLS Primers | 1 | 1f1 |
| Command Summaries | 2 | 1f2 |
| TNLS Quick References | 5 | 1f3 |
| Old -New Command Lists | 1 | 1f4 |
| Not Completed yet (various stages of development): | | 1f5 |
| Line-Processor Guides | 5 | 1f6 |

Status of Documentation for Office-1 Clients (KWAC)

| | | |
|---|---|---|
| Glossaries | | 1f7 |
| NLS Preface | | 1f8 |
| TNLS Addressing Intro | | 1f9 |
| Intro to How to Use NLS | | 1f10 |

Stone, Duane L.
Rome Air Development Center
(ISIM)
Griffiss Air Force Base
New York 13441
Phone: (315) 330-3857; 1g

| | | |
|---|---|---|
| TNLS Primers | | 1g1 |
| Command Summaries | 10 | 1g2 |
| TNLS Quick References | | 1g3 |
| Old -New Command Lists | | 1g4 |
| Not completed yet (various stages of development): | | 1g5 |
| Line-Processor Guides | 5 | 1g6 |
| Glossaries | | 1g7 |
| NLS Preface | | 1g8 |
| TNLS Addressing Intro | | 1g9 |
| Intro to How to Use NLS | | 1g10 |

Taylor, Stan M.
BRLFunction: Workshop Architect;
Phone: (301) 278-4149;
Ballistic Research Laboratories
AMXBR-XA
Aberdeen Proving Ground
Maryland 21005 1h

| | | |
|---|---|---|
| TNLS Primers | | 1h1 |
| Command summaries | 5 | 1h2 |
| TNLS Quick References | 5 | 1h3 |

Status of Documentation for Office-1 Clients (KWAC)

| | | |
|---|---|---|
| Old -New Command Lists | | 1h4 |
| Not completed yet (various stages of development): | | 1h5 |
| Line-processor Guides | 5 | 1h6 |
| Glossaries | | 1h7 |
| NLS Preface | | 1h8 |
| TNLS Addressing Intro | | 1h9 |
| Intro to How to Use NLS | | 1h10 |

Vanhassel, Bill V
Educational Testing Service
Rosedale Road
Princeton, New Jersey 08540

11

| | | |
|---|---|---|
| TNLS Primers | 2 | 111 |
| Command Summaries | 5 | 112 |
| TNLS Quick References | 10 | 113 |
| Old -New Command Lists | 1 | 114 |
| Line-processor Guides | 1 | 115 |
| Not completed yet (various stages of development): | | 116 |
| Glossaries | | 117 |
| NLS Preface | | 118 |
| TNLS Addressing Intro | | 119 |
| Intro to How to Use NLS | | 1110 |

JHB 31-OCT-74 13:28 24377

Status of Documentation for Office-1 Clients (KWAC)

(J24377) 31-OCT-74 13:28;;;; Title: Author(s): James H. Bair/JHB;
Distribution: /KWAC( [ ACTION ] ) WEC( [ ACTION ] ) LAC( [ ACTION ] )
EJK( [ ACTION ] ) FEED( [ ACTION ] ) RLL( [ INFO-ONLY ] ) POOH( [
INFO-ONLY ] ) JOAN( [ INFO-ONLY ] ) SLJ( [ INFO-ONLY ] ) DVN( [
INFO-ONLY ] ) EJK( [ INFO-ONLY ] ) POOH( [ INFO-ONLY ] thank You-Pooh) ;
Sub-Collections: SRI-ARC KWAC; Clerk: JHB;

JHB 31-OCT-74 13:41 24378

Use of 24031,, What and Why of Utility Service.

Jim, When can we use JJournal,24031, (...Utiltiy Service: What and Why) for dealing with users. I noticed you had not submitted it to KWAC yet.... It would be very helpful to give to both users and prospective clients.

JHB 31-OCT-74 13:41 24378

Use of 24031,, What and Why of Utility Service.

(J24378) 31-OCT-74 13:41;;;; Title: Author(s): James H. Bair/JHB;
Distribution: /JCN( [ ACTION ] ) DCE( [ INFO-ONLY ] ) SRL( [ INFO-ONLY ]
) RLL( [ INFO-ONLY ] ) RSR( [ INFO-ONLY ] ) JDH( [ INFO-ONLY ] ) ;
Sub-Collections: SRI-ARC; Clerk: JHB;

DCE 31-OCT-74 16:08 24379

Demo of SCHOLAR-NLS Fri. at 1530

Should be very interesting. (jml)

DCE 31-OCT-74 16:08 24379

Demo of SCHOLAR-NLS Fri. at 1530

Mario Grignetti, of BBN, offered to give us an on-line demo of their SCHOLAR-NLS system -- the sophisticated CAI system designed to teach "elementary NLS-7." 1

Friday afternoon, 3:30 p.m., in our conference room. We'll be online to BBN-TENEXA, linked to Mario, and on the phone with him. 2

DCE 31-OCT-74 16:08 24379

Demo of SCHOLAR-NLS Fri. at 1530

(J24379) 31-OCT-74 16:08;;;; Title: Author(s): Douglas C. Engelbart/DCE; Distribution: /SRI-ARC( [ ACTION ] ) ; Sub-Collections: SRI-ARC; Clerk: JML; Origin: < LEAVITT, GRIG,NLS;2, >, 31-OCT-74 16:04 JML ;;;;####;

the headless journal item .

The journal item (mjournal, 24258,) about the L10-Guide was unfortunately untitled and some outdated parts were included. Soon to follow will be a titled, accurate and updated version. 1

POOH 31-OCT-74 17:22 24380

the headless journal item

(J24380) 31-OCT-74 17:22;;;; Title: Author(s): Anne Weinberg/POOH;
Distribution: /DIRT( [ INFO-ONLY ] ) ; Sub-Collections: SRI-ARC DIRT;
Clerk: POOH;

Answers to Contract Questions and Revised Schedule F

Duane to redo the cost estimate would require approvals etc that cannot be done by tomorrow. Relooking at things show that computer costs come out as estimated although categories have shifted some. The only other places where costs would change much is that travel should go up some and consultants should go down and about balance out so we have left them unchanged at this point. 1

Totals 2

See redo of schedule F below 2a

PDP 11s 3

There will be two PDP 11s at ARC. One, the development machine will be paid for on project, the second is being purchased on SRI capital equipment and will be shared by both sides of the house for network access. 3a

Terminals, Modems Leased Lines 4

Modems and leased lines are for home access to the PDP 11. 4a

The DNLS terminals will be Hazeltines and Data Medias. The Line Processors are being purchased on SRI capital equipment, but there is something included for on going modification and maintenance. 4b

Cost of Tecktronics will be included. 4c

TI's are GFE and were purchased under 1868. 4d

TAskers will probably be listed as excess equipment. 4e

Tenex and PDP 10 5

The estimate given originally is still oK. The cost per slot or percent CPU is still somewhat fluid and is less than general Utility because of need for less hand holding, some reciprocal services etc. 5a

Travel 6

We think that at this point the total travel budget is probably going to be low by $3,000 but for an estimate is OK and we can use the consulting funds below. 6a

Consultants 7

The purpose of the consultants was planned to aid with the design of the secretaries interface. No specific group has yet been

chosen. If becomes an issue during negotiations we will probably give it up and increase the travel budget. 7a

Delivery 8

Delivery will be on Magnetic Tape or by FTP to the appropriate machines, Office 1 for NLS, the Tenex on which the Works Manager will run, the PDP 11 in Montgomery etc. 8a

SCHEDULE F 9

COMPUTER SUPPORT COSTS 9a

1) PDP-10 TENEX Computer Time 9b

a) July 1, 1974 to December 31, 1974 GFE 9b1

b) January 1, 1975, to June 30, 1975
5.5 job slots for 6 months * 9b2

16,765 X 5.5 = $ 92,201 9b2a

2) PDP-11 Systems 9c

a) Equipment (lease) 9c1

1) PDP-11 Development Machine
$1,600/mo X 12 = 19,200 9c1a

$450/mo X 6 =(tape drive and card reader) 2,700 9c1b

2) Special cables, hardware, etc,
$2,000 (estimated) = 2,000 9c1c

b) Maintenance (16 hrs/d, 5 d/wk) 9c2

1) DEC PDP-11,
$750/mo X 6 = 4,500 9c2a

3) Terminals 9d

a) NLS Workstations (7) 9d1

1) Display (7)
a) alphanumeric displays $150/mo x 7 x 6 = 6,300
b) Tables for work stations, one time charge
at $200 estimated each x 7 = 1,400
c) Tektronix graphics and hardcopy units
4012 at $300/mo x 6 = 1,800
4014 and hardcopy unit at $880/mo x 2 = 1,760
one time installation estimated 200
d) Line processor modifications to accept
the Tektronix units estimated 2,400
Line Processor maintenance at $20/mo x7x6 = 840
9d1a

b) TNLS Terminals 9d2

1) TI (incl maintenance) (4)
$165/mo x 4 x 12 = 7,920 9d2a

2) Maintenance, owned TI's (8)
$20/mo x 8 x 12 = 1,920 9d2b

3) Acoustic couplers (8)
$16/mo x 8 x 12 = 1,536
9d2c

c) Modems 9d3

1) Dial-up (4)
$36/mo x 4 x 12 = 1,728
9d3a

d) Leased lines 9d4

1) DIA, data
$366/mo x 12 = 4,392 9d4a

2) DIA, Voice
$22/mo x 12 = 264
9d4b

Answers to Contract Questions and Revised Schedule F

| | | |
|---|---|---|
| 4) Tasker Display System (10 units for 3 mo) | | 9e |
| a) Parts (estimated) = | 3,000 | 9e1 |
| 5) Miscellaneous (estimated) = | 2,000 | 9f |
| | -------- | 9g |
| Subtotal (Items 2-5) | $ 65,860 | 9h |
| Total (Items 1-5) | $158,061 | 9i |

RWW 31-OCT-74 17:40 24381

Answers to Contract questions and revised schedule F

(J24381) 31-OCT-74 17:40;;;; Title: Author(s): Richard W. Watson/RWW; Distribution: /DLS( [ ACTION ] ) JCN( [ INFO-ONLY ] ) ; Sub-Collections: SRI-ARC; Clerk: RWW;

JAKE 31-OCT-74 21:05 24382

Documentation and the DataComputer

Recently I learned that the Datacomputer has a feature called dftp which allows network users to store large files at the DataComputer and call them back through a process called dftp. They are sending me documentation and particulars. It seems that this might present an excellent mechanism for collecting network documentation into a meaninful, online sink. NIC would like to pursue this since the Resource Notebook tries to list documentation and it would be nice for network users to know that they could go to a given spot and find the cited documentation. It seems that Development has also been collecting documentation and would benefit by an easily accessible online collection. Therefore, if anyone is interested perhaps we could discuss this - somewhat low key and back burner. Possibly for after first of year. Will let all know when I hear particulars - please let me know if there is any interest from development side.
Jake

Documentation and the DataComputer

(J24382) 31-OCT-74 21:05;;;; Title: Author(s): Elizabeth J. (Jake) Feinler/JAKE; Distribution: /RWW( [ ACTION ] ) JEW( [ ACTION ] ) JBP( [ ACTION ] ) DCE( [ INFO-ONLY ] ) JCN( [ INFO-ONLY ] ) ; Sub-Collections: SRI-ARC; Clerk: JAKE;

KIRK 1-NOV-74 05:11 24383

NLS allows one mistake and then runs off when your not ready when entering markers.

For instance, try the Jump to Link command or Process Statement command. Type something, backspace, and typein a marker, it will go off as if you typed a CA. 1

KIRK 1-NOV-74 05:11 24383

NLS allows one mistake and then runs off when your not ready when entering markers.

(J24383) 1-NOV-74 05:11;;;; Title: Author(s): Kirk E. Kelley/KIRK;
Distribution: /BUGS( [ ACTION ] ) ; Sub-Collections: SRI-ARC BUGS;
Clerk: KIRK;

First Pass at Agenda for Meeting Nov 6-7

First Pass at Agenda for Meeting Nov 6-7 1

Wed Nov 6 1a

Assumptions: Millstein to arrive afternoon and goal of first days sessions to get out information on SRI MCA approaches, problem solving and designing should be kept small the first day and hit hard in the evening and the second day. 1a1

9:00 - 10:00 Tutorial on PCP based protocol approach and discussion and listing of protocol and related issues. 1a2

10:00 - 11:15 (break someplace in between) Frontend philosophy, issues and implementation approach. 1a3

11:15 - 12:00 NLS Tasks for NSW 1a4

12:00 - 1:00 Lunch 1a5

1:00 - 2:00 Tutorial on Works Manager functions and issues. 1a6

2:00 - 3:00 Tutorials on SRI tasks as needed by Millstein 1a7

3:00 - 3:15 break 1a8

3:15 - 4:00 Review of issues from morning session for Millstein 1a9

4:00 - 4:30 Create agenda of problems to be dealt with and ares needing further discussion and solution in some priority order. 1a10

Start solving problems on into the evening with break for dinner someplace. 1a11

Thursday Nov 7 1b

Continue with previous agenda or revise as needed from first days discussion. 1b1

Friday Nov 8 1c

Discussions with ADR as in previous note and revised Friday morning 1c1

RWW 1-NOV-74 18:18 24385

First Pass at Agenda for Meeting Nov 6-7

(J24385) 1-NOV-74 18:18;;;; Title: Author(s): Richard W. Watson/RWW;
Distribution: /NPG( [ INFO-ONLY ] ) JBP( [ INFO-ONLY ] ) ;
Sub-Collections: SRI-ARC NPG; Clerk: RWW;

CHI 1-NOV-74 23:56 24387

Some issues for the NSW frontend

sent via sndmsg to crocker, balzer, millstein, warshall, carlson, wall, natoli

# Some issues for the NSW frontend

## INTRODUCTION 1

The concept of the NSW Frontend is a very important yet, we think, not fully understood part of the NSW as a whole and is, we believe, very vital to the overall success of the NSW program. This paper attempts to clarify the Frontend concept somewhat, to raise some issues that have come up so far, and to present our current thoughts on those issues. This is a draft document and will be updated to reflect the outcome of our meetings Nov 6,7, and 8. 1a

## THE PURPOSE OF THE FRONTEND FOR THE NSW 2

The Frontend is a buffer between the user and the Works Manager and tools of the NSW. The primary reasons for having a Frontend, as we perceive them, are as follows: 2a

1) To provide the user with a coherent and consistent command language discipline throughout the NSW. 2a1

No matter whether the user is giving commands to a tool or to the Works Manager or the Frontend itself, he does so using the same methods for specifying which commands he wishes executed, the same methods for specifying arguments or parameters to commands, gets the same type of prompting and requests help in the same way, always. In addition, the general syntactic form(s) should be the same from tool to tool unless there is good reason for the tool to deviate from the standard. Of course the particular commands and vocabularies will vary with the tool and in fact the same verbs may be used with quite different semantics in different tools, but at least most other facits of the command language (including asking for help and being prompted for the proper type of input) should stay the same across tool boundaries. 2a1a

It is expected that initial users of the NSW will have to access some tools in a transparent mode, where the Frontend cannot provide the user with the facilities just described. In this instance, the Frontend will take on the nature of a TIP or ELF terminal concentrator. However, we expect that as time goes on and the NSW grows, the user will be able to use most tools through the unified user interface provided by the Frontend, and it is toward this end that we should build. 2a1b

2) To provide tools with well-formed commands. 2a2

It is proposed that this be done by issuing remote procedure

calls to "external" procedures in the tools to actually execute commands. This will be accomplished through the procedure Call protocal (see Jim Whites papers on the PCP). 2a2a

Many operating systems and application programs have elected to use half duplex, line-at-a-time terminals because of the increased computer efficiency provided by this approach. Other operating systems and application programs have chosen, instead, to utilize character-at-a-time full duplex terminal disciplines because of the opportunity this provides for utilizing a more human-engineered command language. 2a2b

The NSW Frontend is an attempt to combine these two approaches into a command-at-a-time system, where the application programs do not directly interact with the terminal, but rather receive fully specified commands from the Frontend. At the same time, the Frontend will attempt to provide the user with the best possible human-engineered command language discipline. This means that interfacing to application programs developed for line-at-a-time terminals should be quite straight forward, even though the user operates from a character-at-a-time full duplex terminal, since such programs tend not to interact with the user extensively. 2a2c

3) To provide a terminal-independent interface to the tools. 2a3

Because the Frontend handles all terminal interaction (except in transparent mode), it will present to the tool a virtual terminal. Thus, once a tool is developed, little attention need be given to the type or particular characteristics of the terminal the end user may choose to employ while using the tool. In fact, the cost of creating new tools should be considerably reduced because of the facilities made available by the Frontend. 2a3a

This means that even though the creators of a tool envisioned the user sitting at a typewriter terminal, the NSW user who happens to be using a display terminal with a pointing device may be able to interact with the tool in a two dimensional sense, pointing to arguments on his screen instead of typing them, etc. 2a3a1

For tools which wish to make more extensive use of a display terminal if the user has one, the Frontend presents primitives for allocating windows on the display and allows the tool to write/delete/move/make invisible items displayed within the windows. 2a3a2

4) Possible asynchronous operation. 2a4

In some instances, it may be possible for the execution of the user's commands to be accomplished in parallel with subsequent command specification and execution. This frees the user to do other things while a lengthy command is being executed by a tool. 2a4a

5) NSW-wide macro facilities 2a5

The user should be able to define (text substitution) macros which he can then use with any tool, since the macros will be expanded by the Frontend. 2a5a

6) To provide standard mechanisms for presenting status or error conditions to the user. 2a6

an error should consist of the following: 2a6a

a human readable error message 2a6a1

a code indicating whether this error caused the command to be aborted, completed or undefined and whether the tool is now in a state to receive more commands or should be restarted. 2a6a2

certain types of errors will have to be reported to the Works Manager so that it can take action (e.g. file system errors, disk errors, etc). Does the Frontend do this or does the tool? 2a6b

In particular, from the user's standpoint, the first and last of these justifications are very important. With very few exceptions, most user's would go mad in an environment where every new tool he chose to use required that he learn a new interaction discipline. In fact, it is our belief that this would spell certain doom for the NSW. 2b

The Frontend functions could be much more extensive and could be distributed between the satellite PDP-11 and a larger host. This notion will have to evolve as we gain experience with the NSW as a whole. 2c

ISSUES THAT HAVE COME UP SO FAR 3

Some of the issues that should be raised now are the following: 3a

1) What is to be done for tools that already exist as

monolithic packages where the user interaction cannot readily be separated out into the NSW Frontend? 3a1

It is our belief that the more tools which are fully integrated into the NSW framework the better the NSW will seem as a total system. However, we must also allow users to run tools which were not built or modified to run within the NSW. Aside from the impact this has on the works Manager, the Frontend cannot be expected to help the user when he is using this type of tool. It is envisioned that a transparent mode (with a user-settable escape character) will be provided for such tools and that tool output to the user will appear as though the user had a TTY, even though he may be using a display. 3a1a

The Frontend will provide external procedures to present error and status messages to the user and, if he is using a display terminal, to allocate and manipulate text and graphics within windows on the display. A tool will not, however, be able to effect certain areas of the screen which are used by the Frontend for command feedback. 3a1b

2) What classes of terminals should be supported in the first year? 3a2

A Network Virtual Terminal (NVT) was defined for TELNET. We would propose that in addition to this definition of a virtual typewriter terminal, the NSW needs a similar definition of a virtual alpha-numeric display and a virtual display with a pointing device. 3a2a

It is our assumption that it is ADR's responsibility to write drivers for any terminals the NSW management decides the NSW Frontend will support to map them into the appropriate virtual terminal. 3a2b

While many application programs in conventional operating systems now make use of line-at-a-time terminals, as discussed above, these terminals do not allow the Frontend to actively interact with the user to answer help requests, to provide keyword recognition, noise words, or to prompt him for various types of input. For these reasons, the NSW Frontend should perhaps support half duplex terminals for printing devices only (since the best hardcopy seems to be produced on some of these devices). 3a2c

Proper support of half duplex terminals as interation devices may call for quite a different interaction strategy on the part of the Frontend. Should we be

planning on this or just support them awkwardly, as is now done throughout much of the ARPANET? 3a2c1

3) Is the Command Meta Language flexible enough for first-year NSW (documentation of currently planned language will be available shortly)? 3a3

As currently planned, the NSW CML will be derived from the current CML, used in the NLS system. The re-implementation and generalization of this CML will remove problems that we have found during its use within NLS but are there other steps we should take to generalize it even further? 3a3a

We are now in the process of writing trial grammars for TECO, WYLBUR, CANDI, and two forms of DDT. A discussion of these will be distributed shortly. Are there other interactive systems that people know of that we should try to express in CML at this time? 3a3b

4) What language form should be the NSW standard? 3a4

We currently envision NSW commands that will consist of command words (which might serve as verbs for commands or as modifiers for partialy specified commands), parameter specifications (pointing operations for users at displays and typing parameters), standard command confirmation (final ok to proceed), standard backup to a previous state in the specification of the current command, standard ways of determining the currently available alternatives or the general syntactic form of commands, and general semantic (data base driven) help for particular tools and commands within those tools. 3a4a

Should the NSW CML attempt to enforce some conventions about the form of commands, such as specifying command words at the begining of commands followed by parameters or vice versa? Should the recognizers for some low-level parameter types, such as word, text-string, and file name, be built into the CML so that they will be the same for all tools? 3a4b

Should post fix be allowed? Should functional notation be allowed? 3a4c

5) What interaction and presentation forms should be provided 3a5

Should function keyboard simulation or menu selection be provided for tools? 3a5a

6) What sorts of things should the user be allowed to tailor in the Frontend to his own personal preferences? 3a6

should he be able to specify the level of verbosity, the amount of prompting, the succinctness of error messages, the recognition algorithm for command word recognition, tools available to him, etc. what should a site or group manager be able to specify on behalf of his people? 3a6a

7) How much control should a tool be allowed to have over the user's terminal? 3a7

Our current plan is to provide a standard mechanism for presenting status and error messages and the ability to write text (and perhaps graphics) in or to subdivide windows on a portion of the screen. Is anything else needed or does anything beyond this constitute a violation of the primary reason for the frontends existence -- i.e. to present a standard interface to all NSW tools? 3a7a

8) Semantic help 3a8

It is envisioned that the user will be able to obtain English help with tools in the NSW. This will be accomplished by providing a separate tool, capable of interacting with the user (via a grammar in the Frontend) and using a structured data base provided along with the tool grammar. This help tool will not run in the satellite machine but will be invoked by the satellite whenever the user asks for semantic help with a tool. The help tool will be provided with the name of the help data base for the tool the user was using and a representation of the user's command state at the time he requested help. It is expected that the command language designers will provide this data base. 3a8a

We would propose that for first-year NSW, this help tool is simply a set of calls on the NLS backend, with the data bases being NLS structured files (this approach is now being used within NLS). 3a8a1

In the future it is expected that the help tool will be able to take on the character of a tutor and show the user how to execute commands and what the effects of doing so are as well as providing the user an environment in which he is free to try things without running the risk of destroying anything or leaving unwanted trash around. (We refer you to the NLS-SCHOLAR project at BBN and to the CoTCo system being designed at ISI as examples of more active help facilities.)

Initially and for some time, however, we expect the help tool to be more of a browsing aid, using a structured data base to allow the user to more quickly find the information he seeks. 3a8b

9) UNDO and REDO 3a9

What mechanisms must be in the Frontend to facilitate UNDO and REDO capabilities on an NSW-wide basis and what must be done for tools which can undo the effects of previous function executions. 3a9a

10) Checkpointing 3a10

Must the Frontend do anything with respect to NSW checkpointing, backing up to a checkpoint, etc? What does the Frontend do when the Works Manager crashes and restarts? What must the Frontend do to allow the user to pickup where he left off at the end of his last session? 3a10a

We understand that the NSW Frontend must evolve over several years and cannot be done "perfect and complete" in this first year. However, there must be a means for making decisions on these and other issues and there must be a mechanism for establishing priorities for the development of various Frontend facilities. What role is ARPA management going to play in resolving these issues? Are meetings required or can we use network mail and telephones? TO what extent can we feel free to apply what we have learned about such matters to the NSW Frontend? 3b

## THE CML AND ITS IMPLICATIONS FOR NSW TOOLS, TOOL BUILDER, TOOL INSTALLERS, AND COMMAND LANGUAGE DESIGNERS 4

The Frontend system that is being planned for the NSW consists of the following: 4a

1) A formal language (CML) for specifying NSW user interfaces 4a1

2) A compiler for that formal language that runs under TENEX as a subsystem or from NLS 4a2

3) Tool grammars, products of the CML compiler or any other such program 4a3

4) A CML interpreter that processes a CML grammar in order to work with the user in specifying syntactically correct commands to the NSW. 4a4

5) A user profile data base that is used by the CML interpreter

while interacting with the user. This data base allows the Frontend to be tailored to the individual preferences of the users. 4a5

6) A user statistics data base, where, if desired, statistics can be accumulated on commands used by a user, error rates, etc. This will be accumulated on a file or perhaps reported to the Works Manager. 4a6

7) Access to a semantic help tool which is employed by the Frontend when the user requests semantic level help with a tool or a command. It is presumed that each tool, in addition to supplying the Frontend with a grammar will also supply it with the name of a help data base file whose structure and content, as with the grammar, are the sole responsibility of the tool builder/supplier. 4a7

This help tool could also be kept informed of the user's dialog with the Frontend, can have access to the tool grammar, the current parse state of the user, and the user's profile. 4a7a

Detailed discussions of the CML and the CML interpreter are being prepared and will be forwarded to you as soon as they are completed. However, here we would like to discuss some of the implications any choice for a CML and a CML interpreter will have on the NSW system. 4b

In effect, we are establishing a standard that will perhaps be flexible for a year or two but will soon thereafter become quite inflexible (if the growth in number of users is as we expect it will be). In spite of the fact that this might seem like an awesome responsibility, someone must specify these standards if the NSW is going to be a success. Although the choice of a standard will have some impact on whether or not it is a success, the failure to establish such a standard would spell certain failure. 4c

Many people in the computer system development business have formed quite strong attachments to certain command language philosophies. Some of these feelings are based on objective reasoning and empirical studies and others are based on experience with different command languages, usually most are biased toward those that are most familiar. It is important to realize that in the NSW, the target user is a reasonably experienced programmer or system developer and requires a language form that allows reasonable power while being as straight forward and easy to learn as possible. 4d

Some issues for the NSW frontend

Given any choice for a standard, we will make it difficult for certain programs to be inserted into the NSW without some fairly major changes to the language form used to interact with that program (tool). Now, this is of couse the way it has to be since the user should be able to interact with all tools using the same command language discipline. However, we must recognize that this may decrease the usability of some programs within the NSW. This is not to say that equivalent programs cannot be written that perform the desired function very well within the NSW environment and are very useful. The problem only exists when we try to incorporate existing programs, not with new ones. 4e

DOCUMENTATION THAT SEEMS NECESSARY FOR THE NSW TO FUNCTION: 5

A system guide to running an NSW Frontend 5a

System specs for tool bearing host execs 5b

A system manual on the flow of control in the NSW as a whole 5c

A system guide for Command language deigners 5d

A system guide for tool installers 5e

System documentation on the Procedure Call protocol 5f

System documentation on debugging NSW tools 5g

System documentation on (PCP) external procedures for each tool 5h

System documentation on CML 5i

System documentation on functions the Frontend provides to a tool 5j

System documentation on functions the works Manager provides 5k

CHI 1-NOV-74 23:56 24387

Some issues for the NSW frontend

(J24387) 1-NOV-74 23:56;;;; Title: Author(s): Charles H. Irby/CHI;
Distribution: /RWW( [ INFO-ONLY ] ) NPG( [ INFO-ONLY ] ) ;
Sub-Collections: SRI-ARC NPG; Clerk: CHI; Origin: <
NSW-SOURCES, FE-ISSUES.NLS;1, >, 1-NOV-74 23:53 CHI ;;;;####;

JMB 2-NOV-74 11:37 24388

RE-REVISED VIEWSPEC CARD; for review

Jim Norton did not approve the revised Viewspec card announced in <JOURNAL, JRNL22, J24266;gw> He and I therefore worked out a compromise, which has to go back through the review process. The draft is to be found in Branches 1 and 2 of <userguides,viewspeccard,>. Branch 1 did not change. Branch 2 is the new stuff. Branches 3 and 4 are historical predecessors of Branch 2 (irrelevant). To read the new stuff, Output Quickprint Branch 2.

JMB 2-NOV-74 11:37 24388

RE-REVISED VIEWSPEC CARD: for review

(J24388) 2-NOV-74 11:37;;;; Title: Author(s): Jeanne M. Beck/JMB;
Distribution: /RWW( [ ACTION ] ) DVN( [ ACTION ] ) JCN( [ INFO-ONLY ] )
WDM( [ INFO-ONLY ] does this new stuff meet COM size requirements? What
can COM do to make the boxed information stand out clearly?) ;
Sub-Collections: SRI-ARC; Clerk: JMB;

JMB 2-NOV-74 18:11 24389

Outline for an Output processor primer

What the Output Processor is and what it's for--GENERAL 1

What its function with the rest of the system is 2

Where in the process of printing it takes effect 2a

What the Sequence Generator and Portrayal generator do to structure text 2a1

OP pays attention to viewspecs. 2a1a

How NLS file is printed 2a2

at terminal 2a2a

The Printer and what it reads 2a2b

Output Quickprint 2a2c

Go through OP: 2a2d

Output printer, 2a2d1

Output Terminal, 2a2d2

Output Remote, 2a2d3

Output COM 2a2d4

Output Printer File & Output Remote File 2a2e

Output Processor's sequential form--deals with statement at a time 2a2e1

What a print, or text, file is. Output that is printed is simply a print file that goes to printer directory and is deleted. 2a2e2

Dirk/Dean's Illustraton page parameters <Include page> 3

What headers, footers, margins, journal headers, page numbers are 3a

What directives are 4

Where they are obeyed and take effect 4a

including their relationship to character stream 4a1

How OP takes whole statements and counts lines 4b

Outline for an Output Processor Primer

Outline for an Output Processor Primer

JMB 2-NOV-74 18:11 24389

)utline for an Output Processor Primer

(J24389) 2-NOV-74 18:11;;;; Title: Author(s): Jeanne M. Beck/JMB;
)istribution: /RWW( [ ACTION ] I left a hardcopy of this on your desk)
)VN( [ INFO-ONLY ] To decide how much to integrate the Primer with
)ean's OP Intro, Dick first wanted a separate outlinefrom me according
:o his model) ; Sub-Collections: SRI-ARC; Clerk: JMB; Origin: <
3ECK, OPPRIMER,NLS;2, >, 2-NOV-74 17:36 JMB ;;;;
HERE IS AN OUTLINE OF AN OUTPUT PROCESSOR PRIMER####;

JHB 2-NOV-74 21:16 24390

SRI/ARC BASIC TNLS-8 COURSE

This is the same basic course with corrections and minor revisions.

SRI/ARC BASIC TNLS-8 COURSE

TNLS SYLABUS

# THE BASIC TNLS-8 COURSE OUTLINE

## INTRODUCTION TO NLS

NLS = oN Line System

TNLS = Typewriter Version

CAPABILITIES OF SYSTEM:

- Composing
- Editing
- Studying
  - Structuring
  - Browsing = viewing
- Printing
- Publishing
- Communicating =
  - sending and receiving mail, messages, documents; teleconferencing; etc.
- Storing and retrieving =
  - record keeping, library services, data bases, searching, etc.
- Calculating

## SOME NOTES

**This is designed for use when terminals are available for all participants to use/view easily. It is intended to be the first course a person receives on NLS. The commands are shown as they would appear with partial prompting.

## COURSE ORGANIZATION

The course is organized by concepts of what a user can do with

TNLS at this level. The seven concepts (listed below) are ordered as one would need them to use the system. Under each concept are the exact commands that instruct the computer to perform the function that goes with the concept. There is a command summary at the end of the course outline that lists the same commands alphabetically for easy reference.

The commands which are included in this first course have been selected to let a user write, edit, store, and communicate typewritten information (text). Those commands numbered with a (2) are to be covered on the second day of the course.

TNLS CONCEPTS: (Things you can do as covered in this course:)

1. FILES FOR STORAGE

2. TYPING IN TEXT

3. TYPING OUT TEXT

4. ADDRESSING

5. EDITING

6. COMMUNICATING

7. TROUBLE SHOOTING AND HELP

DEFINITIONS FOR THE COURSE OUTLINE

COMMANDS: You typing some characters to tell the computer what to do.

WHERE YOU ARE: Where the computer thinks you are pointing to (to some character in some file); you tell it by specifying an address; this is where your command will be done.

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

Upper case characters in a TNLS command phrase are what you type.

BASE C: = the TNLS ready signal. It means that you can type in an editing command (like home base,,).

SEND C: = the Sendmail subsystem ready signal. It means that you can type in a Sendmail command.

GETTING TO NLS (review)

THE TERMINAL AND USE (if necessary)

similarities to and differences from a typewriter

NETWORK (if used)

Net login, after establishing a phone connection type:

e (<> equals a space:)

@<>1<>43 CR (Office-1 is host number 43)

TENEX Executive (review)

Login procedure:

USERNAME PASSWORD ACCOUNT CR

(2)Group allocation quota: gro<esc>UpSTAT

Calling NLS:

Type PREVIEW CR .,**This will be in effect until Nov 5**

To return to the Exec:

Quit CR

To continue where you were in TNLS:

continue CR

To leave the system, logout in NLS:

<>Logout CR

BASIC TNLS:

Abort Commands = CTRL x (kills the command before the final CR!)

OK: equals a carriage return.

1. FILES

The origin statement (number 0, includes the file name -- don't edit)

The initials file

New files

BASE C: <>CReate C: File T: FILENAME CR
( FILEOWNER, FILENAME,NLS:1, )

(any short "word", like a folder label)

To see a list of all your files: show Directory:

<>SHoW Directory (of) OK: CR OPT/OK CR

2. TYPING IN "TEXT"

Insert Statement (ADDRESS = statement number)

BASE C: Insert C: Statement (to follow) A: 1 CR L: CR T: TYPEIN CR

(TEXT or TYPEIN means you type in whatever you want in the file)

Continue to insert = CTRL e

(Puts you in the "Enter mode" until type a CTRL x -- you type CR to end each statement until done)

backspace character = CTRL a
backspace word = CTRL w

(2)Insert Text at the end of a statement

(2)BASE C: Insert C: Text (to follow) A: +e T: TYPEIN CR

(+e means the end of the statement)

3. TYPING OUT "TEXT" *To stop printing type a CTRL o
(takes some time to get through!!)

Printing the file:

BASE C: Print C: File OK: CR

Print Statement:

BASE C: Print C: Statement at A: ADDRESS CR V: CR

Print the rest of the file:

BASE C: Print C: Rest OK: CR

(2) Easy print = \ (prints the statement where you are)

4. ADDRESSING

Where the pointer is -- type a / (see the questionmark key on some terminals). This will show an arrow pointing to the character that you are at: ==>x

Addressing within files (to move the pointer)

Jump to new address (to change where your pointer is)

BASE C: Jump (to) C: Address A: ADDRESS CR

OR you can type in an address anytime you see the prompt A:
An address can be:

statement number (NOTE: TNLS automatically renumbers statements when appropriate)

.t ("tail") for the last statement in the file

(2) To find some word or text: "TEXT"

BASE C: Jump (to) C: Address A: "TEXT" CR

(enclose in quotes whatever word or series of characters you want to find -- takes you to the first occurence of it that occurs to the right and down in your file)

Addressing across files and directories

Jump to Link

BASE C: Jump (to) C: Link A: (FILEOWNER,FILENAME,)CR

(2) Link can be: (FILEOWNER,FILENAME,STATEMENT NUMBER) OR (FILENAME,STATEMENT NUMBER)

(You do not have to type in the parentheses)

load file

BASE C: Load C: File T: FILENAME CR

5. EDITING

To change text that has been typed in:

Delete Statement

BASE C: Delete C: Statement at A: ADDRESS OK: CR

Delete File

BASE C: Delete C: File at T: FILENAME OK: CR

(Careful, this removes the file. To start over
you will have to create a new file. You can Undelete a File.)

Substitute Text in Statement (to correct most errors):

BASE C: Substitute C: Text in C: Statement (at) A: ADDRESS CR
(New TEXT) T: TYpEIN CR
(Old TEXT) T: TYpEIN CR Finished? Y/N: CR
Substitutions made: 1

(will replace the old text with the new text every time it finds it in the statement.)

Update: (do periodically for backup)

BASE C: Update C: File OK:/C: CR
( FILEOWNER, FILENAME,NLS;2, )

(2) Move Statement:

BASE C: Move C: Statement (from) A: ADDRESS CR (to follow) A: ADDRESS CR L: CR

(2) Copy Statement:

BASE C: Copy C: Statement (from) A: ADDRESS CR (to follow) A: ADDRESS CR L: CR

(2) formatting technique:

To insert a carriage return, type CTRL v CR

6. COMMUNICATING

(2) SENDMAIL SYSTEM:

(2) Submit message using idents (or ,receivername) and Interrogate (where the system prompts you):

BASE C: Goto subsystem C: Sendmail OK: CR

SEND C: Interrogate OK: CR

distribute for action to: T: CHI FEED SRL CR

distribute for information-only to: T: JHB

title: T: Example CR

type of source: C: Message T: TYPEIN CR

show status? Y/N: CR (the status typed by the system:)

TITLE: Example

AUTHOR(S): JHB

DISTRIBUTE FOR ACTION TO: chi feed srl

DISTRIBUTE FOR INFO-ONLY TO: JHB

MESSAGE: (Typein of message will be repeated.)

Completed

SEND C: Quit OK:/C:

(2) to send a statement use the following instead of Message (See the Command Summary for example)

<>Statement

(2) send a file (See the Command Summary)

File

(2) The mail box is in initials file under a statement called "(Journal)"

(2) Print Journal

BASE C: Print C: Journal (mail) OK: CR

(2) Empty mail box: subsitute (read) for (journal)...

TENEX ways: (review)

SNDMSG

Link (to) [username]: break links

7. TROUBLE SHOOTING AND HELP

Immediate:

TYpe ?

Type H for Help command (after Help you can type any word in NLS you wish to know about) or type CTRL q for help concerning what you are doing.

call SRI-ARC, (415 326-6200, ext.3630)
or Link to Bair or Lee at SRI-ARC or Office-1

(2) FEEDBACK mechanism:

SNDMSG to FEEDBACK or send a Journal item to ident FEED

(2) Status commands

CTRL t

(2) Remedies

CTRL c, reset, NLS

Update File Compact

PRACTICE

In addition to trying each command, there is a primer designed to be used for practice.

TNLS COMMAND SUMMARY FOR THIS COURSE: (alphabetical) You type that part of the command that appears in capitals. CR = Carriage Retrun.

BACKSPACE CHARACTER = CTRL a ; BACKSPACE WORD = CTRL w

CARRIAGE RETURN (formatting) = CTRL v CR

CONTINUE TO INSERT = CTRL e instead of first CR (CTRL x to stop inserting)

COPY STATEMENT

Copy C: statement (from) A: ADDRESS CR (to follow) A: ADDRESS CR L: CR

CREATE FILE

<>CReate C: File T: FILENAME CR

DELETE STATEMENT:

Delete C: statement at A: ADDRESS OK: CR

DELETE FILE:

Delete C: File at T: FILENAME OK: CR

INSERT STATEMENT:

Insert C: Statement to follow A: T: TYPEIN CR

INSERT TEXT at the end of a statement

Insert C: Text to follow A: +e T: TYPEIN CR

JUMP TO ADDRESS:

Jump (to) C: Address A: "TEXT" CR

JUMP TO LINK:

Jump (to) C: Link A: (FILEOWNER,FILENAME,)CR

LINK:

(FILEOWNER,FILENAME,STATEMENT NUMBER) or (FILENAME,STATEMENT NUMBER)

LOAD FILE:

Load C: File T: FILENAME CR

MOVE STATEMENT:

Move C: statement (from) A: ADDRESS CR (to follow) A: ADDRESS
CR L: CR

PRINT STATEMENT:

print C: Statement at A: ADDRESS CR V: CR

Easy print = \

PRINT REST:

Print C: Rest OK: CR

Stop printing = CTRL o

PRINT FILE:

Print C: File OK: CR

SHOW DIRECTORY:

<>SHow Directory (of) OK: CR OPT/OK CR

SUBSTITUTE TEXT IN STATEMENT:

Substitute C: Text in C: Statement at A: ADDRESS CR
(New TEXT) T: TYPEIN CR
(Old TEXT) T: TYPEIN CR Finished? Y/N: OK: CR
Substitutions made: 1

TAIL = .t for ADDRESS

(the last statement in the file -- when single level)

UPDATE A FILE:

Update C: File OK:/C: CR

SENDMAIL SYSTEM:

Submit Message or Statement or File, idents (or .receivername),
and Interrogate:

Goto subsystem C: Sendmail OK: CR

SEND C: Interrogate OK: CR

(distribute for action to:) T: CHI FEED JCN CR

(distribute for information-only to:) T: RWW

(title:)T: Example CR

(type of source:) C: Message T: TYPEIN CR

OR,,type of source:) C: STRUCTURE A: ADDRESS CR

OR,,type of source:) C: File T: FILENAME CR

(show status?) Quit OK:/C: (the status typed by the system:)

TITLE: Example

AUTHOR(S): JHB

SEND FOR ACTION TO: chi feed jcn

SEND FOR INFO-ONLY TO: rww

MESSAGE: Typein of message,

(Send the mail?) C: Y/N: (CR for yes)

Completed

(2) Print Journal

Print C: Journal mail OK: CR

(2) Empty mail box: substitute (read) for (journal)...

TITLE PAGE

JHB 2-NOV-74 21:16 24390

# BASIC TNLS-8 COURSE

SRI-ARC

4 NOV 74

Augmentation Research Center

STANFORD RESEARCH INSTITUTE
MENLO PARK, CALIFORNIA 94025

SRI/ARC BASIC INLS-8 COURSE

(J24390) 2-NOV-74 21:16;;;; Title: Author(s): James H. Bair/JHB; Distribution: /SRL( [ ACTION ] ) KWAC( [ INFO-ONLY ] ) SRI-ARC( [ INFO-ONLY ] ) EJK( [ INFO-ONLY ] ) DFI( [ INFO-ONLY ] ) ; Sub-Collections: SRI-ARC KWAC; Obsoletes Document(s): 24207; Clerk: JHB; Origin: < BAIR, NEWCOURSE.NLS;13, >, 29-OCT-74 10:50 JHB ;;;;( BAIR, NEWCOURSE.NLS;3, ), 1-JUL-74 09:10 JHB ;####;

JHB 2-NOV-74 21:59 24391

New printer

Congratulations on your new printer!! It was certainly needed. What kind is it? 1

New printer

(J24391) 2-NOV-74 21:59;;;; Title: (Unrecorded) Title: Author(s): James H. Bair/JHB; Distribution: /DLS( [ ACTION ] ) RADC( [ INFO-ONLY ] ) ; Sub-Collections: SRI-ARC RADC; Clerk: JHB;

JI 3-NOV-74 07:16 24392

test of sendmail system

A reasonable case could be built for a synonym directory (for the keyword search feature) in the help system: many users refer to things in a different way than others : I just spent fifteen minutes learning how to locate the CM Marker, equivalent of the old A:<>[string command, from the help system. Unfortunately, positioning and string search did not work on the keyword retrieval and I had to keep searching for the MAGIC combination. The synonym capability could be evolved dynamically and be adaptive to user experience with a simple user-feedback capability that added synonyms (even if done on a deferred basis with "maintainer approval" (hold them in suspense)). What say, I vote for user convenience!!!

JI 3-NOV-74 07:16 24392

test of sendmail system

(J24392) 3-NOV-74 07:16;;;; Title: Author(s): Jean Iseli/JI;
Distribution: /FEEDBACK( [ ACTION ] ) DCE( [ INFO-ONLY ] ) JI( [
INFO-ONLY ] ) ; Sub-Collections: NIC FEEDBACK; Clerk: JI;

DCE 3-NOV-74 09:43 24393

Recording our written dialogue

Special attention requested of those who have vital SNDMSG interchanges

DCE 3-NOV-74 09:43 24393

Recording our written dialogue

I perceive that many SNDMSGs are being exchanged these days about the projects, their scope of work, etc., concerning vital ARC activity. I don't get the feeling that these in general are being saved in a methodical way and recorded in a manner that makes them available for people to find who may later have valid need to know. This type of dialog recording was a basic purpose in the development of our Journal system, and it seems both frustrating and ironical to see that purpose break down in our own practices. 1

If people are forced to use SNDMSG because of inadequacies in our dialogue support system, then I would like for arrangements to be set up where the SNDMSG interchanges are Journalized -- for instance, periodically bundling and Journalizing of the SNDMSG records for particular topical or ARC-activity areas. 2

Elizabeth shared with me some of her SNDMSG interchanges for 31 Oct an 1 Nov. Watson, Carlson, Michael and Lehtman all had valuabe things to say -- I would say that 80% of what was said should be recorded, and the other 20% wouldn't hurt. 3

Harvey's comment about long SNDMSG items, and Dick's reply about the shortcomings of Net Delivery, point toward some system changes that would help; but in the meantime, I would like to see a little method applied. 4

Keeping an evolving file in which the relevant interchanges on a given topic are collected would seem a good idea. If it is updated after every addition, then other people can go browse. Standard naming for such files will help people find them. If for some reason, access should be limited, the NLS-privacy feature can be used. When it gets to a certain size, or according to other criteria, the current contents can be Journalized, and a new set of contents begin to accrue. The file can contain links to the past Journal items representing prior dialog collections. I would think that the conventions being evolved for the FEEDBACK fils would be worth considering for more general such use. 5

As an aside, I found the interchange to make very useful reading for me. The talk about what kinds of terminals to support, the difficulties with new users trying to learn on half-duplex terminals, etc. seem very important for Applications people to know about -- yet Norton and Bair weren't on the relevant message distributon list and one wonders when and how they would be assured of learning what they need to know. Jim(s) and I may well not want to receive copies of all of the interchanges; so the point here is that to record the dialogue provides for later bringing to another's attention any interchange that turns out to be of value to him, and it provides for browsing through indices or full-text subsequently by people with really valid need to know. 6

DCE 3-NOV-74 09:43 24393

Recording our written dialogue

(J24393) 3-NOV-74 09:43;;;; Title: Author(s): Douglas C. Engelbart/DCE; Distribution: /RWW( [ ACTION ] ) JCN( [ ACTION ] ) SRI-ARC( [ INFO-ONLY ] ) ; Sub-Collections: SRI-ARC; Clerk: DCE;

DVN 4-NOV-74 09:04 24394

Response to Outline for Output Processor Primer

This comments on (hjournal,24389,)

DvN 4-NOV-74 09:04 24394

Response to Outline for Output Processor Primer

Jeanne, your outline looks neat to me. I would be sure to include a scenario of making a format via the format system. 1

DVN 4-NOV-74 09:04 24394

Response to Outline for Output Processor Primer

(J24394) 4-NOV-74 09:04;;;; Title: Author(s): Dirk H. Van Nouhuys/DVN; Distribution: /JOAN( [ ACTION ] add to dpcs notebooke, also :please add hjournal, 24389,) DIRT( [ INFO-ONLY ] ) ; Sub-Collections: SRI-ARC DIRT; Clerk: DVN;

RWW 4-NOV-74 10:01 24395

ARC Participants in NSW Review meetings Nov 6-8

ARC Participation in Meetings Wed, Thurs, Fri 1

All ARC software people are invited to spend as little or as much time in the meetings as they desire for their background, although Wed will probably be the most generally useful. My present view on active presentation and participation runs roughly as follows. 1a

Wed Morning 1a1

Protocols 1a1a

20 min tutorial on PCP by JEW, 20 tutorial on protocols building on PCP and NCP level issues by JBP and then 20 min discussion 1a1a1

Frontend 1a1b

Outline of Frontend philosophy and components by CHI and KEV probably 40 min and 20 min general discussion. 1a1b1

NLS 1a1c

Review of recent trip to Montgomery and outline of task areas we plan to work in that resulted, EKM and HGL about 30 min with 15 minutes for general discussion. 1a1c1

Wed Aft and Thurs 1a2

Tutorial by Millstein on MCA works Manager plans, everybody should probably attend. 1a2a

Rest of Afternoon and Thurs will be more open ended. The people who definitely probably need to be there are Protocol and Frontend people and maybe Elizabeth and Harvey for the COBOL entry type issues. 1a2b

Friday 1a3

The main people who need to be there for discussions on interface with ADR and ELF are Frontend and Protocol people, probably not all at the same time, although Harvey may also need to be there some of the time. 1a3a

RWW 4-NOV-74 10:01 24395

ARC Participants in NSW Review Meetings Nov 6-8

(J24395) 4-NOV-74 10:01;;;; Title: Author(s): Richard W. Watson/RWW; Distribution: /NPG( [ INFO-ONLY ] ) DVN( [ INFO-ONLY ] ) POOH( [ INFO-ONLY ] ) KIRK( [ INFO-ONLY ] ) ; Sub-Collections: SRI-ARC NPG; Clerk: RWW;

RLL 4-NOV-74 11:07 24396

comment on Beck's OP primer outline

Just read Jeanne's OP primer outline. Great. OOne comment. I think the sequence generator and portrayal generator might be a difficult task to explain in a primer. Be careful, if it appears early it could turn the readers off frm the whole system. 1

RLL 4-NOV-74 11:07 24396

comment on Beck's OP primer outline

(J24396) 4-NOV-74 11:07;;;; Title: Author(s): Robert N. Lieberman/RLL; Distribution: /DIRT( [ INFO-ONLY ] ) ; Sub-Collections: SRI-ARC DIRT; Clerk: RLL;

HGL 4-NOV-74 11:26 24397

Information for ISI-COTCO people

Some replies to your questions of last Friday: 1

1. The file (nls, sysgd,) is currently 219 pages (!), but could be sent down if you wish. 1a

2. For FTPFRK process to work in sucking NLS files across from here or OFFICE-1 you must have the following: 1b

The SAV file <NET>FTPFRK. (If you do not have it in a directory NET, we must patch a file name reference in your version of NLS, an easy thing to do.) 1b1

The user program by Dave Hopper or the (currently being implemented) command "Load Remote File" which handle the user interface and set up the subsidiary fork must also be available. The Hopper user program may be FTP'd down and placed in ay directory you wish. 1b2

Dave's user program is made up of two REL files: SUBFTPM.SUBSYS; and SUBFTPM.CML. These create a suer subsystem called FTPMSYS when loaded via the Load program command. Within the user subsystem there are a number of (UNDOCUMENTED!) options which duplicate FTP commands (e.g., connect, get, etc.) To use that subsystem to bring over non-NLS files, you must do "Set type TENEX"; the file at this end must not have a partial copy or it won't go over. There are other things you may need to know about, but when we try the process we'll come upon most of them. 1b3

3. Quit from any subsystem uses the subsystem stack, not the file return ring. (I'm not quite sure why the question is being asked.) 1c

4. Charles has no other requirements. We should, however, coordinate the transfers required for getting NLS file through the network. Also, do you have compilers, the output processor, etc? Do you want them? 1d

5. Re the BBN Scholar project. We had a demo by Mario Grignetti on Friday via the net. I think you should speak to him or to Laura directly via phone or SNDMSG rather than through us. (I'm not quite sure what the funding status of their project is. As far as I could tell, they had a demonstration project which could answer questions about and tutor users in the use of a subset of NLS.) 1e

6. While there is currently not a counter which calls help for the user if he types repeated mistakes without asking for help, it probably would no t be difficult to implement as an extension to

the current system. (Some sort of bookkeeping matrix inthe User Profile, change inthe error generation and sinalling mechanisms to record information in the user profile ad call help if appropriate.) There are no plans to implement such an extension in the near future. 1f

Thus, we do not currently invoke Help on the user's behalf. Also, another extension to the system should translate functional characters in syntax, etc, to the characters defined by the user. Such a mod would deal with your friends problem, but probably is not very easy. 1f1

Seems you have things under control. We should get together via phone soon to set up FTPFRK, etc. 2

HGL 4-NOV-74 11:26 24397

Information for ISI-COTCO people

(J24397) 4-NOV-74 11:26;;;; Title: Author(s): Harvey G. Lehtman/HGL;
Distribution: /JGR( [ ACTION ] ) RT2( [ ACTION ] ) RWW( [ INFO-ONLY ] )
CHI( [ INFO-ONLY ] ) JDH( [ INFO-ONLY ] ) ; Sub-Collections: SRI-ARC;
Clerk: HGL;

RWW 4-NOV-74 11:48 24398

Reply to Carlson's Note Replying to Irby's Frontend Issues Paper

Bill, a few words of reassurance and then a statement of the questions and issues at stake relative to terminals. 1

We completely agree with you that anybody with a terminal supported by TELNET or ELF should be able to use the NSW and that includes we assume 2741's, second people should be able to put any existing or future tool into the NSW and be able to have it used in at least transparent mode. 2

Therefore I do not think there is any disagreement on these two critical areas. The issues in Charles document are more oriented toward providing capabilities that will encourage growth over the longer haul of a more coherent human engineered NSW user environment. 3

What are our long term visions of what a network based marketplace like the NSW can become? It will always be possible as stated above to use the NSW Frontend like a TIP is now used. The issue is what kind of coherent user interface world we want to encourage evolving over time and how to offer the types of attractive services from the Frontend, Works Manager, protocols that will encourage future evolution in the "good" directions. Our view is that the "good" direction for design of human engineered user interfaces is not toward half duplex, line at a time terminals because what you can do for users is so limited (remember I said earlier that people on such terminals would always be able to use them, possibly somewhat awkwardly for some tools that are built to take full advantage of the services available to them from the Frontend. 4

The problem for us at this point is not whether to support the 2741's of the world, that's assumed as given above, the issue is how much effort to invest to optimize things for the user interface for such terminals. 5

Charles pointed out in his document that one of the goals of the Frontend is to interact with the user as helpfully as possible and to collect and parse the command for the tool and to pass to the tool a fully formed command call for the tool to execute. We want to save, for tools fully in the NSW context, the work of interacting with the user parsing etc. In this way besides being able to provide a nice responsive human interface, we can make network and tool operation more efficient. And in fact half duplex, line at a time systems like Multics, IBM etc should operate very nicely in this kind of environment. 6

It might be useful to reread Charles document from this point of view of the future environmental goals. The design choices in the Frontend area will critically affect the nature of NSW tool evolution in the future to either being the kind of incoherent user world presently offered by the ARPANET or toward a more coherent one. We

understand fully the marketing needs of now and they are being provided for, its the framework for the future that we are most concerned with in the issues raised by Charles,

7

RWW 4-NOV-74 11:48 24398

Reply to Carlson's Note Replying to Irby's Frontend Issues Paper

(J24398) 4-NOV-74 11:48;;;; Title: Author(s): Richard W. Watson/RWW;
Distribution: /NPG( [ INFO-ONLY ] ) DCE( [ INFO-ONLY ] ) ;
Sub-Collections: SRI-ARC NPG; Clerk: RWW;

JBP 4-NOV-74 11:51 24399

telnet-cover

< POSTEL, TELNET-COVER.NLS;2, >, 4-NOV-74 11:38 JBP ;;;; 1

Request for Comments: 659 Jon Postel
NIC# 31177 SRI-ARC
Online file: [SRI-ARC]<POSTEL>RFC659.TXT 18 October 1974

Announcing Additional Telnet Options 1a

This is to announce the set of Telnet Options defined in Requests For Comments 651 through 658 (NIC 31154 through 31161) are part of the offical Telnet Options and should be added to the Protocol Notebook. 1b

RFC 651 is a revision of the Status Option to utilize the subcommand feature and reduce the number of bits required to convey the status information. This revised Status Option replaces the previous Status Option. 1c

The others RFCs (652 through 658) are new Options for controling the behavior of the format effector characters Carriage Return, Horizontal Tab, Form Feed, Vertical Tab, and Line Feed. 1d

Your attention is also called to RFC 645 (NIC 30899) "Network Standard Data Specification Syntax" which was prepared some time ago but has not received wide circulation. 1e

Unfortunately the Network Information Center can not provide hardcopy documents. Currently the author is responsible for distribution of RFCs. 1f

The documents are available online as: 1g

[ISI]<DCROCKER>STATUS-OPTION-REVISION.TXT 1g1
[ISI]<DCROCKER>NAOCRD.TXT 1g2
[ISI]<DCROCKER>NAOHTS.TXT 1g3
[ISI]<DCROCKER>NAOHTD.TXT 1g4
[ISI]<DCROCKER>NAOFFD.TXT 1g5
[ISI]<DCROCKER>NAOVTS.TXT 1g6
[ISI]<DCROCKER>NAOVTD.TXT 1g7
[ISI]<DCROCKER>NAOLFD.TXT 1g8
[SRI-ARC]<POSTEL>RFC645.TXT 1g9
[SRI-ARC]<POSTEL>RFC659.TXT (This Announcement) 1g10

telnet-cover

(If these files are not found online they may have been archived, in this case the files should be accessable via the "interogate" command.)

1g10a

telnet-cover

(J24399) 4-NOV-74 11:51;;;; Title: Author(s): Jonathan B. Postel/JBP; Distribution: /JBP( [ ACTION ] ) ; Sub-Collections: SRI-ARC; Clerk: JBP;

KIRK 4-NOV-74 14:07 24401

Questions concerning the 3M cassette machine

Can it be programmed to accept control characters instead of ESC followed by a character? If so, can it then be programed to automatically backspace wrd and backspace character using CTRL-A and CTRL-W? other characters? user defineable? Can it be hooked up to a line processor or to a CRT with arrow-buttons to allow pointing? (that would be exciting.) How much does it cost in comparison with Termicette, etc.? Does anyone make one that does the same thing but uses standard cassettes instead?

KIRK 4-NOV-74 14:07 24401

Questions concerning the 3M cassette machine

(J24401) 4-NOV-74 14:07;;;; Title: Author(s): Kirk E. Kelley/KIRK;
Distribution: /MEH( [ ACTION ] ) EKM( [ INFO-ONLY ] ) HGL( [ INFO-ONLY ]
) JML( [ INFO-ONLY ] ) DVN( [ INFO-ONLY ] ) ; Sub-Collections: SRI-ARC;
Clerk: KIRK;

RLL 4-NOV-74 16:35 24402

bug: reset temp mod. command does not work.

Bug: try a set tempp modifications , then change something, then try a reset temp.. modification command. I got a 'this file is not lock' message. The file was a journal file. Also tried a delte mod command but got the same result (as expected).

RLL 4-NOV-74 16:35 24402

bug: reset temp mod. command does not work.

(J24402) 4-NOV-74 16:35;;;; Title: Author(s): Robert N. Lieberman/RLL; Distribution: /FDBK( [ ACTION ] ) JDH( [ INFO-ONLY ] ) JHB( [ INFO-ONLY ] ) ; Sub-Collections: SRI-ARC; Clerk: RLL;

JHB 4-NOV-74 20:12 24404

Re (mjournal,24393,), Recording written dialogue

I agree enthusiastically; it certainly would help us do our job (in Applications). Perhaps an Ident should be set up for the kind of dialogue refered to, DAD (Design Application Dialogue)? 1

JHB 4-NOV-74 20:12 24404

Re (mjournal,24393,), Recording written dialogue

(J24404) 4-NOV-74 20:12;;;; Title: Author(s): James H. Bair/JHB;
Distribution: /JCN( [ ACTION ] ) RWW( [ ACTION ] ) DCE( [ ACTION ] )
SRI-ARC( [ INFO-ONLY ] ) ; Sub-Collections: SRI-ARC; Clerk: JHB;

DSM 4-NOV-74 20:24 24405

CARLSON at USC-ISI: NLS TRAINING

1-NOV-74 1250-PST CARLSON at USC-ISI: NLS TRAINING
Distribution: WATSON AT SRI-ARC, carlson, riddle at office-1, crain at office-1,, martin at sri-arc, maynard at sri-arc, belleville at sri-arc,, lehtman at sri-arc, michael at sri-arc, lee at sri-arc
Received at: 1-NOV-74 12:51:23 1

IT WILL TAKE ME A WHILE TO DIGEST AND REACT TO YOUR RECENT MEMOS. MY ONLY IMMEDIATE COMMENT IS THAT YOU SHOULD NOT LIMIT THE NUMBER OF COMMANDS TAUGHT IN NLS TRAINING SESSIONS. I PERSONNALLY THINK THE BEST APPROACH IS TO LET THE PEOPLE ASK "HOW TO DO IT" QUESTIONS AND SHOW THEM. THE QUESTIONS ARE PROBABLY DIRECTED AT SOMETHING THEY ANTICIPATE HAVING TO DO A LOT. NO MATTER HOW COMPLICATED THE SOLUTION, THEY WILL BE BETTER OFF HAVING IT AND BEING ABLE TO REPEAT IT BY ROTE. WHEN I TAKE A CLASS AND ASK HOW TO DO SOMETHING, I AKE A NEGATIVE RESPONSE TO INDICATE THAT THE SYSTEM IS NOT ABLE TO SUPPORT THAT REQUIREMENT. IF THE CLASS IS LARGE, IT MAY BE RESPONSIBLE TO PUT THE QUESTION OFF TILL AFTER CLASS, BUT I WILL BE VERY DISAPPOINTED IF ANY AIR FORCE PERSON LEAVES THINKING THAT SOMETHING IS IMPOSSIBLE WHEN REALLY IT IS ONLY CUMBERSOME, UNAESTHETIC, OR DIFFICULT. 1a

BILL 1b

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(J24405) 4-NOV-74 20:24;;;; Title: Author(s): David S. Maynard/DSM; Distribution: /JHB( [ INFO-ONLY ] ) ; Sub-Collections: SRI-ARC; Clerk: DSM;

DVN 4-NOV-74 22:12 24406

References and Thoughts about Output to COM from Office-1

Larry, In response to your Sendmessage: 1

I recenty composed a brief description of using COM through NLS for the people in the ARPA office (njournal,24105,). It cites (gjournal,23549,) with information about prices. Bear in mind in figuring prices that COM reduces the number of pages 30-50%. I think it will answer most of your questions for a first pass anyway.

2

A word about microfiche. DSSI's optics limit them to 24X reduction or less. Of curse it is possible to make paper copies and photograph them, but that is relatively expensive. We are now talking to an outfit with a Singer 6000 who probably has the capacity to make 48X fiche, but it is not yet clear if they can handle our output and at a compeditive price. 3

DVN 4-NOV-74 22:12 24406

References and Thoughts about Output to COM from Office-1

(J24406) 4-NOV-74 22:12;;;; Title: Author(s): Dirk H. Van Nouhuys/DVN; Distribution: /LAC( [ ACTION ] ) JOAN( [ ACTION ] for dpcs notebook please) DPCS( [ INFO-ONLY ] ) ; Sub-Collections: SRI-ARC DPCS; Clerk: DVN;

KIRK 4-NOV-74 22:59 24408

Format Subsystem ready for review

Please look at the Format user-subsystem and let me know what you think. It contains the old Index and TOC userprograms converted to nls-8. These are the last of the first priority user-programs requested by applications to be converted. 1

KIRK 4-NOV-74 22:59 24408

Format Subsystem ready for review

(J24408) 4-NOV-74 22:59;;;; Title: Author(s): Kirk E. Kelley/KIRK;
Distribution: /JHB( [ ACTION ] ) JCN( [ ACTION ] ) RWW( [ ACTION ] )
JDH( [ ACTION ] ) ; Sub-Collections: SRI-ARC; Clerk: KIRK;

EKM 5-NOV-74 08:19 24409

nsw/nls plan

My file (MICHAEL,index,) is a table of contents for the NSW/NLS document. Each chapter heading is followed by a link to the text for that chapter in the author's directory. Dick will be reviewing these files so be sure to keep them updated. 1

EKM 5-NOV-74 08:19 24409

nsw/nls plan

(J24409) 5-NOV-74 08:19;;;; Title: Author(s): Elizabeth K. Michael/EKM; Distribution: /RWW( [ ACTION ] ) HGL( [ ACTION ] ) RLB2( [ ACTION ] ) DSM( [ ACTION ] ) KIRK( [ ACTION ] ) KJM( [ INFO-ONLY ] ) CHI( [ INFO-ONLY ] ) ; Sub-Collections: SRI-ARC; Clerk: EKM;

RWW 5-NOV-74 08:55 24410

Quick Thoughts on the Problem of an Adequate Interface to the Sequential File World

NLS can not be an island, its driving me nuts living in the NLS world where my local coworkers live and work and in the sequential world where just about everyone I work with outside NLS lives. We badly need more bridges. Some of these can be built with NSW funds. Dave Maynard has got the ball to do some designing here. Here are some of my recognized needs. Others with similar needs convey yours through the Journal to me and others and particularly Dave.

RWW 5-NOV-74 08:55 24410

# Quick Thoughts on the Problem of an Adequate Interface to the Sequential File World

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Input 2

From the message world 2a

The problem here is how to handle the tens of messages a person receives every day, files them in appropriate categories and gets important ones into the Journal easily. 2a1

I believe messages should be at the very least automatically delivered into ones initial file, whether under a separate branch from Journal stuff or not is not clear to me. There ought to be a commad that allows you to point at a message and gets it journalized supplying the appropriate info from the headr for author, title etc. The question of converting last name to idents and handling inputs o the Ident File for people not already there need s doing. All the people we are in correspondence with should be in the Ident File, ifits hard to add people we need to know why and make it easier. 2a1a

There is also a longer term need for filing forwarding replying capabilities as in BBN's Readmail system. 2a1b

From other text editers and offline systems 2b

The problem here is getting stuff into NLS files structured appropriately. There are simple conventions in Inseqh, but more flexibility is needed. For example every organization usually has definite conventions on level numbering indenting etc that could provide other clues to aid the process. Is it possible to design a question answer system that would compile to a special inseqh type program to be used by architects or other knowledgable people? How then do we make that program easily available to secretaries and others in an organization? 2b1

OUtput 3

To the message world and the Journal 3a

When I create a messae I should do so in NLS and be able to

indicate who to send through Journal or by SNDMSG type address, recorded or unrecorded. When NLS does Network delivery there probaly should be an option to indicate whether the person should get the whole document or just a citation. Most people who now get citations ignore them because they assume its tto hard to get the whole thing (we need to understand this better because I thought this was easy). Should it be possible to address sndmsg addressees not in the Ident File (I think probably yes). 3a1

To sequential files and hardcopy 3b

We are doing reasonbly well here and except for the list of needs for OP I do not presently see any crying holes here. 3b1

System Primtives 4

We probably need a set of NLS primitives for dealing with the process of going back and forth between NLS and sequential files. These could be used for user programs and to build system hunks needed. No concrete suggestions hit me as I'm writing this. 4a

RWW 5-NOV-74 08:55 24410

Quick Thoughts on the Problem of an Adequate Interface to the Sequential File World

(J24410) 5-NOV-74 08:55;;;; Title: Author(s): Richard W. Watson/RWW; Distribution: /SRI-ARC( [ INFO-ONLY ] ) ; Sub-Collections: SRI-ARC; Clerk: RWW;