1c1

THANK YOU.

[CHI] Charles, I'd like to finalize the PLASMA DISPLAY order as	
soon as possible. The hardware commitment specified in PO# A56388	
is complete.	1
What remains are some software questions that you are aware	
of.	1 a
- As soon as it is convenient for you to do so, would you	
please call William Petty at Owens-Illinois (419) 242-6543 to	
straighten these out.	1 b
- Please reply thru journal or in this file directly, It has	
write protection off.	
J(JUMP) L(LINK) (HARDY, mehchi, wfi; "[CHI])	
When finished U(update) O(old) or O(output) F(file)	
(HARDY, mehchi.nls; 1; p777777)	10

CHI Plasma Display Follow-Through Request

(J13231) 18-DEC-72 14:28; Title: Author(s): Hardy, Martin E./MEH; Distribution: Irby, Charles H., Norton, James C./CHI JCN; Sub-Collections: SRI-ARC; Clerk: BER;

**** I sent you a journal item (12876,) with many errors. Please replace it with this corrected copy, sorry. ****	
reptace It with this corrected copy, sorry.	1
+ If at all possible could you please obtain the following	
information for me by 12/20/72. I would like to get it together	
for analysis and action as soon after this date as possible.	2
[DCW] BBN information on their facility room environment	
recording device(s).	2a
[DCW] What kind of back-up or cushioning does BBN have for	
PGSE fluctuations or outages?	2ъ
[DCW] Can you recall device/system failure due to suspected or	
known power fluctuations or outages?	2c
[DCW] What is a reasonable estimate of the average number of	
pages on our drum at any one time?	2d
[DCW] What power back-up does software need?	2e
[DCW] Estimate of time or how many pages must be saved	
inorder to safely save the system on disc/drum?	2e1
[DCW] I have done some timing and total page capacity	222
estimates as follows:	2e1a
CAPACITIES: DRUM AND MEMORY	2e1a1
ADDRESSABLE MEMORY ADDRESSES	2e1a1a
1 Xcore box implies = 32,768/b10	
(500K/b8 to 577,777/b8).	2e1a1a1
10 DEC boxes (16k ea.) implies = $163,840/b10$	
(0 to 477,777/b8).	2e1a1a2
ADDRESSABLE DRUM ADDRESSES	2e1a1b
170/b10 bands X 18/b10 sectors X 512/b10 words	
= 1,566,720/b10 words,	2e1a1b1
TOTAL ADDRESSABLE PAGES	2e1a1c
1 page = 512/b10	2e1a1c1
VENORY	2010102

## MEH 22-DEC-72 9:37 13232

### DCW QUESTIONS FOR MOTGEN (correct version of 12876)

DEC = $163,840/b10$ addresses divided by $512/b10$ words = $320/b10$ pages.	2e1a1c2a
XCORE = 32,768/b10 addresses divided by	
512/b10 words = $64/b10$ pages.	2e1a1c2b
DRUM	2e1a1c3
170/b10 bands X $18/b10$ sectors = 3,060/b1	0
pages	2e1a1c3a
XFER RATES: DRUM AND MEMORY	2e1a2
Bryant Drum = approx 6 micro seconds per word	2e1a2a
implies 3.078 milli sec per page	2e1a2a1
Dec Memory = 1 micro sec per word	2e1a2b
implies 0.512 milli sec per page	2e1a2b1
[DCW] What does TENEX POWER-FAIL code do?	2e2
[DCW] With previous notification could we perhaps HALT TENEX after completion of current xfers and saving appropriate registers, THEN; when power was restored staup again without losing? (assuming disk/drum/mem ok)	rt 2e3
+ Reply through the journal OR In my scratch file:	
It is a file with write protection off (any user can write on it).	3
J( jump) L(link) (HARDY, MEHDCW, 1: why1; "[DCW]" - **)	За
- Insert reply one level down from each request	3ь
- Please asterisk each item you reply to immediately following [initial] ie: [initials]*	
This enables me to sense your replies	
WHEN FINISHED	3с
- U(update) O(old)	
OR	3d
- O(output) F(file) HARDY, mehdcw.nls; 1; P777777	Зе

THANK YOU 3f

DCW QUESTIONS FOR MOTGEN (correct version of 12876)

(J13232) 22-DEC-72 9:37; Title: Author(s): Hardy, Martin E./MEH; Distribution: Wallace, Donald C. (Smokey), Ferguson, Ferg R., Victor, Kenneth E. (Ken), Irby, Charles H./dcw wrf kev chi; Sub-Collections: SRI-ARC; Clerk: MEH;

Response to (13206,) Status-Light job start request.

(M2J)* I have started the status light assessment and should complete it by the end of the week, $10/20/72$	
	1
(FM2J)* Still on the 10/20 time estimate? I'm still interested in a ROUGH cost estimate - in man weeks of hardware and manweeks of	
software time I know it's hard to estimate, but	2
(M2J1)* YES, I am done with this estimate, but it is not on line yet. Hope to journalize by 10/20.	3
(FM2J1)* Ha HA still not in the Journal? 10/30. I have read the draft and will reflect on it this week. Seems pretty expensive, but what doesn't?	4
(M2J2)* I have it in my author branch(12379,) 11/3, There may have been a delievery goof.	5
(FM2J2)* I got it. It must fit into the overall list of things we are now about to start. The EMC will get it this week. Hang in	
there. It's a very good study thanks.	6
(FM2J3) received (13206,) request for start.	7
- By 12/15 I will work up a conceptional drawing (full scale) of a typical Light Station. We should review it, just a few of us for starters-MEH, JCN, KEV, DWW?then put that accepted	
design up for larger (whole) group review?	7 a
(FM2J4) I obviously missed my 12/15 target in (FM2J3).	8
- I will finish drawing sometime this week (12/18-24). Once we have decided on layout I will request a bid.	8 a
I expect the minimum delivery date will be $3-4$ weeks from PO.	8a1
- I have finished block design and discussed with EKV. He will finalize design and direct construction (by somebody	
outside ARC).	86
It will take some time to receive needed parts and to complete.	8b1
I expect like 6 weeks plus Christmas delays.	8c
- This places installation around mid February 1973.	8d

MEH 19-DEC-72 9:55 13234 Response to (13206,) Status-Light job start request.

- Limuti is gone. He is 100 per cent on an active project.

2 .

MEH 19-DEC-72 9:55 13234

Response to (13206,) Status-Light job start request.

(J13234) 19-DEC-72 9:55; Title: Author(s): Hardy, Martin E./MEH; Distribution: Engelbart, Douglas C., Watson, Richard W., Norton, James C., Victor, Kenneth E. (Ken)/emc kev; Sub-Collections: SRI-ARC EMC; Clerk: MEH;

[WRF] Ferg, a recap of our 12/19, discussion about Drum error	
hardcopy.	1
- You are going to write a filter program that will sort Drum errors (and others you want) from System's ERROR.MESSAGES file.	1 a
The Drum sort will contain only those errors since last program run.	1a1
An operator will run this program once a week (after dump).	
The Drum hardcopy output will be delivered to ED.	1a2
Ed will store them in a binder for maintenance	
reference.	1a2a
- What is your expected completion date? Please answer via	
journal.	1 b

(J13235) 26-DEC-72 11:31; Title: Author(s): Hardy, Martin E./MEH; Distribution: Ferguson, Ferg R., Norton, James C., Wallace, Donald C. (Smokey), Victor, Kenneth E. (Ken)/wrf jcn dcw kev; Sub-Collections: SRI-ARC; Clerk: MEH;

MEH 22-DEC-72 9:48 13236

responce to 13447, "you have Journal Mail"

I like it for both (TNLS/DNLS).

1

responce to 13447, "you have Journal Mail"

(J13236) 22-DEC-72 9:48; Title: Author(s): Hardy, Martin E./MEH; Distribution: Irby, Charles H./chi; Sub-Collections: SRI-ARC; Clerk: MEH;

maintaning our whole system.

e ARC Hardware group has a new (Electronics technician)	1
Rodney's experience lies in computer systems maintenance and development, specifically: Dec I/O devices, Adage graphics	
terminal, A/D converters, Line printers, and Mag tape devices.	1 a
During the past year he has been relaxing and touring country.	1 b
Previous to this he spent 6 years working for Columbia	
University's Physics lab servicing and interfacing small computer systems.	1 c
Rodney acquired his electronic interest through hobbies from	
youth and his formal understanding (after high school) through 3 years of technical schooling at RCA Institute of N.Y.	1 d
His current hobbies are electronics and touring.	1 e
My intention is to put him immediately to work learning Tasker and becoming responsible for this device. Aside from this he	
will work with EKV on documentation to become familiar with other ARC hardware.	1 f
Once Rodney feels his feet are on the ground with Tasker (3	
to 4 No.?) he will then indulge in learning other devices so he can (as soon as possible) help in troubleshooting and	

(J13237) 29-DEC-72 17:44; Title: Author(s): Hardy, Martin E./MEH; Distribution: Agent, Station, Hoffman, Carol B., Lee, Susan R., Michael, Elizabeth K., Dornbush, Charles F., ARC, Guest O., Feinler, Elizabeth J. (Jake), Handbook, Augmentation Research, Kelley, Kirk E., Meyer, N. Dean, Byrd, Kay F., Prather, Ralph, White, James E. (Jim), Vallee, Jacques F., Kaye, Diane S., Rech, Paul, Kudlick, Michael D., Ferguson, Ferg R., Lane, Linda L., Auerbach, Marilyn F., Bass, Walt, Engelbart, Douglas C., Hardeman, Beauregard A., Hardy, Martin E., Hopper, J. D., Irby, Charles H., Jernigan, Mil E., Lehtman, Harvey G., North, Jeanne B., Norton, James C., Page, Cindy, Paxton, William H., Peters, Jeffrey C., Ratliff, Jake, Row, Barbara E., Van De Riet, Edwin K. (Ed), Van Nouhuys, Dirk H., Victor, Kenneth E. (Ken), Wallace, Donald C. (Smokey), Watson, Richard W., Andrews, Don I./sri-arc; Sub-Collections: SRI-ARC; Clerk: MEH;

MEH

sample journal message

this is a sample message

1

sample journal message

(J13238) 11-DEC-72 10:02; Title: Author(s): ARC, Guest O./ARCG; Distribution: Neigus, Nancy J., Watson, Richard W., Kidston, Carol A./NJN RWW CAK; Sub-Collections: SRI-ARC; Clerk: ARCG;

test message to susan

Here is my second message. When will I get my Net resources notebook?

1

test message to susan

(J13239) 11-DEC-72 10:17; Title: Author(s): ARC, Guest O./ARCG; Distribution: Lee, Susan R./SRL; Sub-Collections: SRI-ARC; Clerk: ARCG;

quick query

does the nic have any of it's collection on file in nls?

1

quick query

(J13240) 11-DEC-72 10:27; Title: Author(s): ARC, Guest O./ARCG; Distribution: Van Nouhuys, Dirk H./DVN; Sub-Collections: SRI-ARC; Clerk: ARCG;

CHI 10-DEC-72 14:00 13241

Comment on (Mjournal, 13224,1), viewspecs in Query

From the description given in (MJOURNAL, 13224,1), it appears that the user will have the link which is used for viewspec control printed as part of the substance of the data base. This seems to me to be a terribly confusing thing to do to the poor user. Did I misread the memo? Are you planning to use a content filter to remove this internal information? -- Charles.

1

Comment on (Mjournal, 13224,1), viewspecs in Query

(J13241) 10-DEC-72 14:00; Title: Author(s): Irby, Charles H./CHI; Distribution: Vallee, Jacques F., Watson, Richard W., Norton, James C., Van Nouhuys, Dirk H., Feinler, Elizabeth J. (Jake), North, Jeanne B./jfvrww jcn dvn jake jbn; Sub-Collections: SRI-ARC; Clerk: CHI;

CHI 10-DEC-72 14:58 13242

Comment on (Mjournal, 13221,1), comments on Paul's user control memo

Paul and Don, These are comments on don's comments (Mjournal, 13221,1) on Paul's user control memo: 1) (Mjournal, 13221,1b) online ordered list for user group profile—a very good idea, Don; 2) (Mjournal, 13221,1d) good job mix— I agree with Don that there is considerable advantage to sharing subsystems and preempting the machine for a short time to get something out of the way; 3) (Mjournal, 13221,1e1) terminal type—I agree that it is rediculous to have several displays unusable because people on tty's got on first. These are are most valuable resource an we must be able to use them; 4) (1f) user names—I agree, One should not be able to log in as catalog, etc. and thre should be no need to login as someone else; 5) (1g) autologout—I agree, it should do the right thing; 6) (1h) EXEC only changes—This is very important. We must restrict the changes to the EXEC. — Charles.

CHI 10-DEC-72 14:58 13242

Comment on (Mjournal, 13221,1), comments on Paul's user control memo

(J13242) 10-DEC-72 14:58; Title: Author(s): Irby, Charles H./CHI; Distribution: Rech, Paul, Andrews, Don I., Vallee, Jacques F., Watson, Richard W., Norton, James C./pr dia jfv rww jcn; Sub-Collections: SRI-ARC; Clerk: CHI;

CHI 10-DEC-72 18:27 13243 A Snap Shot of Software Task Planning for the Next Few Months

Summarizes work done by CHI and RWW; Your Comments will be greatly appreciated

1

10

add auto-logout to screen sharing, user-name check in ident verify 2 3 (Journal) Journal first (most recent documents) 4 (wishlists) 5 Jacques: data management integration, mpl conversion, mpl programmer's manual 5a PR 4-OCT-72 9:06 12058 Analysis Notes: Some Typical Measurements Location: (LJOURNAL, 12058, 1:w) 6 WRF 26-SEP-72 15:54 11936 Improved SIN - Jsvs 52 Location: (LJOURNAL, 11936, 1:w) 7 DIA 26-SEP-72 13:59 11933 Results of TTY-simulation process clock measurements Location: (LJOURNAL, 11933, 1:w) 8 MDK 25-AUG-72 14:01 11573 On NLS Command Language Syntax: I Location: (KJOURNAL, 11573, 1:w) 9 LPD 23-AUG-72 15:20 11569 More on compiling patterns Message: I have now printed out the code generated for Dirk's content analyzer pattern in (11135,) and the results are just what I expected: compiling that pattern open as suggested in (11506,) would produce about an order of magnitude improvement in speed, possibly more. I think it would be very instructive for some of you to look at this code. The relevant NLS routines are READC, CCT, CHRCT, BEGARB, INCARB, ENDARB, PCP, SCP, BFS, amd FECHC1. I will also make Xerox-type copies of the machine code and attempt to distribute them to the people who are receiving

this message.

# CHI 10-DEC-72 18:27 13243

A Snap Shot of Software Task Planning for the Next Few Months

Comments: See (11135,), (11153,), and (11506,) for history.	10a
DIA 25-AUG-72 17:59 11575	
About the partition scheduler: some questions	
Location: (KJOURNAL, 11575, 1:w)	
	11
NDM 30-AUG-72 13:00 11649	
The Ultimate Format Designer	
Location: (KJOURNAL, 11649, 1:w)	
	12
Comments: a ressurection of bruce parsley's and my thoughts	
on the ideal output processor format designer of the future	12a
	40
mfa jim cooke	13
Output Processor Users' Guide (ljournal, 11076, 2:gy)	14
LPD 8-SEP-72 18:04 11726	
Additions to IMLAC protocol	
Location: (LJOURNAL, 11726, 1:w)	4744
	15
Comments: per our discussion today	15a
JEW 20-SEP-72 16:13 11891	
TELNET Documentation	
Location: (LJOURNAL, 11891, 1:w)	
	16
Comments: A copy of (system)telnet.help as of 20-SEP-72	16a
(read) journal docs which have been read	17
DVN 29-NOV-72 11:54 13066	
DRAFT for All-Purpose Handout on ARC	
Location: (MJOURNAL, 13066, 1:w)	
*****Note: (Secondary Distribution Copy)*****	
	17a
Comments: Around the time of ICCC several people inside and	
outside ARC commented that we needed such a handout.	
Comments are appreciated.	
Secondary Distribution Copy	17a1
DIA 8-DEC-72 12:28 13220	
Pesponse to your comment on L10 change	

Message: I did not make myself clear enough. The following are legal, assuming my proposed changes to L10:
(name) FILE
FILE name
PROGRAM name
(blitz) PROGRAM name
The following is illegal:
(name1) FILE name2

17b

DIA 8-DEC-72 12:44 13221
Response to Paul's User Control suggestion
Location: (MJOURNAL, 13221, 1:w)

17c

Comments: This is an attempt to start some dialogue on Paul's ideas.

17c1

JCN RWW 8-DEC-72 12:54 13086 The New ARC Management Structure Location: (MJOURNAL, 13086, 1:w)

17d

JFV 8-DEC-72 16:18 13223
Response to CHI regarding my current and future work.
Location: (MJOURNAL, 13223, 1:w)

17e

PR 8-DEC-72 14:30 13227 User Allocation by Group Accounts Location: (MJOURNAL, 13227, 1:w)

17f

WLB 5-DEC-72 14:26 13140

A Random DSS/Journal NP Suggestion

Message: How about a deferred delivery option for the journal so that you could, e.g., submit the announcement for a future meeting and have it delivered on-line on the day before a meeting — or even have it delivered right away, then again on the day before a meeting, then finally again on the day of the meeting. Or allow users to tag journal delivery messages for redelivery to themselves later on. Or how about an on-line calender, handled thru the journal system, that provides automatic, selective delivery of notices at the appropriate time as well as a query capability to use as an aid in scheduling meeting's as well as personal affairs?

17g

### CHI 10-DEC-72 18:27 13243

## A Snap Shot of Software Task Planning for the Next Few Months

EKM 6-DEC-72 8:36 13141	
CALCULATOR: Phase 1 Specifications	
Location: (MJOURNAL, 13141, 1:w)	
	17h
JCN 5-DEC-72 9:16 13084	
Response to (12425,) on Resource Notebook - Future Plans	
Location: (MJOURNAL, 13084, 1:w)	
	17i
JFV 1-DEC-72 16:35 13110	
NLS Command statistics: Current implementation and plans.	
Location: (MJOURNAL, 13110, 1:w)	
noderions (moodeling) rolloy 1. m)	17.j
	113
JCN 30-NOV-72 10:28 13083	
Response to (13055,) on the Design Review Procedures we Need	
Location: (MJOURNAL, 13083, 1:w)	171
	17k
11 NO. 20 NOT 52 12-15 12-15	
JAKE 29-NOV-72 12:17 12425	
Resource Notebook - future plans	
Location: (MJOURNAL, 12425, 1:w)	
	171
Comments: This memo sums up plans, ideas, and needs for the	
Resource Notebook. Comments gladly accepted.	1711
MFA 17-NOV-72 13:46 12893	
A NEW BROOM SWEEPS	
Location: (LJOURNAL, 12893, 1:w)	
	17m
Comments: if we have our way, the general appearance of	
this place will change drastically unless there are any	
serious objections, we will proceed as outlined.	17m1
JBN 17-NOV-72 16:05 12890	
Suggestion for END OF FILE Page on Printer Output	
Location: (LJOURNAL, 12890, 1:w)	
	17n
JBN 17-NOV-72 10:26 12889	
Request for Extension of Statement Number and Outline Format	
Capabilities	
Location: (LJOURNAL, 12889, 1:w)	
ರಾಜಕಾರ್ಯದಾಗಿಯ ಕಿರ್ಮಾಪಾಟ್ರಾ <b>್ ಕರ್ಮದ್ಯ</b> ಕರ್ಮದ್ಯ ಕರ್ಮಕ್ಕೆ ಕ್ರಾಪ್ರಾಕ್ ಕ್ರಾಪ್ರಿಕ್ಕೆ ಕ್ರಾಪ್ರಾಕ್ ಕ್ರಾಪ್ರಾಕ್ ಕ್ರಾಪ್ರಾಕ್ ಕ್ರಾಪ್ರಿಕ್ಕ್ ಕ್ರಾಪ್ರಾಕ್ ಕ್ರಾಪ್ರಾಕ್ ಕ್ರಾಪ್ರಾಕ್ ಕ್ರಾಪ್ರಿಕ್ಕ್ ಕ್ರಾಪ್ರಾಕ್ ಕ್ರಾಪ್ರಾಕ್ ಕ್ರಾಪ್ರಾಕ್ ಕ್ರಾಪ್ರಾಕ್ ಕ್ರಾಪ್ರಾಕ್ ಕ್ರಾಪ್ರಿಕ್ ಕ್ರಾಪ್ರಾಕ್ ಕ್ರಾಪ್ರಾಕ್ ಕ್ರಾಪ್ರಾಕ್ ಕ್ರಾಪ್ರಿಕ್ ಕ್ರಾಪ್ರಿಕ್ಕ್ ಕ್ರಾಪ್ರಿಕ್ ಕ್ರಾಪ್ರಿಕ್ ಕ್ರಾಪ್ರಿಕ್ ಕ್ರಿಪ್ರಿಕ್ ಕ್ರಿಪ್	170

DCW 26-NOV-72 16:28 12888 NLS on the outside (a view) Location: (LJOURNAL, 12888, 1:w)

17p

DCW 26-NOV-72 15:35 12887 Answer to DSK's suggestion

Message: It seems to me you are missing the point. If you cant logout and then back in because the load average is to high then i beleive that means you shouldn't be on anyway. There are flat out not enough resources to go around and we are attempting to figure out a way to equitably share them in a manner that will allow all to get a shot at NLS with a load low enough to get something (anything?) done. Suggestions such as yours sound to me like more of the same old "if i get screwed then so should everyone else". I for one think that kind of thinking is bullshit and dont want to be part of it. smokey...

179

DCE 17-NOV-72 8:41 12886

Phone Log: 16 Nov 72, to Keith Uncapher re our running NLS in ISI TENEX

Location: (LJOURNAL, 12886, 1:w)

17r

Comments:

17r1

DSK 14-NOV-72 10:19 12767

Message: Please do what you can to get me an SRI phone as soon as possible. I've tried to do without one, but it just isn't working out. Thanks.

17s

JBN 14-NOV-72 9:03 12781
Dates of Document Preparation and Journalization Both Desired Location: (LJOURNAL, 12781, 1:w)

17t

DIA 14-NOV-72 20:16 12786

More on NLS Call and Return Tracing
Location: (LJOURNAL, 12786, 1:w)

17u

Comments: Describes the new one which uses \*K and \*L to turn the trace on and off.

17u1

#### CHI 10-DEC-72 18:27 13243

A Snap Shot of Software Task Planning for the Next Few Months

JFV 15-NOV-72 16:15 12801 A reply to RWW about QUERY extensions: Towards an integrated access to data files. Location: (LJOURNAL, 12801, 1:w)

17v

RWW 15-NOV-72 14:03 12803 Request by Steve Crocker to Set up A Journal in NLS Location: (LJOURNAL, 12803, 1:w)

17w

MDK 19-OCT-72 9:33 12329 Annotating Journal Files with Footnotes Location: (LJOURNAL, 12329, 1:w)

17x

JCN 12-OCT-72 13:04 12118

Aids to Preparation of: Table of Contents, Journal References, and Index

Location: (LJOURNAL, 12118, 1:w)

17y

MDK 13-OCT-72 8:43 12202 Overview of NLS for ICCC Location: (LJOURNAL, 12202, 1:w)

17z

Comments: I put together this overview in order to have a demonstration file to use at the ICCC. It briefly outlines the principal features of the NLS text editor, structure editor, file system, journal system, and NIC.

17z1

RWW 13-NOV-72 15:24 12731 Some Design Issues for the Identsystem Needing Solution Location: (LJOURNAL, 12731, 1:w)

17a\*

DCE 23-OCT-72 10:20 12380
Centrally Coordinated Information Services for a Disciplineor Mission-Oriented Community
Location: (LJOURNAL, 12380, 1:w)

17aa

Comments:

17aal

DIA 24-OCT-72 13:41 12387
How to Trace Procedure Calls and Returns Inside NLS.

Location: (LJOURNAL, 12387, 1:w)

17ab

Comments: This describes a getting of accept a printout of calls and returns within number for one command, or small NLS of commands. It involves no permanent code changes in NLS.

17ab1

MFA 20-OCT-72 17:03 12367 ARC LOCATOR Location: (LJOURNAL, 12367, 1:w)

17ac

Comments: This file will be helpful as a general guide to services and features at ARC especially for demonstration pusposes.

17ac1

JBP 17-AUG-72 14:53 11532

Message: Are you doing anything about a network graphics meeting ?

17ad

LPD 16-AUG-72 15:09 11506 A fast pattern matcher compiler Location: (KJOURNAL, 11506, 1:w)

17ae

Comments: see (11135,) and (11153,) for history; distribute further as needed

17ae1

BER 15-AUG-72 8:28 11489 PSO Work Hours Experiment 14-18 August 1972 Location: (LJOURNAL, 11489, 1:w)

17af

Comments: This is a request for comments by PSO participants and others who might be interested. Direct the comments to Dirk.

17af1

HGL 15-AUG-72 13:38 11493 The New PODAC SIGS Location: (LJOURNAL, 11493, 1:w)

17ag

MDK 15-AUG-72 14:24 11495 Final Copy: RFP on Low-Cost Alphanumeric CRT's for DNLS Use Location: (LJOURNAL, 11495, 1:w)

17ah

MDK 15-AUG-72 14:28 11496
Transmittal Letter and Addressees for RFP on Low-Cost Alphanumeric CRT's (JOURNAL, 11495, 1:wy)
Location: (LJOURNAL, 11496, 1:w)

17ai

Fairly Firm Tentative Plans for ICCC Meeting In WDC
Message: You will be staying at the Washington Hilton.
RWW JEW - Arrival Oct. 19 - Departure Oct. 27
CHI DVN - Arrival Oct. 20 - Departure Oct. 27
DCE JCN - Arrival Oct. 22 - Departure Oct. 27 (suite with twin attached)
WLB JFV - Arrival Oct. 23 - Departure Oct. 27
JBN MFA - Arrival Oct. 23 - Departure Oct. 27
MDK PR - Arrival Oct. 23 - Departure Oct. 27
One of you (probably RWW) will be staying over one more night.

17a.j

PR 16-AUG-72 14:00 11505

Message: This Friday, August 18, at 1:30 p.m. I shall share with those of you who are interested in "EST" some of my experiences at the training seminars. Please let me know if you intend to attend.

17ak

NEW NLS
Message: New NLS is here. Please report bugs immediately to
Diane Kaye, Harvey Lehtman, Dave Hopper (re Journal), or
Charles Irby. Backup is <subsys>oldnls.sav;333.

17al

DL 18-AUG-72 12:27 11543

HGL 17-AUG-72 23:13 11535

Message: a new system hardware configuration is planned. the layout is shown on the arc general bulletin board. comments are appreciated. don limuti

17am

RWW 18-AUG-72 14:29 11544 All ARC Meeting to Dicuss ICCC Message: There will be an all ARC meeting at 11:00 Wed. Aug 23 to bring people up to date on the International Computer Communications Conference network demo and ARC's plans to participate, to discuss some of the things we hope to get out of it etc.

17an

MEH 18-AUG-72 15:15 11545 video projector Location: (KJOURNAL, 11545, 1:w)

17ao

DCE 14-AUG-72 12:02 11423
Goodbye, I'm off on my vacation
Message: To all of ARC: I'll be back from vacation on Sept
5. Dick Watson is in charge. Doug.

17ap

MDK 10-AUG-72 10:09 11353 User Costs for ARPANET and TYMNET. Location: (KJOURNAL, 11353, 1:w)

17ag

KEV 10-AUG-72 15:57 11367 seminars at arc Location: (KJOURNAL, 11367, 1:w)

17ar

Comments: this document describes the seminar pusher role within PARSLEY as I see and some tentative plans

17ar1

WLB 11-AUG-72 14:11 11382 Specifications for the Interconnection of an ARC and a DDSI Location: (LJOURNAL, 11382, 1:w)

17as

Comments: These are the specs which I have sent to DDSI regarding the initial interface between the NLS Output Processor and DDSI's COMp80 service. It's not two late to change anything that's really bad, but you'll have to convince me that any changes you suggest are really critical at this time. — Walt

17as1

DCE 11-AUG-72 18:13 11407 Launching The User-Systems Analysis Role Location: (LJOURNAL, 11407, 1:w)

17at

### CHI 10-DEC-72 18:27 13243 A Snap Shot of Software Task Planning for the Next Few Months

DCE 11-AUG-72 19:11 11409 Letter to Ed Parker, answering X(10829,) Location: (LJOURNAL, 11409, 1:w)

17au

DCE 11-AUG-72 19:50 11410 Extending the Possibility for Dean Meyer to work with ARC Location: (LJOURNAL, 11410, 1:w)

17av

JFV 25-JUL-72 11:03 11136 A facility to interrogate network resources Location: (KJOURNAL, 11136, 1:w)

17aw

Comments: This outlines a service to be demonstrated at the ICCC conference and providing a simple-minded way of getting 'resource notebook type info from a teletype.

Master Copy Printed by WRF

Access Copy Printed by WRF

17aw1

KEV 25-JUL-72 11:15 11137 new jsies Location: (KJOURNAL, 11137, 1:w)

17ax

Comments: this is the description of two new jsies to be implemented soon in our version of monitor 129. they are the first step in not having to specify device type to nls. Master Copy Printed by WRF Access Copy Printed by WRF

17ax1

DVN 25-JUL-72 11:22 11139 Time Cards Early in the Week Location: (KJOURNAL, 11139, 1:w)

17ay

DVN 26-JUL-72 8:33 11146 DLS' Visit to ARC: Notice of Draft Memoranda Location: (KJOURNAL, 11146, 1:w)

17az

WRF 26-JUL-72 11:33 11149 ARC Operator's Manual Location: (KJOURNAL, 11149, 1:w)

17b\*

DVN 26-JUL-72 11:34 11150

Decor for the Bruce Parsley Room (J2100)
Message: Everybody seems to agree that it would be nice if the Bruce Parsley Room (J2100) were more comfortable for small meetings. I had thought of getting a low round table and bean bag chairs like those at Xerox. Someone suggested getting some kind of smaller but comfortable chair. Other people may have other suggestions. Please pass them on to Barbara.

17ba

LPD 26-JUL-72 14:55 11153
Let's do patterns right (reply to DVN's 11135)
Location: (KJOURNAL, 11153, 1:w)

17bb

MDK 28-JUL-72 11:19 11173 RFP for NLS Network Service Facility Location: (KJOURNAL, 11173, 1:w)

17bc

MDK 28-JUL-72 11:25 11174

Transmittal Letter for NLS Network Service Facility RFP Location: (KJOURNAL, 11174, 1:w)

17bd

DVN 31-JUL-72 11:51 11183

Baseline Record System: A Meeting on Cooperation with RADC Location: (KJOURNAL, 11183, 1:w)

17be

DVN 31-JUL-72 12:09 11184 Continuing Efforts Following Duane Stones Visit of the Week of July 17 Location: (KJOURNAL, 11184, 1:w)

17bf

SSRI-ARC 30-JUL-72 15:28 11163
ARC Journal Index by Author to 25 July 72 (PDP-10 Entries Only)
Location: (KJOURNAL, 11163, 1:w)

17bg

SSRI-ARC 30-JUL-72 14:59 11162

ARC Journal Index by Number to 25 July 72 (PDP-10 Entries Only)

Location: (KJOURNAL, 11162, 1:w)

17bh

JCN 1-AUG-72 18:39 11188

#### CHI 10-DEC-72 18:27 13243

A Snap Shot of Software Task Planning for the Next Few Months

New ARC Journal Indices are available online and in Hardcopy Location: (KJOURNAL, 11188, 1:w)

17bi

MDK 2-AUG-72 10:35 11205 DRAFT RFP for Low Cost Alphanumeric Display Terminals Location: (KJOURNAL, 11205, 1:w)

17bj

DVN 3-AUG-72 21:09 11215

Language Special Interest Group Meeting

Message: The next meeting of the Language Special Interest

Group will be on Thursday the 17th at 3:00 in the Parsley

room. Don Walker of SRI-AI will tell us about what is going on
in the field of "Speach Understanding"—that is vocal
interaction between men and computers.

17bk

MFA 4-AUG-72 8:17 11217

Location: (KJOURNAL, 11217, 1:w)

17bl

JBN 4-AUG-72 10:57 11221 Some Background for SDIS Considerations Location: (KJOURNAL, 11221, 1:w)

17bm

DIA 4-AUG-72 11:23 11223
Recipe for roasted soy beans
Location: (KJOURNAL, 11223, 1:w)

17bn

MEJ 4-AUG-72 11:37 11224
ARC Group Luncheon Information
Location: (KJOURNAL, 11224, 1:w)

17bo

NDM 8-AUG-72 12:35 11070 On-Line Letter Form Location: (KJOURNAL, 11070, 1:w)

17bp

DIA 7-AUG-72 16:22 11261 All about the new loader (called TENLDR - for TENEX loader, or L10 loader or whatever you like) Location: (KJOURNAL, 11261, 1:w)

17bq

MFA JDH KEV 8-AUG-72 10:07 11266
party annoucement
Message: there is going to be a party friday, august 18 at
dave hopper's house. the party will get under way around
three in the afternoon and will be a combination swim party
and buffet dinner/snack party with homecooked chinese dishes
as the bill of fare. Everyone is invited and welcome.

17br

DVN 8-AUG-72 16:51 11316 Mass Deletion of Unread Files Location: (KJOURNAL, 11316, 1:w)

17bs

DVN 8-AUG-72 17:20 11317 Mass Deletion of Unread Files Location: (KJOURNAL, 11317, 1:w)

17bt

MFA 8-AUG-72 17:26 11318
PARSLEY's at it again - 8 August
Location: (KJOURNAL, 11318, 1:w)

17bu

KIRK 9-AUG-72 15:00 11330 PSO 4-DAY WEEK EXPERIMENT. Location: (KJOURNAL, 11330, 1:w)

17bv

DVN 9-AUG-72 15:42 11333

How to Make the Journal Available More: A Meeting Location: (KJOURNAL, 11333, 1:w)

17bw

JFV 9-AUG-72 15:27 11331 Progress of SDIS Planning. Location: (KJOURNAL, 11331, 1:w)

17bx

Comments: The SDIS Planning team (Jeanne North, Mike Kudlick and Jacques Vallee) met on 26 July for a review of current ideas and to prepare the groundwork for specific discussion with DCE. The present document is a transcript of the session.

17bx1

allowed about display related topics

18

do I really need to use getstr in strda or scsr

18a

change display jsies as follows	18b
actual jsys always produces string in output buffer	18ь1
written in macro, in standard tenex, conditional assembly	18b1a
process clock takes chars out of buffer and passes them to an interpreter (strda, case statement which looks at ta, tg, CR etc, will also look for long char messages and process them). this interpreter will have a co-routine linkage with process clock (effected by a stack switch).	1862
this will be codded in L10	18b2a
passed line number and two byte pointers	18ь2ь
if it has a stack, then popj with first char, popj for each additional char until string empty. then	
switch stacks and popj	18b2b1
since always called from schedular, no nsked setting	18ь2ь2
a special jsys will cause a new version of the	
interpreter to be read in and initialized.	18b2c
this requires some flags which prevent its use after completion of a long caracter (may be inside interpreterwhen flag set for all lines, process	
clock will cause new version to be gotten (what about resolving undefined symbols??))	18b2c1
add uasqd jsys call to nls	18c
coords in terms of line #, char #, daid, fraction.	18d
write inlit code for NLS as follows	18e
uses new sin with bytepointer to string of break chars, small char mode, when awakened, do bkjfn, switch to big char mode and reread last char (will get coords with this big char) switching from big to little chars will be done	
via a fast jsys kev is writing	18e1
(submitted) Things submitted to journal	19
TITLE: A Snap Shot of Software Task Planning for the Next Few Months	

COMMENT: Your Comments will be greatly appreciated AUTHOR(S):CHI
DISTRIBUTION:sri-arc
SUBCOLLECTION:
CLERK:CHI
GO.

19a

TITLE: BACKLINKS in the Journal
COMMENT:
AUTHOR(S): CHI
DISTRIBUTION: rww dce mdk pr jcn dsk jdh hgl wlb jfv jew jbn
jake
SUBCOLLECTION: sri-arc
CLERK: CHI
GO.

19b

#### BACKLINKS in the Journal

1951

Several months ago, I proposed a method of implementing backlinks and a commenting capability. As far as I could tell it fell on deaf ears. Since the DSS team is currently considering the addition of a simple commenting capability, and since MDK has proposed a footnote facility for viewing comments (LJOURNAL, 12329, 1:w), and since the SRI-AI/ACM SIGART people are considering ways to use NLS for its newsletter (they want online users to be able to see links to comments people have made on newsletter articles, etc.), I think it is time ti re-propose the age old backlink idea. This time, however, I will propose a modified scheme that will work only for the Journal (since this can be implemented more easily and at least moves us in what I believe is the right direction).

19b1a

First, write a user program that will process the JCAT file in the following way:

19b1b

For each entry, examine the title and body of the document for links to other journal documents. For each such link, go to the appropriate JCAT entry and record a backlink as a sub statement (or several per statement, etc.).

19b1b1

There are obvious problems with archived documents

-- they could be processed over a period of time
and simply would not contribute backlinks until
processed.

19b1b1a

Then change Journal submission so that when it updates JCAT (tjcat), it would examine the title and body of the document for links to other Journal entries and update appropriate JCAT entries with backlinks.

19b1c

Then change NLS so that when it loads a Journal document, it also loads the list of backlinks. These will be encoded into a data structure that a special sequence generator would use to display the backlinks with the text (under viewspec control, of course), indented several spaces and of the form:

Comment: (LJOURNAL, 12345, 1) CHI TITLE or TEXT

19b1d

This would then work for the display's (DNLS), TNLS

print, Output Quickprint, and Output Device Printer.

Of course, one can easily extend this (another viewspec) to actually show the text of the comments instead of the citations.

19b1d2

Where the text of a comment might be a branch from another Journal document, the title of a document, or an ARCHIVED message.

19b1d2a

TITLE: Note to JBP re: next Network Graphics Meeting COMMENT:
AUTHOR(S):CHI
DISTRIBUTION: JBP
SUBCOLLECTION:NIC, SRI-ARC
NUMBER: 11546
CLERK:CHI

SURROUNDING LINK.

19c

No I am not doing anything about a Network Graphics
Meeting. I am very busy these days and would have a
difficult time organizing and hosting such a Meeting until
after the ICCC meeting. Who else could host the next
meeting? Is Al Vezza or Jim Michner the coordinator?
Sorry if I have held things up, but it was not my
understanding that we were definitly going to host the next
meeting.

-- Charles.

19c1

(author) Journal documents authored

20

CHI 6-DEC-72 20:55 13191 Comment on (mjournal, 13143,1) regarding use measurements

Message: Jacques and Don, in (Mjournal, 13143, 3) Jacques states that the WSI code is obsolete and that SUPERWATCH gives better character reaction time data. As I understand the WSI code, it was to measure the monitor overhead in getting a character to the user program (NLS). This seem like useful information to me. Does SUPERWATCH really give us data on this? If not, it might be worth considering updating the WSI code to give us acurate data. Also, I do not understand whether the use measurements code actually measures page faults or just PMAP's. Is any of this page fault, working set size, etc. data useful or is it all waisted in the presence of SUPERWATCH? — Charles.

\*\*\*\*\*Note: Author Copy\*\*\*\*

20a

CHI 6-DEC-72 20:25 13190

Comment on proposed L10 change, (Journal, 13135,)

Message: Don, What is the proposed relationship between name1 and name2 in the following: (name1) FILE name2 ? Can either name be omitted? If they are both present which one has pesedence? --Charles.

\*\*\*\*\*Note: Author Copy\*\*\*\*\*

20b

CHI 5-DEC-72 21:21 13134
The Third Seminar
Message: Charles Irby will give a seminar on 3-JAN-73 on The
Conversion of NLS to MPS
\*\*\*\*\*Note: Author Copy\*\*\*\*\*

20c

CHI 5-DEC-72 21:11 13133

Comment on (MJOURNAL, 13129, 1:nw), login problems

Message: Walt, I sympathize with your situation with regard to the login restrictions. I have essentially given up trying to use the system during the day. I wish I had some magic I could do to make things all better. But unfortunately, I don't. Paul is about to put a paper into the journal proposing a much better scheme for handly our problem.

Although I am no longer on the EMC, I ask that you please have patiance and please make known any suggestions or ideas you may have regarding this resource allocation problem. —

Charles.

\*\*\*\*\*Note: Author Copy\*\*\*\*\*

20d

CHI 5-DEC-72 20:58 13132
To have a Christmas party or help a Viet Namese child, that is

CHI 10-DEC-72 18:27 13243

A Snap Shot of Software Task Planning for the Next Few Months

the question

Message: I think the notion of giving our christmas party money to a good charitable cause is a marvelous idea. God knows the USA has raped Viet Nam. I would be very happy if the money went to help some Viet Nam child. Bravo -- Charles.

\*\*\*\*\*Note: Author Copy\*\*\*\*

20e

CHI 3-DEC-72 10:49 13112

Statement Names on PROGRAM statements

Message: Don, With regard to Doug's suggestion about having names on PROGRAM statements (MJOURNAL, 13099, 1), how hard would that be to change? What about ignoring the name? ——Charles.

\*\*\*\*\*Note: Author Copy\*\*\*\*

20 f

CHI 28-NOV-72 9:21 13048

Thanks for your offer to help streamline NLS
Message: Thanks for your offer to help in the streamlining on
NLS. I have asked DIA to coordinate and measure the
improvement of such changes. Please work with him on this.
-- Charles.

\*\*\*\*\*Note: Author Copy\*\*\*\*

20g

CHI 17-NOV-72 17:12 12885

DIA will coordinate the implementation of the improvements he has recomended.

Message: Don Andrews will be coordinating the changes to NLS which he has proposed as a result of his messurement of NLS. He will maintain a file (andrews, nlsrecord,) which lists the suggested changes and what was done about them. He is coordinating these changes so as to be able to measure and keep track of the consequences of the changes. -- Charles. \*\*\*\*\*Note: Author Copy\*\*\*\*\*

20h

CHI 16-NOV-72 22:29 12883

Postponement of Journal Comment command

Message: Diane, After thinking about the objections MDK has raised about the acknowledge command, I think we should punt that command. I feel that the comment command, however is important and should be persued. I think that it is a valuable counterpart to the Journal backlinks capability. However, given the flack, I guess you should not implement anything until we hold a meeting to discuss the issue. Sorry,

very sorry for getting you in the middle of flack. Possibly next week you could get the program in (irby>xproc (it has been archived) to work (if you are in need of something to do), see HGL or me for an explaination of what this is supposed to do. -- Charles \*\*\*\*\*Note: Author Copy\*\*\*\*\*

201

CHI 15-NOV-72 21:54 12867

Comment on Rich Fikes memo to Dick Watson on 1/14/72
Message: Dick, I am not sure that I understand completely the planned use of Place Link in Rich's memo, but If I do, They are probably going to end up with some very messed up newsletters. My impression is that each member who wishes to comment on a newsletter artical will submit the comment to the journal and specify that the link to the submitted comment is to be placed in the newsletter file using a TNLS address expression. This seems highly prone to user error. — Charles

\*\*\*\*\*Note: Author Copy\*\*\*\*

20 j

CHI 15-NOV-72 21:37 12866 BACKLINKS in the Journal

Location: (LJOURNAL, 12866, 1:w)

\*\* \*\* \*Note: Author Copy \*\* \*\*

20k

CHI 15-NOV-72 20:07 12865
Display regeneration Bug reported by DCE
Message: Diane, Please read DCE's note (ljournal,12779,1).
Thanks. -- Charles
\*\*\*\*\*Note: Author Copy\*\*\*\*\*

201

CHI 14-NOV-72 0:05 12775

Acknowledgement of (journal, 12731,1), Some Design Issues for the Ident System

Message: Dick,

Re: SIZE, The current ident system has somethin on the order of 800 to 1000 idents and uses 14 out of 95 structure pages and 61 out of 370 data pages. Based on this, I estimate we can handle about 4000 to 5000 Idents without changing the current system (updates will get slower as the file gets larger, unless we adopt a new way of "proofing" new idents or changes to Idents).

Re: Protection features, I see no reason why these cannot be implemented.

Re: Obsolete Idents, Dave and I are talking about that now (and have been thinking about it for about a week).

Re: Novice Mode, I would appreciate your suggestions. I added quite a bit of that flavor the last go-round. If we add more, I think we will have to go to novice-expert destinction or we will drive BER mad.

Re: Nationwide Unique Idents, The current scheme seems fine to me, especially if people can choose their own Ident. \*\*\*\*\*Note: Author Copy\*\*\*\*\*

20 m

CHI 13-NOV-72 23:52 12774 Acknowledgement Re: (journal,12599,) Message: Jake,

Thanks for your input concerning viewspecs and Output Quickprint. I personally am inclined to simplify such commands, but agree that specifying viewspecs (not to mention starting location) might be a good addition to that command. You are aware that you can specify viewspecs (using the mouse buttons) in DNLS for Output Quickprint, aren't you? \*\*\*\*\*Note: Author Copy\*\*\*\*\*

20n

CHI 13-NOV-72 23:48 12773 Comment on (Journal, 12598, ), Resource Notebook content and Format

Message: Jake

I highly recommend, that the name delimiters be changed in the Resource Notebook file. Several people asked, "Why the parens?" and I could not justify it very easily. I recommend NULL for the left and ': for the right delimiters. Also, I would like to re-open the question of structure and indenting in the printout. I realize that this may mean changing the query program slightly and the data base a lot, but given the large amount of clerical work that has and will go into that file, I think we owe it to the clericaal people invovided to make it as easy as we can for them. -- Charles \*\*\*\*\*Note: Author Copy\*\*\*\*\*

20 o

CHI 10-NOV-72 12:01 12772

Carriage Return May Now Be Redefined in
Message: EOL (the character NLS receives when you type
Carriage Return) may now be redefined in a user's
"NLSControlCharacters" branch (see (journal, 12237,) for a
discussion of this branch). This will be particularly useful
for people using line-at-a-time terminals and people who like
Cariage Return as Command Accept but also want to input

Carriage Returns by typing a single character. For Line-at-a-time terminals the following will (I hope) prove useful:

(NLSControlCharacters) EOL = NULL;

This will make typeing Carriage Return (necessary to return the carriage) a no-op to NLS (a literal CR can still be entered by typing the literal escape character followed by CR. If you wish to redefine CR to be some other character, use

(NLSControlCharacters)

EOL = (some other character); ECHO = (some character);

NOTE: If you wish to continue using CR as CA, but would like to enter a CR into the text by typing only one character, you must also include a CA = 370; ECHO = 370; definition following the EOL redefinition.

NOTE: At present we are letting TENEX echo literal input for Thus It is not possible to change some echoing. particular, If you define some printing character as your CR, it will get echoed as that printing character although a CR (EOL) will be input into your text.

\*\*\*\*\*Note: Author Copy\*\*\*\*

20p

CHI 13-NOV-72 21:17 12726

Comment Re: (journal, 12611,1), NLS Organization Notes: 1, by DIIA

Message: Don.

Thanks for the note on NLS improvements. Looks like you have been busy. I have a few comments on your notes: (journal, 12611, 1b3): UNPUT no longer exists, TINPTC, TODCHR, RAWCHR, AND SHIFT are already together (with the exception of two very small routines which are called by TINPTC, and HOW OFTEN IS NLCRMS CALLED? In general, I agree with your handcoding and procedure movement recomendations (including inline coding of small simple routines which are used in a loop in a frequently called routine. HOWEVER, I think we should keep these corrective changes under very careful contol so we can measure the gain we receive (this is almost as important as speeding NLS up). Also, learning about these slopey areas and building the tools and understanding that go along with them is more important than speeding up nls, when one consideres that we will be rewiting it in a few months. I will be glad to help code the changes you recomend, but I think one person, namely

you, should be coordinating the changes and measuring the improvement. -- Charles \*\*\*\*\*Note: Author Copy\*\*\*\*\*

20g

CHI 13-NOV-72 20:50 12725 Comment on (journal, 12718, 1a) Message: Jim,

With regard to getting files prepared on other systems in nls form, KEV has given some though to generalizing the input assembler/sequential mechanism (and the output sequential, of course) to allow the use of a user program (some commonly used one could be inside NLS, of course) to determine statement breaks and level designation. This mechanism opens all kinds of doors for specially formatted files which can be converted into NLS files. When you start seriously thinking about this, please talk to Ken and I about it. — Charles \*\*\*\*\*Note: Author Copy\*\*\*\*\*

20r

CHI 13-NOV-72 20:42 12724
Coment on (journal, 12719,)
Message: Dave,
Is Dick right about secondary distr

Is Dick right about secondary distribution not checkint TEJOURNAL? in (journal, 12719,)
\*\*\*\*\*Note: Author Copy\*\*\*\*\*

20s

CHI 13-NOV-72 20:34 12723

Acknowledment: (journal, 12720,), Query Capability for Ident System in DNLS

Message: Dick,

Re (journal, 12720,), Ident system Query in DNLS: It has been in our plans all along. I am amazed that you bothered to mention it -- Charles

\*\*\*\*\*Note: Author Copy\*\*\*\*\*

20 t

CHI 8-NOV-72 19:04 12610

Acknowledgement of (journal, 12329, 1)

Message: Mike, this is to acknowledge that I have read your anotation note and am preparing a reply ( I have thought about this problem some and proposed a way ov handling it some months ago, which I will re-propose). Since I am somewhat pressed to get the new monitor up, I must defer this until I have more time. Thanks for your interest and patience. \*\*\*\*\*Note: Author Copy\*\*\*\*\*

20u

CHI 22-OCT-72 5:53 12373 FUNNY CONTROL CHARACTER ECHOING

Message: PETER, PRINTING CHARACTERS ECHO WHEN THEY ARE USED AS CONTROL CHARACTERS BECAUSE WE HAVE ECHOING TURNED ON WHEN WE ARE COLLECTING A LITERAL FROM THE USER. THE ONLY ALTERNATIVE SEEMS TO BE TO NOT HAVE TENEX ECHO FOR US OR TO CHANGE TENEX'S NOTION OF WHAT ECHOING IS. ANY IDEAS WOULD BE APPRECIATED.

-- CHARLES

\*\*\*\*\*Note: Author Copy\*\*\*\*

20 v

SRI-ARC 12-OCT-72 14:12 12520

Message: tata black sheep \*\*\*\*\*Note: Author Copy\*\*\*\*\*

20w

CHI 8-OCT-72 17:07 12106

Message: this is a test
\*\*\*\*\*Note: Author Copy\*\*\*\*\*

20x

CHI 3-OCT-72 10:39 12041 IMLAC DNLS Policy (until after ICCC) Message: BOB and BUZZ,

Our policy on supporting imlacs and Display NLS over the net (at least until after the ICCC) is as follows: If you have an imlac(s) which has the same configuration of hardware as some IMLAC which is already running DNLS, then you may run DNLS also and should get loading instructions from the people who are already using the one like yours. If you have a new configuration (like maybe a light pen), then if you are willing to invest the time and energy to make the changes necessary to support your new cnfiguration. then fine. The problem is that we do not have any manpower available at present to help anyone with changes to that program. We will be glad to talk about it with you and advise you. We will also send you a preliminary user's guide for DNLS. If you wish to contribute a person to help us, we would greatly appreciate it.

\*\*\*\*\*Note: Author Copy\*\*\*\*

20 y

CHI 3-OCT-72 10:08 12040 This is a test Message: this is a test

# CHI 10-DEC-72 18:27 13243

A Snap Shot of Software Task Planning for the Next Few Months

\*\*\*\*\*Note: Author Copy\*\*\*\*

20z

CHI 28-SEP-72 14:48 11955

test

Message: this is a test

\*\*\*\*\*Note: Author Copy\*\*\*\*

20a\*

CHI 28-SEP-72 14:32 11954

This is a test

Message: this is another test message

\*\*\*\*\*Note: Author Copy\*\*\*\*

20aa

CHI 27-SEP-72 19:59 11947

this is a test

Message: This is a test of DNLS journal, template submission.

\*\*\*\*\*Note: Author Copy\*\*\*\*

20ab

CHI 27-AUG-72 14:12 11579

ARC Guest IDENT (ARCG)

Message: I defined a new IDENT for ARC Guests (IDENT = ARCG).

If one logs in as "GUEST" or "ICCC", his IDENT will

automatically be set to ARCG. Note also, that the NLS

greeting will be "Good Morning Guest".

\*\*\*\*\*Note: Author Copy\*\*\*\*

20ac

CHI 20-AUG-72 13:51 11547

test message

Location: (KJOURNAL, 11547, 1:w)

\*\*\*\*\*Note: Author Copy\*\*\*\*

20ad

CHI 20-AUG-72 13:38 11546

Note to JBP re: next Network Graphics Meeting

COMMENT:

AUTHOR(S):CH

Location: (KJOURNAL, 11546, 1:w)

\*\*\*\*\*Note: Author Copy\*\*\*\*

20ae

Comments:

AUTHOR(S):C

20ae1

SRI-ARC 18-AUG-72 10:02 10575

### CHI 10-DEC-72 18:27 13243

A Snap Shot of Software Task Planning for the Next Few Months

Network information center and computer Augmented feam	
Interaction:FINAL DRAFT	
Location: (KJOURNAL, 10575, 1:w)	
*****Note: Author Copy*****	
	20af
(imlac) imlac related journal dialog	21
JGM 31-JUL-72 14:14 11186	
Catalogue of Known IMNLS Bugs. Location: (KJOURNAL, 11186, 1:w)	
Location. (AJOURNAL, 11186, 1.W)	21a
	ZIa
Comments: It is hoped that this file (imlac, imnlsbugs,:)	
can be used as the primary means of communicating about the	
many IMNLS bugs and can aid in getting them fixed.	21a1
many lands was and can all in gerting them liveds	LIGI
(JINDEX) There are new ARC Journal Indices now online and in	
hardcopy.	22
SSRI-ARC 23-AUG-72 16:30 11165	
ARC JOURNAL INDEX BY TITLEWORD M thru Z to 21 July 72	
Location: (KJOURNAL, 11165, 1:w)	
	22a
ESRI-ARC 23-AUG-72 16:16 11164	
ARC JOURNAL INDEX BY TITLEWORD A thru L to 21 July 72	
Location: (KJOURNAL, 11164, 1:w)	
	22b
Journal number index (11162,:zxn)	22c
Journal author index (11163,:zxn)	22 d
The Titlement Index is sectional in two files due to also	
The Titleword Index is contained in two files due to size	
limitations. They are stored in (DOCUMENTATION) directory as	
shown below awaiting enough disk space to submit to the Journal.	22e
Journat.	226
Journal titleword index A thru L	
(documentation, j11164, :zxn)	22f
Journal titleword index M thru Z	
(documentation, j11165, :zxn)	22g
Dummy statement	23
9	
Once upon a time othere were two elephants.	23a

## CHI 10-DEC-72 18:27 13243 A Snap Shot of Software Task Planning for the Next Few Months

(NLSControlCharacters) EOL = 1740; ECHO = 370;	2.4
	24a
CA = 370: ECHO = 370:	24h

(J13243) 10-DEC-72 18:27; Title: Author(s): Irby, Charles H./CHI; Distribution: Agent, Station, Hoffman, Carol B., Lee, Susan R., Michael, Elizabeth K., Dornbush, Charles F., ARC, Guest O., Feinler, Elizabeth J. (Jake), Handbook, Augmentation Research, Kelley, Kirk E., Meyer, N. Dean, Byrd, Kay F., Prather, Ralph, White, James E. (Jim), Vallee, Jacques F., Kaye, Diane S., Rech, Paul, Kudlick, Michael D., Ferguson, Ferg R., Lane, Linda L., Auerbach, Marilyn F., Bass, Walt, Engelbart, Douglas C., Hardeman, Beauregard A., Hardy, Martin E., Hopper, J. D., Irby, Charles H., Jernigan, Mil E., Lehtman, Harvey G., North, Jeanne B., Norton, James C., Page, Cindy, Paxton, William H., Peters, Jeffrey C., Ratliff, Jake, Row, Barbara E., Van De Riet, Edwin K. (Ed), Van Nouhuys, Dirk H., Victor, Kenneth E. (Ken), Wallace, Donald C. (Smokey), Watson, Richard W., Andrews, Don I./sri-arc; Sub-Collections: SRI-ARC; Clerk: CHI; Origin: <IRBY>CHI.NLS;549, 3-DEC-72 10:51 CHI;

coupler 1318

HI. My novation coupler has serial number 1318. I'll bring it in Wednsday. Bye Don

1

coupler 1318

(J13244) 11-DEC-72 16:53; Title: Author(s): Andrews, Don I./DIA; Distribution: Row, Barbara E./BER; Sub-Collections: SRI-ARC; Clerk: DIA;

sample - rjs

this is a sample message from rjs---72 dec 11 10:20

1

sample - rjs

(J13245) 11-DEC-72 10:22; Title: Author(s): Van Nouhuys, Dirk H./DVN; Distribution: Van Nouhuys, Dirk H./DVN; Sub-Collections: SRI-ARC; Clerk: DVN;

JBN 11-DEC-72 8:42 13246

EHF Inquiry About Copies of BBN Otly Rpt

We don't have extra copies of BBN Qtly. Reports, but make photocopies when necessary. Better you should get originals from BBN, as you apparently have in the past. OK?

1

EHF Inquiry About Copies of BBN Otly Rpt

(J13246) 11-DEC-72 8:42; Title: Author(s): North, Jeanne B./JBN; Distribution: Forman, Ernest H., North, Jeanne B., Agent, Station/EHF NICSTA SA; Sub-Collections: SRI-ARC NICSTA; Clerk: JBN;

JBN 11-DEC-72 9:12 13247

Agreement with AAM That NIC Will Not Send Him Hardcopy of Journal Messages He Has Authored

As yet NIC lacks the ability automatically suppress hard copy for authors. Susan will pull your author copies as she or Carol sees them, without a guarantee that all will be caught. Your suggestion is welcome; we should do this however we can. -Jeanne

Agreement with AAM That NIC Will Not Send Him Hardcopy of Journal Messages He Has Authored

11-DEC-72 9:12; Title: Author(s): North, Jeanne B./JBN; Distribution: McKenzie, Alex A., Wolfberg, Michael S., Feinroth, Yeshiah S., Hurt, James, Hearn, Anthony C., Stein, James H., Shoshani, Arie, Shure, Gerald, Harslem, Eric F., Metcalfe, Robert M. (Bob), Kantrowitz, William, Reussow, Bradley A., Reins, E. R. (Dick), Kadunce, Daniel L., McCutchen, Samuel P., Petregal, George N., Sundberg, Robert L., Madden, James M., Slyke, Richard M. Van, Young, Michael B., Kantrowitz, William, Padlipsky, Michael A., Stevenson, Schuyler, Deutsch, L. Peter, Davidson, John, Millstein, Robert E., Lawrence, George, O'Sullivan, Thomas, Seroussi, Sol F., Bradner, Scott, Thomas, Robert H., Thomas, John C., Romanelli, Michael J., Stoughton, Ronald M., Owen, A. D. (Buz), Fink, Robert L., Meir, Jaacov, North, Jeanne B., Crocker, Steve D., Lawrence, Thomas F., McConnell, John W., Ollikainen, Ari A. J., White, James E. (Jim), Hathaway, A. Wayne, Foulk, Patrick W., Winter, Richard A., Van Zoeren, Harold R., McKenzie, Alex A., Winett, Joel M., Bhushan, Abhay K., Pyke, Thomas N., Wilber, B. Michael, Feigenbaum, Edward A., Braden, Robert T., Pepin, James M., Wessler, Barry D., Melvin, John T., North, Jeanne B./AAM NLG NICSTA; Sub-Collections: SRI-ARC NLG NICSTA; Clerk: JBN;

DEX-II Design Change

If we do not hear objections we will proceed with the implementation

HGL and CHI met to discuss a difficulty (impossibility) in the syntax of DEX-II. The problem involved the use of backspace characters in literals and in the rest of the command string. the former case, it was not to take effect untill all other processing was completed (this allows fancy editing of extant statements) and in the latter, it had to take effect either before or during the parsing operation. However, since literals are not delimited in a unique way and since one must parse the command string before one knows where a literal is in the command string. Thus we had a very difficult situation: we can not pre-process back spaces, doing backup during parsing is arbitrarily difficult, and user's will be forever confused. have developed a design modification to solve the problems: Before parsing, we will process backspaces right to left. The user will be allowed to include '\$ followed by arbitrary delete cluster in a literal parameter. This will not be effected by the pre-parsing backup processing. After all other processing is complete, this backup cluster will be processed.

(J13248) 11-DEC-72 16:06; Title: Author(s): Byrd, Kay F./KFB; Distribution: Lehtman, Harvey G., Irby, Charles H., Bass, Walt, Paxton, William H., Engelbart, Douglas C., Auerbach, Marilyn F., Irby, Charles H., Lehtman, Harvey G., Engelbart, Douglas C., Watson, Richard W., Norton, James C./DEX2 DEXBUY; Sub-Collections: SRI-ARC DEX2 DEXBUY; Clerk: KFB;

## DVN 9-DEC-72 18:05 13249

Should Each of us take a turn answering the phones?

Some rethinking is a going on about phone answering here. Various plans are being considered.	1
I have made one suggestion that would involve everyone at ARC:	2
Everyone should take a turn on the phone boards.	2a
I know of at least two offices with egalitarian pretensions where every person takes a half day in turn round robin as phone answerer. That would mean a half day about every 18 working days or a little more often than once a month.	3
Several people have expressed interest in taking turns on the phones, what are other peoples opinions?	4

Should Each of us take a turn answering the phones?

(J13249) 9-DEC-72 18:05; Title: Author(s): Van Nouhuys, Dirk H./DVN; Distribution: Agent, Station, Hoffman, Carol B., Lee, Susan R., Michael, Elizabeth K., Dornbush, Charles F., ARC, Guest O., Feinler, Elizabeth J. (Jake), Handbook, Augmentation Research, Kelley, Kirk E., Meyer, N. Dean, Byrd, Kay F., Prather, Ralph, White, James E. (Jim), Vallee, Jacques F., Kaye, Diane S., Rech, Paul, Kudlick, Michael D., Ferguson, Ferg R., Lane, Linda L., Auerbach, Marilyn F., Bass, Walt, Engelbart, Douglas C., Hardeman, Beauregard A., Hardy, Martin E., Hopper, J. D., Irby, Charles H., Jernigan, Mil E., Lehtman, Harvey G., North, Jeanne B., Norton, James C., Page, Cindy, Paxton, William H., Peters, Jeffrey C., Ratliff, Jake, Row, Barbara E., Van De Riet, Edwin K. (Ed), Van Nouhuys, Dirk H., Victor, Kenneth E. (Ken), Wallace, Donald C. (Smokey), Watson, Richard W., Andrews, Don I./SRI-ARC; Sub-Collections: SRI-ARC; Clerk: KIRK; Origin: <VANNOUHUYS>PHONES.NLS; 2, 9-DEC-72 18:00 KIRK;

return memo

jon, this is the second time i am typing this, because i hit rubout on a funny terminal instead of the shift character. i am at SRI today and tomorrow; will try to call you at your office some time before i leave. I will find out about Tenx socket 7 when i return to Cambridge. I know you are concerned about violations; I agree with you; we can do something about that next. The policing issue is a tricky situation; talk to you about it on the phone. Had a vey dull weekend in Los Gatos; wish I could have been with you in LA. ..N

1

return memo

(J13250) 11-DEC-72 11:05; Title: Author(s): Neigus, Nancy J./NJN; Distribution: Postel, Jonathan B./JBP; Sub-Collections: NIC; Clerk: NJN;

message to shirley

hi Shirley rob here

1

message to shirley

(J13251) 11-DEC-72 16:55; Title: Author(s): Rutledge, Ronald M./RMR; Distribution: Watkins, Shirley W./sww ; Sub-Collections: NIC; Clerk: RMR;

Sample message

This is a sample message. Susan and Elizabeth are learning more about TNLS today.

1

(J13252) 11-DEC-72 10:22; Title: Author(s): Lee, Susan R./SRL; Distribution: Feinler, Elizabeth J. (Jake)/JAKE; Sub-Collections: SRI-ARC; Clerk: SRL;

SWW RR 11-DEC-72 17:06 13253

regards to the maryland crew

hello
california is great except for the alaska-type weather.
we will see you all soon.
our regards----the california crew

- 1

regards to the maryland crew

(J13253) 11-DEC-72 17:06; Title: Author(s): Watkins, Shirley W., Rosenthal, Robert/SWW RR; Distribution: Lindamood, George E./gel; Sub-Collections: NIC; Clerk: SWW;

JED 12-DEC-72 13:17 13255

distribution test.

here is a message to myself

1

distribution test.

(J13255) 12-DEC-72 13:17; Title: Author(s): Donnelley, Jed E./JED; Distribution: Donnelley, Jed E./JED; Sub-Collections: NIC; Clerk: ARCG;

this better be statement number 2.	1
will this be 2a1?	1 a
here is a main thought	2
this is the first subthought	2a
this is the second subthought in statement 1, ie	1 ь 2 ь
i guess that i have to accept another subthought	(reason,1:m)2c
i wonder where i am now?	2c1

test plex to carol Kidston

(J13256) 12-DEC-72 13:42; Title: Author(s): ARC, Guest O./ARCG; Distribution: Kidston, Carol A./CAK; Sub-Collections: SRI-ARC; Clerk: ARCG;

there is a file <guest>tomoexp useful in examining the effects of editing a file

(J13257) 12-DEC-72 13:55; Title: Author(s): ARC, Guest O./ARCG; Distribution: Watson, Richard W./RWW; Sub-Collections: SRI-ARC; Clerk: ARCG;

there is a file (guest) tomoexp useful in examining yhe effects of editinga file.

(J13258) 12-DEC-72 14:08; Title: Author(s): ARC, Guest O./ARCG; Distribution: Van Nouhuys, Dirk H., Watson, Richard W., Neigus, Nancy J., Feinler, Elizabeth J. (Jake), Kidston, Carol A., Lee, Susan R./DVN RWW NJN JAKE CAK SRL; Sub-Collections: SRI-ARC; Clerk: ARCG;

## MEH 12-DEC-72 14:35 13259

Discussion with DEC Personnel Re. Disk-pack Catastrophe

Lucky Gilbert, Kal Hubler (salesman from Maynard), and Al Titcomb (in Product Line Equipment) of DEC will be here Thursday, 12/14 at 1:30 to discuss with us our current disk-pack catastrophe. 1

Discussion with DEC Personnel Re. Disk-pack Catastrophe

(J13259) 12-DEC-72 14:35; Title: Author(s): Hardy, Martin E./MEH; Distribution: Norton, James C., Wallace, Donald C. (Smokey), Ferguson, Ferg R./JCN DCW WRF; Sub-Collections: SRI-ARC; Clerk: BER;

the weather here is cold and dreary.

1

(J13260) 12-DEC-72 13:19; Title: Author(s): Kidston, Carol A./CAK; Distribution: Lee, Susan R., Van Nouhuys, Dirk H., Kidston, Carol A./SRL DVN CAK; Sub-Collections: NIC; Clerk: CAK;

this is a sample journal message.

1

(J13261) 12-DEC-72 13:28; Title: Author(s): Kidston, Carol A./CAK; Distribution: Kidston, Carol A./CAK; Sub-Collections: NIC; Clerk: CAK;

i have no message

1

(J13262) 12-DEC-72 13:44; Title: Author(s): Kidston, Carol A./CAK; Distribution: /; Sub-Collections: NIC; Clerk: CAK;

Comment on (mjournal, 13249, 1), Phone answering

I would be willing to answer phones 1/2 day every 18 days provided there was a mechanism which told me in advance when my turn would be and reminded me several times just prior to my tour of duty. -- Charles

Comment on (mjournal, 13249, 1), Phone answering

(J13263) 12-DEC-72 7:21; Title: Author(s): Irby, Charles H./CHI; Distribution: Van Nouhuys, Dirk H./DVN; Sub-Collections: SRI-ARC; Clerk: CHI;

I recommend that ARC invest in am imlac terminal for DCE's home. This would give DCE the ready access to his notes, and files that he should have. Given his new emphasis on long range planning, thinking, and promotion, this facility will become even more important. Doug could demo and use the system during the day for visitors and in the evening could use it to answer questions that his (hous guests?) visitors ask after thinking about what they saw. Having a DNLS terminal at his home would allow Doug to use the system in off hours without creating havoc with his homelife (that is, he would not have to go into SRI to work effectively). For many of the things Doug does, TNLS just is not the same as DNLS. I feel that Doug is probably our best example of a typical future (target) user, using the system to help him in his longer range pursuits. Since access to one's information is inherant in the design of our workshop, we need to support this 'target' user more fully. 1 A DNLS terminal for DCE's home.

(J13264) 12-DEC-72 8:29; Title: Author(s): Irby, Charles H./CHI; Distribution: Agent, Station, Hoffman, Carol B., Lee, Susan R., Michael, Elizabeth K., Dornbush, Charles F., ARC, Guest O., Feinler, Elizabeth J. (Jake), Handbook, Augmentation Research, Kelley, Kirk E., Meyer, N. Dean, Byrd, Kay F., Prather, Ralph, White, James E. (Jim), Vallee, Jacques F., Kaye, Diane S., Rech, Paul, Kudlick, Michael D., Ferguson, Ferg R., Lane, Linda L., Auerbach, Marilyn F., Bass, Walt, Engelbart, Douglas C., Hardeman, Beauregard A., Hardy, Martin E., Hopper, J. D., Irby, Charles H., Jernigan, Mil E., Lehtman, Harvey G., North, Jeanne B., Norton, James C., Page, Cindy, Paxton, William H., Peters, Jeffrey C., Ratliff, Jake, Row, Barbara E., Van De Riet, Edwin K. (Ed), Van Nouhuys, Dirk H., Victor, Kenneth E. (Ken), Wallace, Donald C. (Smokey), Watson, Richard W., Andrews, Don I./SRI-ARC; Sub-Collections: SRI-ARC; Clerk: CHI;

I recommend that ARC operations make a full time secretary/assistant available to DCE. Given his new role, I think this is vitally important. One service such a person could perform is the daily transcription into online files (specified brances in files) of tapes created by DCE's use of a portable dictation device (we have several small ones). Other functions might include organizing incoming mail, reminding DCE of upcoming visitors, meetings, papers, etc. Such a person should be able to answer a good deal of Doug's routine mail and perhaps do considerable first draft work on memo's, papers, etc. This person should be facil with DNLS, TNLS, and DEX and should be allowed the same high priority access to the system that DCE should have.

(J13265) 12-DEC-72 8:38; Title: Author(s): Irby, Charles H./CHI; Distribution: Agent, Station, Hoffman, Carol B., Lee, Susan R., Michael, Elizabeth K., Dornbush, Charles F., ARC, Guest O., Feinler, Elizabeth J. (Jake), Handbook, Augmentation Research, Kelley, Kirk E., Meyer, N. Dean, Byrd, Kay F., Prather, Ralph, White, James E. (Jim), Vallee, Jacques F., Kaye, Diane S., Rech, Paul, Kudlick, Michael D., Ferguson, Ferg R., Lane, Linda L., Auerbach, Marilyn F., Bass, Walt, Engelbart, Douglas C., Hardeman, Beauregard A., Hardy, Martin E., Hopper, J. D., Irby, Charles H., Jernigan, Mil E., Lehtman, Harvey G., North, Jeanne B., Norton, James C., Page, Cindy, Paxton, William H., Peters, Jeffrey C., Ratliff, Jake, Row, Barbara E., Van De Riet, Edwin K. (Ed), Van Nouhuys, Dirk H., Victor, Kenneth E. (Ken), Wallace, Donald C. (Smokey), Watson, Richard W., Andrews, Don I./SRI-ARC; Sub-Collections: SRI-ARC; Clerk: CHI;

CHI 12-DEC-72 9:54 13266
A Snap Shot of Software Task Planning for the Next Few Months

This is what (MJOURNAL, 13243,1) was supposed to be

Major objectives for the next few months (number to the left of an item is its relative priority--10 high)

Conversion of NLS to MPS (done before NLS UTILITY)

1 a.

Do before MPS conversion

1a1

10 general bug Fixing [Work in Progress]

1a1a

Fixing important bugs as they come up.

1ala1

10 MPS development [Work in Progress]

1a1b

Development of the runtime environment for mps (written in mpl), the compiler (written in mpl), and the debugging facility (written in mpl). This includes the fully typed data structures and the new control structures.

10 DEX-II [Work in Progress]

1a1c

This is the DEX, stage II, which is described in (Journal, xxxx,). It allows extensive editing of existing files in addition to creating new files.1a1c1

10 Dynamic Storage Allocator [Work in Progress] 1a1

The addition of a dynamic storage allocator to NLS to releive some of it space problems and to allow the addition of some new user capabilities. 1a1d1

10 Calculator [Work in Progress]

1ale

The development of a numerical calculator facility. Includes the ability to manipulate numerical data in NLS files, produce graphical representations of numerical data, and provide the user with a high level language for manipulating such numerical data.lale1

10 Ident Cleanup [Work in Progress]

la1f

Addition of an Ident file verifyer, commands to delete idents, fields in ident entries, allow spaces in ident queries, and implementation of restrictions and Ident-Wheel's.

10 Journal cleanup [Work in Progress]

la1g

Cleanup regarding changes made to improve he delivery speed of the journal. Also, to remove name expansion in the file headers and JCAT entries, create initial files if they do not exist (may ask for archive retrieval), Journal backup facility, recording of errors on a file, allow secondary distribution to work on files which have received numbers but are still in TEJOURNAL.

- 10 Catalog Cleanup & bug fixing [Work in Progress] 1a1h
  as needed 1a1h1
- 10 Query language evolution [Work in Progress] 1ali addition of control facilities, such as veiwspecs, multi-file capability. 1ali1
- 10 New file system--property lists [Work in Progress]1a1j

Completig the design and implementing a new file system for NLS files. Includes a base internal file storage management facility on top of which is constructed thee current NLS file structure with the addition of LISP-like property lists (for the storage of numerical, graphical, tabular, etc data). 1a1j1

10 re-doing Net user restrictions [Work in Progress]1a1k

Modifying the EXEC to allow NET users to utilize more of our facilities. Includes the creation of a new SUBSYS directory which holds subsystems available to both NET and local users.

1a1k1

10 Comment and Cleanup NLS code & establish conventions1all

Since the L10 code that now exists will be used as a model for the MPS NLS system, it is important that it be more fully commented and that conventions for coding and documentation be consistently used and clearly understood.

1a111

10 NLS command language cleanup

1a1m

Incorporates many of the suggested changes to the NLS command language to make it more consistent and complete. 1alm1

10 more efficient literal collection

1a1n

TENEX 1.29.01 allows a facility for collecting literals from users in a vastly more efficient manner. The file (NLS, LITDSP, > needs to be rewritten to take advantage of this new feature.laln1

10 Projection TV system [no software planned]

lalo

The development of new procedures and techniques for using this new type of console. No software development is required to my knowledge. 1a1o1

8 Catastrophe pseudo-interrupt

1alp

When the user fC's to the EXEC and attempts to RESET or start a new subsystem (anything that would cause the files to be closed and the current state to be lost), the EXEC will give NLS a timed catastrophy pseudo-interrupt. This will allow NLS to clean up its act and insure that the file structure is in tact. Since it is timed, the EXEC will take control away from NLS after a certain time if it has not already halted.

3 Cross reference facility for NLS (L10) source code1alq

This is the development of a cross-reference facility for the source code of NLS to help in the conversion to MPS.

1a1q1

5 Ident query added to DNLS

1alr

This is the addition of the Ident query facilities now available in TNLS to DNLS. 1a1r1

Think about before MPS conversion

1a2

10 NLS Configuration

1a2a

This is the ability of a user to specify what part of NLS he wants and perhaps how he wants them distributed over machines in the net. This is largely a fallout of the modularization of NLS. 1a2a1

8 Larger char set

1a2b

The design and implementation of a facility in NLS

and NLS files for handling a very large or possibly unbounded character set (math symbols, greek alphabet, sub-script, super-script, etc). In addition, we will have to develop ways to display, print, and COM these characters.

1a2b1

Get the NLS UTILITY up

1b

Do before NLS UTILITY

151

10 Learning net code [Work in Progress]

1b1a

The code written at BBN to support the NET.

1 b1 a 1

10 NLS on other TENEX's [Work in Progress]

1b1b

Providing the facilities via standard TENEX to support NLS on other TENNEX sites. This includes completing the work begun by DCW, KEV's visit to BBN.1b1b1

10 Display code Cleanup [Work in Progress]

1b1c

Reorganizing the display support code in the monitor so that other TENEX's will be able to support DNLS for remote IMLAC-like devices, so that our displays may behave like remote IMLAC-like devices to other TENEX systems, so that a more general screen sharing mechanism can be implemented, and so that the general purpose portion of the code can be separated from the special support of our hardware.

1blc1

10 COM-Completeness [Work in Progress]

1b1d

Defining a "complete" set of facilities for dealing with COM output and seeing to it that they are all inplemented. Most of the facilities are already there. What is needed is to determine what else in needed and supplying it.

1b1d1

10 Scheduler changes--sorting priority [Work in Progress]

1b1e

Rewriting a portion of the TENEX schedular so that it determines the relative priorities of the processes in the system once and puts them in a sorted list for later use. The current schedular computes the priorities whenever it needs to know them (often several times per rescheduling operation). 1b1e1

10 Journal comment submission and viewing [Work in Progress] 1b1f

The provision of mechanisms to easily view comments that have been made on journal documents and to easily make comments on journal documents (including other comments, of course).

1b1f1

10 Journal submission and delivery via NET [Work in Progress] 1b1g

Delivery: Journal delivery to online files and printers at remote sites.

Submission: Provide easy mechanisms for remote users to submit files and literal messages to the journal over the net. Implied here is either an automatic connection / disconnection to our site or ARC maintained subsystems at the remote sites. 1b1g1

10 Other text editors <-> NLS [some facilities designed] 1b1h

This is the development of generalized mechanisms for translating files intended for other text editors into NLS from and vise versa. This may include the use of DEX. Also, the insert/output sequential mechanisms will be modified to include the use of user specified programs to fetch text from/put text into the sequential file. These programs will also be able to determine what constitues the end of a statement and how the resultant NLS file should be structure (insert).

10 re-write part of Superwatch in macro [designed] 1bli

Other Tenex sites have expressed an interest in the system measurement work that DIA has been doing. There are plans for putting much of the measurement code into standard TENEX. There is reluctance, however, for other TENEX sites to accept a subsystem (SUPERWATCH) written in L10. We hope to encourage the use of these facilities at other sites by rewriting the generally useful parts of SUPERWATCH in MACRO.

10 Data Input via forms

1b1j

Text entry into NLS files via a form which the user

fills out. The user may only fill in the blank and cannot change the text of the form. Presumable the user is prompted in some appropriate manner. 1b1j1

10 Special forms: DEPENDENT ON data input via forms1b1k

This is the development of data input forms especially for RADC's use.

1 b1 k1

9 Multilevel file store--especially via the NET 1b11

This is the extension of the multi-level file system (BSYS) that DCW has been working on to use file stores at other sites in the NET and to use mountable disk packs.

1b1l1

9 multi-site Journal

1b1m

The ability to have several Journals, each running on a different PDP-10, which share there data bases. Implied is the automatic retrieval of files from one site to another as needed.

1b1m1

8 use of Ident system by SNDMSG

1b1n

This is the NET-wide use of our Idents in the subsystem SNDMSG. This would probably be inaddition to the user-named site-name facility now in use. This use of idents implies a facility for sndmsg to get at the ident data base. This might be easily handled by our supporting and periodically updating files on all tenex sites. This file would consist of a data structure that SNDMSG would be able to use to accomplish its task.

8 Journal submission/delivery via SNDMSG

1b10

This may turn out to be a simple case of Journal submission/delivery via NET. It implies the ability to submit messages to the journal via the subsystem SNDMSG and to get Journal messages delivered via the SNDMSG mechanisms.

7 Imlac protocal Cleanup [some work done] 1b1p

This is the improvement of the communication protocal developed for the IMLAC. We hope to considerably reduce the number of overhead characters which must

be transferred. This implies some restrictions on the NLS command language, since we do not intent to transmit the cursor coordinates with each character as is now done.

1b1p1

5 Screen Sharing

151q

This is the full blown screen sharing facility that we tried to get done before the ICCC. It allows each participant to see his and the other's cursor, as well as solving the problem of different screen characteristics more generally.

1b1q1

4 Journal-DEX

1b1r

This is the addition of the ability to submit documents or messages to the Journal via DEX. 1b1r1

Think about before NLS UTILITY

1b2

10 Mini cluster

1b2a

Development of a scheme for supporting several diplay terminals with mini computers in a flexible configuration so that at least the NLS command parsing can be done in the local dedicated machines. This should give users the quick response they need during command specification, literal collection, etc. Much of this may fall out of PARC's work, but we cannot wait too long for them. Besides, There aim is slightly different than ours. They intend to develop a chiefly stand alone NLS editing system. 1b2a1

10 Range of terminals

1b2b

To attract and keep external users/collaborators we need to support a range of different terminals (from DEX to DNLS and perhaps beyond). This implies looking at a wide variety of terminals, choosing some, and developing adaquate support for them. For some, this may mean IMLAC-like programs, for others it may mean developing other user interfaces to NLS.1b2b1

10 plasma-DNLS DEPENDENT ON: Imlac protocal cleanup1b2c

Now that we have the plazma display, we need to be able to use it. We can use it for a while as a TNLS terminal, but eventually we need to program it to run

DNLS. This involves developing a scheme for handling the cursor, since the non-destructive write mode has not been developed for this screen.

1b2c1

10 New local display system

1b2d

We need to take a careful look at display terminals to replace our local TASKER system. 1b2d1

8 Data Management Integration

1b2e

This is the integration of all of our data management systems (XDOC, Journal, Resource Data base, Baseline Record System, Ident system, Handbook, Catalog system, personal data bases). This implied the development of a consistent underlying data base management facility which each of the above systems utilize.

1b2e1

7 Baseline Record System development

1b2f

A serious look at the old BRS and why it did not work, and the development and implementation of the next stage BRS. This includes data storage and retrieval questions as well as development of a good understanding of what constitutes a useful management system.

1b2f1

7 Novice-Expert

1b2g

The verboseness of command language and help facilities should be variable as a function of user desire, extent of familiarity with that part of the system, etc. Perhaps each user should have a "proficiency profile" which describes to the system his familiarity with the various arts of the command language. Included here are mechanisms for the user to inspect and modify his proficiency profile as well as development of good help aids and more self-explanitory command language and teaching techniques.

6 Service partitioning

1b2h

This is meant to imply the partitioning of a computer system's resources amoung its users. This extends from control of which users can get on at any point

in time to how much service a user will get once he is on and what control a user has over this. 1b2h1

Do after NLS UTILITY conversion

1c

10 Graphics

1c1

Re-implementation of a line-drawing capability into NLS. Accessable from CALCULATOR programs and user programs (and eventually other subsystems?). Implies development of a data structure within NLS files (a property), graphics subroutines, a monitor interface for displaying the picture, a user language for constructing and modifying pictures, calculator and user program primitives for picture manipulation, a a protocal for transmitting pictures to an imlac-like terminal.

8 Source Code Documentation Aids

1c2

Development of aids for maintaining accurate documentation for large software systems. Implied are mechanisms for automatically extracting documentation and flow-of-control information from source code files.1c2a

8 Retrieval System DEPENDS ON: Data Management Integration

1c3

This is a coordinated development of retrival mechanisms for our various data bases (journal, xdoc, ident, baseline, resource notebook, handbook, and perhaps private data bases). This includes data storage (in NLS properties?) as well as retrieval language development.1c3a

8 NLS on other operating systems

1c4

This will most likely be accomplished by bootstrapping MPS onto other operating systems and other machines. For some operating systems, the NLS file handling will have to be quite different (perhaps impossible, on some). Almost any system would be able to support an NLS front end, however, with the actual file manipulation being done on a system with a suitable file system.

7 Ident system development

1c5

A general review of what the Ident system is, what functions it plays, how it relates to other data bases

that we have and how to efficiently store and retrieve the information. 1c5a

7 User program library

1c6

The accumulation and documentation of all user programs and a library of generally useful MPL modules. This implies that the Information is kept up-to-date and that the users have some reasonable way of retrieving information from this data base.

7 Access to non-NLS subsystems, other programming languages

1c7

This is the ability of an NLS user to "reach through" NLS to operate other subsystems, perhaps on other machines in the NET, to pass information from his NLS files to those subsystems and to have the results put into NLS files. Implied here is both the explicit operation of other subsystems and the implicit use of other subsystems. In the later case, one would hope that the user could use familiar (at least in form) commands to achieve this.

7 Portrayal Generator

1c8

This facility would allow display users to view and edit formatted files. This means that instead of using the display maintenance code that we now use, the output processor itself would generate and maintain the the display image. In this way, one could view the final format of a hardcopy document before it becomes hardcopy. He should be able to edit the text of the document as well as control its formatting.

7 Format designer

1c9

This is a facility to guide a user through the design of formats which he can later apply to several different documents.

1c9a

7 Microfilm reader

1c10

A computer controled microfische reader (perhaps with a pointing device) shoul be online as a terminal. In addition, the terminal would have a display or hardcopy device and a keyboard (keyset?). The user should be able to use the microfile viewer to access a large body

of read-only data. He would give commands via the keyboard and the computer would position the proper micro film frame for the user. In addition, the user would be able to see up-to-date corrections and comments on his display or hardcopy device. He would be alloed to comment on the information presented to him either on the micro-film reader or the other device. He should be able to point to items on the microfilm reader's screen (for jumping on links, or commenting, etc) and the computer should be able to translate the transmitted positional information into a pointer to the appropriate information in an on-line description of the information. The user's comments and edits would be added to new releses of the microfilm data base periodically. 1c10a

6 Catalog development

1c11

Further development of the Catalog system, chiefly in the areas of proofing and input of new data/correction of old data. 1c11a

5 inclusion nodes [some design work done]

1c12

This is a facility in the NLs file system to, at any point in the structure, 'include' (and control access priveledges for) a structure (a sequence--including user filters--applied to a group) from the same or another file. The user, under viewspec control, either sees a description of that which is included or the actual included material (as though it were part of the same file). This allows the user to construct and edit files which are actually pieces of other files, have infinitly large files, and restrict access to an included structure. The user would also have control over the expansion of embedded inclusions.

5 Programmable NLS

1c13

Implied here is the ability of an NLS user to be able to extent NLS by adding his own commands, building up more complex commands by essentially using basic NLS manipulative capabilities, which he describes in terms of a high level language.

4 Indirect links

1c14

This is the addition to the link syntax of an Indirect

flag which will cause NLS to automatically follow the link which is pointed to by the current link. I think that we need a similar capability with jump to name. Of course, the user must have a way of overridding this system feature.

1c14a

4 Tenex Sources in NLS [some done]

1c15

The conversion of all the source files for TENEX to NLS files to facilitate maintenance of these files. 1c15a

3 Mouse-keyset button macros

1c16

This is the ability of users to define character sequences which will be input in response to single keyset/keyboard characters typed by the user. 1c16a

3 Functional Document

1c17

This is the development of mechanisms and procedures to support large complex multi-document documents, probably within the Journal framework. Implied here is the automatic maintenance of tables of contents and perhaps indecies.

(J13266) 12-DEC-72 9:54; Title: Author(s): Irby, Charles H./CHI; Distribution: Agent, Station, Hoffman, Carol B., Lee, Susan R., Michael, Elizabeth K., Dornbush, Charles F., ARC, Guest O., Feinler, Elizabeth J. (Jake), Handbook, Augmentation Research, Kelley, Kirk E., Meyer, N. Dean, Byrd, Kay F., Prather, Ralph, White, James E. (Jim), Vallee, Jacques F., Kaye, Diane S., Rech, Paul, Kudlick, Michael D., Ferguson, Ferg R., Lane, Linda L., Auerbach, Marilyn F., Bass, Walt, Engelbart, Douglas C., Hardeman, Beauregard A., Hardy, Martin E., Hopper, J. D., Irby, Charles H., Jernigan, Mil E., Lehtman, Harvey G., North, Jeanne B., Norton, James C., Page, Cindy, Paxton, William H., Peters, Jeffrey C., Ratliff, Jake, Row, Barbara E., Van De Riet, Edwin K. (Ed), Van Nouhuys, Dirk H., Victor, Kenneth E. (Ken), Wallace, Donald C. (Smokey), Watson, Richard W., Andrews, Don I./SRI-ARC; Sub-Collections: SRI-ARC; Clerk: CHI;

Origin: <IRBY>SOFT.NLS;8, 10-DEC-72 18:16 CHI;

No, we should not take turns at the phone-- (13249,)

I agree that we should strive toward a certain amount of equality around here. Thus I feel, for example, that those who leave their things around the console area should clean up after themselves. I would go so far as as to suggest that we who use the consoles should be assigned turns to take on this task so that it gets done once a week.

It does not seem clear to me that it is necessary for us to be assigned to take turns at answering phones during prime time (8-12, 1-5) as long as PSO are assigned to jobs in which phone answering is as much prerequisite task as programming and documentation are tasks for me. In non prime time (12-1, after 5) we could arrange turns if necessary.

I suppose that in most of the Dirk mentions in which each employee takes a turn at answering phones there are no PSO people whose tasks include phone answering as part of their assignments.3

No, we should not take turns at the phone-- (13249,)

(J13267) 11-DEC-72 19:50; Title: Author(s): Lehtman, Harvey G./HGL; Distribution: Agent, Station, Hoffman, Carol B., Lee, Susan R., Michael, Elizabeth K., Dornbush, Charles F., ARC, Guest O., Feinler, Elizabeth J. (Jake), Handbook, Augmentation Research, Kelley, Kirk E., Meyer, N. Dean, Byrd, Kay F., Prather, Ralph, White, James E. (Jim), Vallee, Jacques F., Kaye, Diane S., Rech, Paul, Kudlick, Michael D., Ferguson, Ferg R., Lane, Linda L., Auerbach, Marilyn F., Bass, Walt, Engelbart, Douglas C., Hardeman, Beauregard A., Hardy, Martin E., Hopper, J. D., Irby, Charles H., Jernigan, Mil E., Lehtman, Harvey G., North, Jeanne B., Norton, James C., Page, Cindy, Paxton, William H., Peters, Jeffrey C., Ratliff, Jake, Row, Barbara E., Van De Riet, Edwin K. (Ed), Van Nouhuys, Dirk H., Victor, Kenneth E. (Ken), Wallace, Donald C. (Smokey), Watson, Richard W., Andrews, Don I./sri-arc; Sub-Collections: SRI-ARC; Clerk: HGL;

to: JBN - please send a resource notebook and TENEX EXEC Langauge manual to:

Dr. Richard Roy National Center 1 Washington, D.C.

the Naval Electronics Systems Command is interested in finding a suitable host on the ARPANET and intends to employ in the neighborhood of 5 equivalent 360/75 cpu hours a month.

1

(J13268) 12-DEC-72 12:45; Author(s): Iseli, John/JI; Distribution: North, Jeanne B./JBN; Sub-Collections: NIC; Clerk: JI;

Paul ... This is part of my learning of the Journal system. It is a copy of the file I gave you in hard copy.

ENEX	File Pro	tection Mechanism	1	
Ge	eneral		1 a	
	File pro	tection in TENEX is controlled by a six-digi	t octal	
		which occurs as part of the file name.	1a1	
	This	protection field follows the version number.	For	
	examp	le:	lala	
	AL	PHA.NLS; 3; P775202	1a1a1	
Pr	otection	Fields	16	
	The six-	digit octal number following the letter "P"	above	
	consists	of three fields of two digits each.	161	
	The l	eft-most two-digit field controls protection	for	
	the f	ile owner.	151a	
	The m	iddle two-digit field controls protection fo		
	group	of users.	1b1b	
		ight-most two-digit field controls protectionsers not covered by the two fields mentioned		1000
	In each	two-digit field, the bits have the functiona	ι	
	meanings	described next.	1ь2	
Pr	otection	Bits	1c	
	BIT	PROTECTION ASPECT	1c1	
	0	Read contents of the file	1c2	
	1	Write onto the file	1c3	
	2	Execute the program stored in the file	1c4	
	3	Append to the file	1e5	
	4	List the file name etc., when making a Dir	ectory	
	Listing		1c6	

When the a bit's value is 1 , the indicated action is permitted. When the value is 0 , It is prohibited.1c7a

1c7

5 not used

For example: 1c7b

77 permits full access (read, write, execute, append, list). 1c7b1

- 52 protects a file from modification (i.e., no write, no append) but permits other functions. 1c7b2
- 02 protects a file from reading or writing, but allows someone to see it in the directory listing.1c7b3

## How to Invoke the Mechanism

aa [CR]

1 d

1 When creating a file in NLS (for example via the commands OUTPUT FILE or UPDATE FILE) then type the entire file name ---

FILENAME . EXTENSION ; VERSION ; P xxxxxx

1d1a

and put the desired protection code octal digits in the field of x's.

2) In the EXEC, use the COPY command and type the entire file name as above.

COP [ALTHODE] (TO) IF IF IF PXXXXXX

1d3a

where the three control F's merely allow you to avoid having to type the name, extension, and version number, and the field of x's is the desired protection code. 1d4

NOTE: Do NOT precede the P with a semicolon, when using this method.

How to find out what the protection bits are set to le

Use the EXEC command DIRECTORY as follows: 1e1

a DIR [ALTMODE] Filename [COMMA] [CR] aa P [CR]

1e1a

where the symbol [COMMA] means you type the character "comma", the symbol [ALTMODE] means you type the "alt mode" key, and the symbol [CR] means you type the "carriage return" key

(J13269) 12-DEC-72 10:06; Title: Author(s): Kudlick, Michael D./MDK; Distribution: Kudlick, Michael D./MDK; Keywords: File-Security File-Protection File-Privacy Security Protection Privacy; File Protection; File Privacy; Sub-Collections: SRI-ARC; Clerk: MDK; Origin: <KUDLICK>PROTECTION.NLS; 5, 1-NOV-72 16:53 MDK;

File protection in TENEX is controlled by a six-digit octal number, which occurs as part of the file name.	1
This protection field follows the version number. For example:	1 a
ALPHA.NLS;3;P775202	1a1

Submit Plex Test

(J13270) 12-DEC-72 10:09; Title: Author(s): Kudlick, Michael D./MDK; Distribution: Kudlick, Michael D./mdk; Sub-Collections: SRI-ARC; Clerk: MDK;