

What about secondary distribution?

(J23861) 22-AUG-74 14:19;;; Title: Author(s): Kirk E. Kelley/KIRK;  
Distribution: /CHI( [ ACTION ] ) DSM( [ ACTION ] ) ; Sub-Collections:  
SRI=ARC; Clerk: KIRK;

What about secondary distribution?

Will that be in the Sendmail system by October?

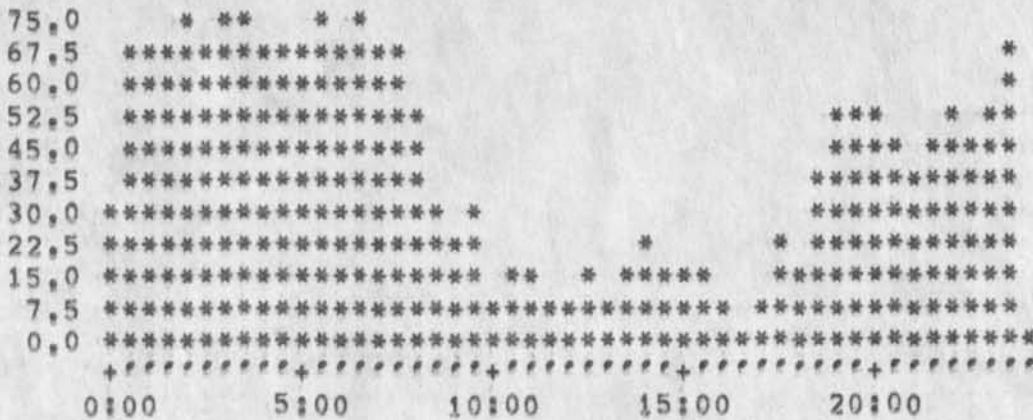
## Superwatch Average Graphs for Week of 8/4/74

(J23862) 22-AUG-74 14:29;;; 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 ] ) ; Sub=Collections: SRI=ARC; Clerk: SRL; Origin: < LEE, WEEK8/4GRAPHS,NLS;2, >, 22-AUG-74 14:25 SRL ;;;;<LEE>WEEK8/4GRAPHS,NLS;1, 22-AUG-74 05:45 SRL ;####;

Superwatch Average Graphs for Week of 8/4/74

TIME PLOT OF AVERAGE IDLE TIME FOR WEEK OF 8/4/74  
 x axis labeled in units of hr:min, xunit = 30 minutes

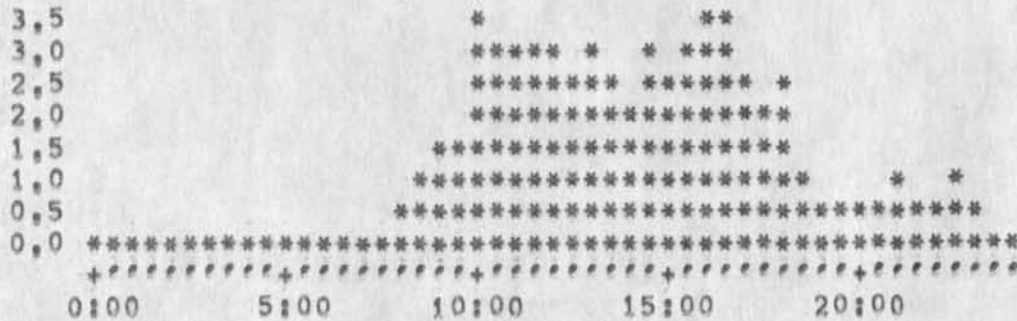
1



1a

TIME PLOT OF AVERAGE NUMBER OF GO JOBS FOR WEEK OF 8/4/74  
 x axis labeled in units of hr:min, xunit = 30 minutes

2

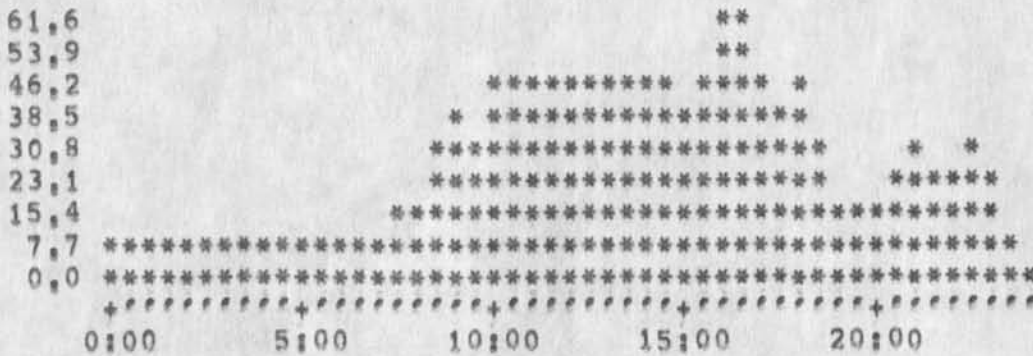


2a

TIME PLOT OF AVERAGE PER CENT OF CPU TIME CHARGED TO USER ACCOUNTS  
 FOR WEEK OF 8/4/74

x axis labeled in units of hr:min, xunit = 30 minutes

3



3a

TIME PLOT OF AVERAGE NUMBER OF USERS FOR WEEK OF 8/4/74  
 x axis labeled in units of hr:min, xunit = 30 minutes

4



KIRK 22-AUG-74 14:59 23863

Illegal statement return ring

(J23863) 22-AUG-74 14:59;;; Title: Author(s): Kirk E. Kelley/KIRK;  
Distribution: /BUGS( [ ACTION ] ) ; Sub-Collections: SRI-ARC BUGS;  
Clerk: KIRK;

## Illegal statement return ring

After removing a split screen, you invariably can no longer jump to file return or jump to return because someone did not fix the split window code to correctly update the statement return ring. Immediately before removing the split window, both file return and statement return work fine. I find myself going out and resetting every time I use a split window and avoiding using a split window as much as possible.

About the ARC Workshop Utility Service Talk October 15

(J23865) 22-AUG-74 15:43;;; Title: Author(s): James C. Norton/JCN;  
Distribution: /RLL( [ ACTION ] ) DCE( [ INFO=ONLY ] ) JHB( [ INFO=ONLY ]  
) RWW( [ INFO=ONLY ] ) TLH( [ INFO=ONLY ] ) ; Sub-Collections: SRI=ARC;  
Clerk: JCN; Origin: < NORTON, SRITALK,NLS;1, >, 22-AUG-74 15:40  
JCN ;;; ,SNF=0; ####;



About the ARC Workshop Utility Service Talk October 15

To: Martin Gorfinkel E-122

From: Jim Norton J-2094

cc: Doug Engelbart, Robert Lieberman, Tom Humphrey

Subject: About the ARC Workshop Utility Service Talk October 15

-----  
Martin, we would be glad to take part in the series of computer services informational talks you have planned for SRI staff. October 15th is a good date. As we discussed, such a description of the Workshop Utility for SRI staff is closely related to the developing Workshop use objectives of SRI management and the SRI Workshop Architect, Tom Humphrey, I will discuss the details of the presentation with Tom as soon as we can get together. In the meantime, assume that an ARC person will do it, I note that you mentioned that it would probably be in Conference Room B and would probably be attended by less than 50 people,

The paragraph you requested follows:

SRI's Augmentation Research Center (ARC) has been developing a computer-based "augmentation" system for over 12 years at the Institute under government sponsorship. ARC's primary objective in this work is to bring into being an evolving system that will significantly increase the effectiveness of individuals and groups in their "knowledge work." The system now runs on two PDP-10 TENEX timesharing computer systems that are connected to the ARPA Computer Network. ARC staff members have been using the system as it has developed over the years as an aid in their work and to provide valuable feedback about changes and additions needed in the system. In order to have the results of ARC's work benefit other groups and also to obtain more useful feedback from such users,

ARC has commenced to provide computer service, training, and consultation to a growing number of subscribing organizations. The computer service portion of what is called the Workshop Utility is provided by Tymshare, Inc, under contract to SRI. The service has been in operation since January 1974. SRI, as an organization interested in learning about the ARC system, has subscribed for an initial share of the service. Initial use of the service at SRI will be by selected groups of people to further develop specific applications. Some of the possible first applications are in the areas of: team coordination and dialog support; document development, production, and control; and personal information management,

Elephant Meeting

(J23866) 23-AUG-74 09:52;;; Title: Author(s): Jeanne M.  
Leavitt/JML; Distribution: /JML( [ ACTION ] ) SLJ( [ INFO-ONLY ] ) ;  
Sub=Collections: SRI=ARC; Clerk: JML; Origin: < LEAVITT,  
MEMO,NLS;2, >, 22-AUG-74 17:26 JML ;;;#####

Elephant meeting

Contradictions have been alledged in our description of the elephant, 1  
The review meeting will be at 3:00, in the project room, 2  
A recursive redefinition plan should emerge, 3

CHI 26-AUG-74 08:38 23867

Secondary distribution (FORWARD JNUMBER TO IDENTLIST)

(J23867) 26-AUG-74 08:38;;; Title: Author(s): Charles H. Irby/CHI;  
Distribution: /KIRK( [ INFO=ONLY ] ) ; Sub-Collections: SRI-ARC; Clerk:  
CHI;

Secondary distribution (FORWARD JNUMBER TO IDENTLIST)

I will try hard to have it in by 1 September, If not, I will get it  
in by 1 October,

1

DDSI and Microfiche (Copy of a Message to Carlson)

(J23868) 26-AUG-74 10:38;;; Title: Author(s): Elizabeth K,  
Michael/EKM; Distribution: /JCN( [ INFO-ONLY ] ) RWW( [ INFO-ONLY ] )  
DCE( [ INFO-ONLY ] ) DDSI( [ INFO-ONLY ] ) JAKE( [ INFO-ONLY ] ) NDM( [ INFO-ONLY ] ) &DPCS( [ INFO-ONLY ] ) ; Sub=Collections: DPCS COM  
SRI=ARC DDSI; Clerk: DVN;

DDSI and Microfiche (Copy of a Message to Carlson)

26-AUG-74 0959-PDT MICHAEL: microfiche  
 Distribution: CARLSON AT ISI, RIDDLE AT OFFICE-1, VANNOUHUYS  
 Received at: 26-AUG-74 09:59:09

< MICHAEL, CARLSON,NLS;1, >, 26-AUG-74 08:45 EKM ;;;  
 The current state of DDSI and microfiche is roughly as follows:  
 They can produce 24 times reduction fiche using stick fonts at  
 a  
 cost of approximately \$30.00/fiche,  
 Presently they cannot produce 48 times reduction microfiche  
 (except  
 from hard copy at a prohibitive cost) because they do not have  
 a  
 proper lens,  
 The cost of the lens is " a couple of thousand dollars" and  
 delivery  
 time is perhaps 3 months.  
 It is possible that DDSI might buy the lens if we could give  
 them  
 some assurance of an adequate volume of business.  
 If you could give us some idea of the volume you anticipate we can  
 approach them again about buying the lens and try to get a firm  
 price  
 for the 48 times fiche,  
 I am going to be out of town Wednesday though Friday of this week,  
 If  
 Doug Weeks needs any information from us during this time he  
 should  
 call Dirk van Nouhuys - 326-6200 (3370)

1

1a

DCE 26-AUG-74 15:07 23869

Visit Log: 26 AUG 74, Paul F. Glaser, First National City Bank, New York

(J23869) 26-AUG-74 15:07;;; Title: Author(s): Douglas C. Engelbart/DCE; Distribution: /JCN( [ INFO-ONLY ] ) SWM( [ INFO-ONLY ] ) BC( [ INFO-ONLY ] ) ; Sub-Collections: SRI-ARC; Clerk: DCE;



Visit Log: 26 Aug 74, Paul F. Glaser, First National City Bank, New York

Paul F. Glaser  
Senior Vice President  
First National City Bank  
399 Park Avenue  
New York, N.Y. 10022  
(212) 559-4013

Also, Glaser is president of:  
Transaction Technology, Inc.

About this TTI organization: Dick Mills, a senior officer of the Bank (whom I met when he worked at Project MAC in 1963), felt that large organizations must set their own system requirements, and must somehow become less dependent upon suppliers -- but recognized that suppliers usually can hire the top technologists while many customer organizations can't offer the right environment to do so, so the Bank has put together this company to be a supplier for their own needs -- as a means of getting good technologists to work for them

Glaser worked previously for TRW, as head of a division in computer-related technology.

Steve says that this bank is one of the largest that has on-line terminals for customers to use. Glaser was the designer. The Bank is very large, and has a reputation for being very progressive.

Steve Miller was giving Mr. Glaser a walking tour. I talked and demonstrated for about a half hour at a Tasker DNLS console. Mr. Glaser seems to be involved with "technological aids to transactions." Has some knowledge of time-sharing systems, interactive consoles. I don't feel that I did a very good job of starting cold and showing him what was most meaningful. He got a bit of editing, and a description of the Journal, and a bit about the Utility, KW architects, etc.

Steve mentioned that Glaser and Mills are putting together a session at the NCC next year, that it was in connection with arrangements for the conference that Glaser had dropped in on Steve -- the tour was an afterthought.

He took copies of the following:

D. C. Engelbart, COORDINATED INFORMATION SERVICES for a DISCIPLINE- OR MISSION-ORIENTED COMMUNITY, paper presented at the Second Annual Computer Communications Conference, San Jose, California, 24 January 1973. (Journal, dated 12 Dec 72 -- Mjournal, 12445,1: xhmz)

Visit Log: 26 Aug 74, Paul F. Glaser, First National City Bank, New York

Augmentation Research Center, "Output Processor Users' Guide," 23 Aug 73, (Journal == 12209,)

5b

RLL 26-AUG-74 16:30 23870

ONR: Ken S. call

(J23870) 26-AUG-74 16:30;;; Title: Author(s): Robert N.  
Lieberman/RLL; Distribution: /JCN( [ ACTION ] ) ; Sub-Collections:  
SRI=ARC; Clerk: RLL;

ONR: Ken S. call

Spoke to Ken S. today. He and Marvin Denicoff definitely want to see film before it is shown. Must give two week notice for seminar. Reviewed the brief and crude video I gave him. Suggested leave out 'knowledge worker'; use split screen with hands and tasker; have bug coordinated with voice and eye; maybe go on without film if not ready. September 19 is ok if we can make the film in time. It is still a possibility of having after Ken leaves (25 Sept).

1

RLL 26=AUG=74 16:33 23871

Geisen; wont be able to help out much, re; ONR movie

(J23871) 26=AUG=74 16:33;;; Title: Author(s): Robert N.  
Lieberman/RLL; Distribution: /JCN( [ ACTION ] ) ; Sub=Collections:  
SRI=ARC; Clerk: RLL;

Geisen: wont be able to help out much, re: ONR movie

Phil Geisen from SRI called, He will NOT be able to help this week  
and not much for next week, Will bring over his 3650 video  
recorder and extra camera,

Professional Journal Subscriptions

(J23872) 26=AUG=74 20:34; Title: Author(s): Mil E, Jernigan/MEJ;  
Distribution: /SRI=ARC; Keywords: Subscriptions; Sub=Collections:  
SRI=ARC; Clerk: MEJ;  
Origin: < JERNIGAN, ARC,NLS;2, >, 26=AUG=74 20:32 MEJ  
; ; ; <JERNIGAN>ARC,NLS;1, 26=AUG=74 18:56 MEJ ;

Professional Journal Subscriptions

To All ARCers -

1

As you know, we are limited in funds for things not directly related to our contractual agreements. However, I heard today that it might be possible to renew some of our professional journal subscriptions,

2

Please let me know which professional journals you would prefer to keep going, but please do keep in mind the restricted budget in that area and mention only those journals most pertinent to our work,

3

Would very much appreciate the proposed list == SNDMSG, via "Hey, Mil" in the hall, or however you find it most convenient == but fairly soon, please, because some of them are now up for renewal and a decision must be made,

4

If you want to refresh your memory concerning journal titles, a quick check of the journals on the three shelves in the cave area might help. They are filed alphabetically by title,

5

Thanks a lot,

6

Mil

7



TEST OF JOURNAL SYSTEM FROM NLS

(J23873) 26=AUG=74 21:23;;; Title: Author(s): Geoffrey S.  
Goodfellow/GSG; Distribution: /GSG( [ INFO=ONLY ] ) ; Sub=Collections:  
NIC; Clerk: GSG;

TEST OF JOURNAL SYSTEM FROM NLS

THIS IS A TEST OF THE JOURNAL MESSAGES SENDING SYSTEM, FROM ENTERING  
THIS MESSAGE THROUGH NLS SENDAMAIL, IN AN EFFORT TO UNCOVER A BUG.

1

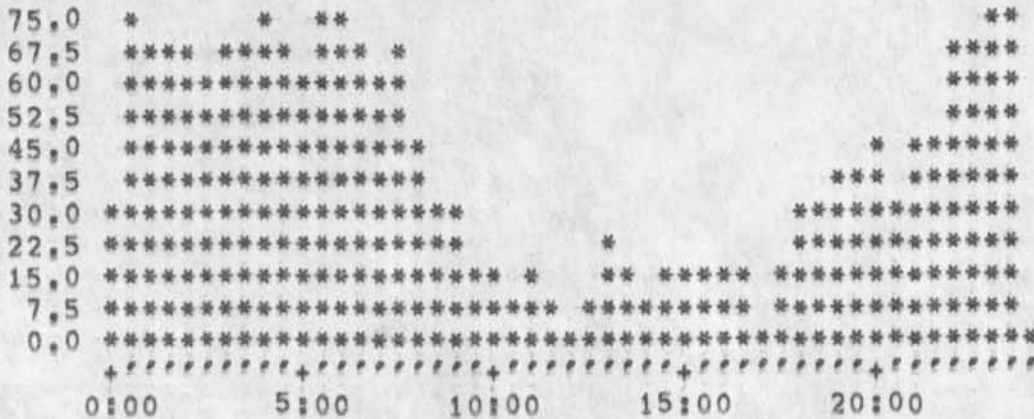
## Superwatch Average Graphs for week of 8/11/74

(J23874) 27=AUG=74 06:53;;; 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 ] ) ; Sub-Collections: SRI=ARC; Clerk: SRL; Origin: < LEE, WEEK8/11GRAPHS,NLS;2, >, 27=AUG=74 06:51 SRL ;;;;<LEE>WEEK8/11GrAPHS,NLS;1, 27=AUG=74 05:54 SRL ;####;

Superwatch Average Graphs for Week of 8/11/74

TIME PLOT OF AVERAGE IDLE TIME FOR WEEK OF 8/11/74  
x axis labeled in units of hr:min, xunit = 30 minutes

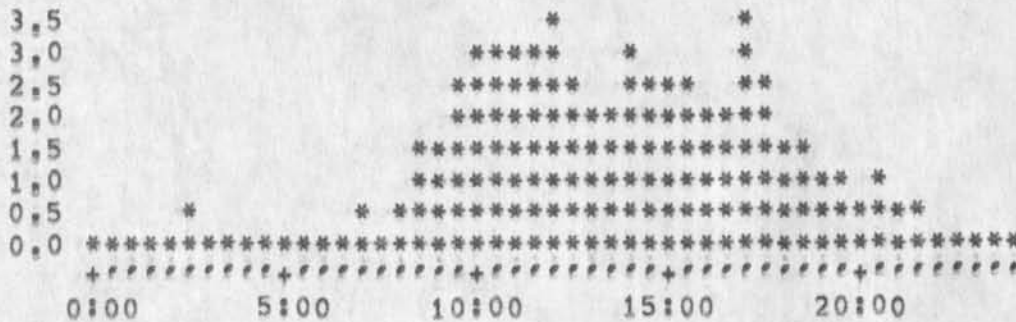
1



1a

TIME PLOT OF AVERAGE NUMBER OF GO JOBS FOR WEEK OF 8/11/74  
x axis labeled in units of hr:min, xunit = 30 minutes

2

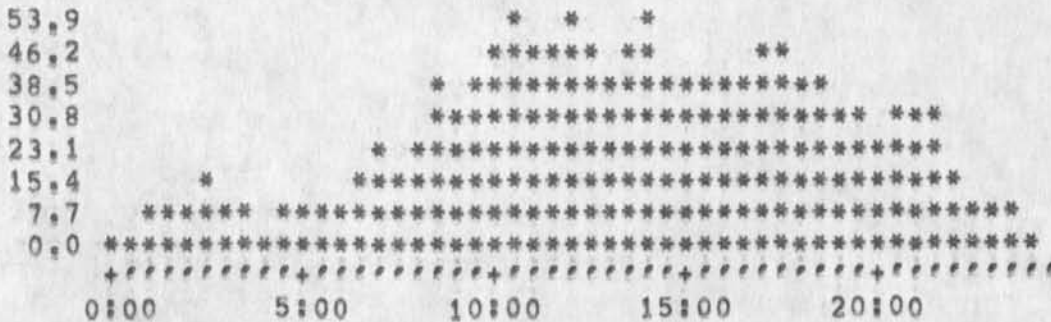


2a

TIME PLOT OF AVERAGE PER CENT OF CPU TIME CHARGED TO USER ACCOUNTS  
FOR WEEK OF 8/11/74

x axis labeled in units of hr:min, xunit = 30 minutes

3

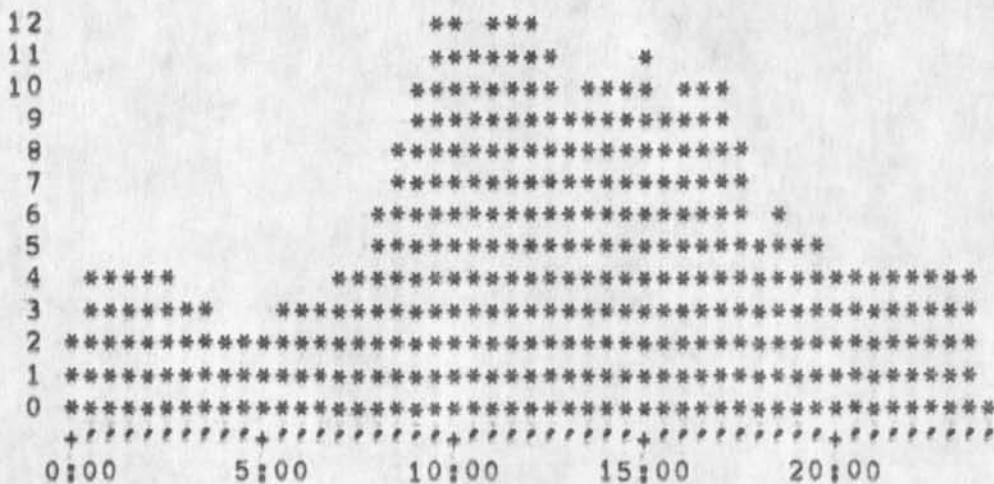


3a

TIME PLOT OF AVERAGE NUMBER OF USERS FOR WEEK OF 8/11/74  
x axis labeled in units of hr:min, xunit = 30 minutes

4

Superwatch Average Graphs for Week of 8/11/74



4a

TIME PLOT OF AVERAGE NUMBER OF NETWORK USERS FOR WEEK OF 8/11/74  
x axis labeled in units of hr:min, xunit = 30 minutes

5



5a

Output COM OK is a Bug

(J23875) 27-AUG-74 08:57;;; Title: Author(s): Dirk H. Van  
Nouhuys/DVN; Distribution: /NEWNLS( [ ACTION ] ) KIRK( [ INFO-ONLY ] )  
JCP( [ INFO-ONLY ] ) MARK( [ INFO-ONLY ] ) EKM( [ INFO-ONLY ] ) NDM( [  
INFO-ONLY ] ) ; Sub-Collections: COM SRI=ARC NEWNLS; Clerk: DVN;

## Output COM OK is a Bug

Last Night for the third or fourth time I mindlessly committed Output COM OK. This command sends the COM output to the printer instead of to a file (Output to a file is available as an alternative,). The printer puts out the COM gibberish one-line-segment-to-a-page. Since a 10-page file may easily contain a thousand line segments, the result is quite a waste of paper and printer time. This option should not be available,

Primer, Command Summary, Microprocessor Paper, and Workstation  
Reference Go to COM

(J23876) 27-AUG-74 09:16;;; Title: Author(s): Dirk H. Van  
Nouhuys/DVN; Distribution: /DDSI( [ INFO-ONLY ] ) EKM( [ INFO-ONLY ] )  
MEH( [ INFO-ONLY ] ) JMB( [ INFO-ONLY ] ) JHB( [ INFO-ONLY ] ) EKM( [ INFO-ONLY ] ) NDM( [ INFO-ONLY ] ) ; Sub=Collections: COM DPCS SRI=ARC  
DDSI; Clerk: DVN; Origin: < VANNOUHUYS, MYLIN,NLS;86, >  
27-AUG-74 09:12 DVN ;;;; 22128####;



Primer, Command Summary, Microprocessor Paper, and Workstation  
Reference Go to COM

Last night I created COM files from Martin Hardy's Workstation reference guide (documentation,calmworkstation,), from his paper "microprocessor Technology,.." (documentation,comfrep,), from the primer for the version of NLS anticipated at Office-1 in October (vannouhuys,newprim,) and from the summary of the current NLS commands generated by the Brutus system (documentation,COMsummary,),

1

I sent them to ISI where they went onto tape 119 as (workstation,com;1), (frep,com;1), newprimer,com;1) and (summary,com;1) respectively.

2

This morning I archived the files listed in statement one above,

3

Note that newprimer contains stick fonts (courrier) which do not work at DDSI the last time we heard,

4

This morning I called DDSI (John Ferdig) and told them the tape awaited them at ISI, I mentioned to them that in the proofs we got Friday of the tape sent the 13th, they had correctly not printed the files containing stick fonts (with "stick" in their name), they had correctly printed the files for the glossary, but they had failed to print the model draft of the final report (kwcsdevfirstry). There had been some confusion about the number of that tape, John told me that they had figured out that ISI had renumbered a tape so we have two tapes numbered "114".

5

RLL 27-AUG-74 10:18 23877

sendmail delivery bug

(J23877) 27-AUG-74 10:18;;; Title: Author(s): Robert N.  
Lieberman/RLL; Distribution: /FDBK( [ ACTION ] ); Sub=Collections:  
SRI=ARC; Clerk: RLL;

sendmail delivery bug

The author copy of a sendmail item was delivered by replacing statement zero (thus destroying the origin statement), Yes there was an author branch and no I did not interrupt the delivery as it wa happening, 27 Aug 74

RLI 27=AUG=74 10:33 23878

Journal subscriptions: my suggestions.

(J23878) 27=AUG=74 10:33;;; Title: Author(s): Robert N.  
Lieberman/RLI; Distribution: /MEJ( [ ACTION ] ); Sub-Collections:  
SRI=ARC; Clerk: RLI;

journal subscriptions; my suggestions,

ACM Journal, communication, surveys and the Siam Computer journal,  
The International Journal for man machine studies and computer and  
information sciences looks interestin but I have not read them,  
Datamation and computer decisions are free for individuals, so I  
would mke up a name or use DCE's (if he doesn't get them), Others I  
would like but have less relevance to ARC are: Consumers Reports,

1

GSG 27=AUG=74 13:22 23880

TEST WITH NETWORK DELIVERY.

(J23880) 27=AUG=74 13:22;;; Title: Author(s): Geoffrey S.  
Goodfellow/GSG; Distribution: /GSG( [ ACTION ] ); Sub=Collections:  
NIC; Clerk: GSG;

GSG 27-AUG-74 13:22 23880

TEST WITH NETWORK DELIVERY.

THIS IS A TEST TO SEE IF THE JOURNAL WILL DELIEVER THIS MEESAGE TO  
MY MAIL BOX AT SRI-AI,

1

JMB 27-AUG-74 14:51 23881

VISIT LOG: 15-AUG-74

(J23881) 27-AUG-74 14:51;;; Title: Author(s): Jeanne M. Beck/JMB;  
Distribution: /SRI=ARC( [ INFO=ONLY ] ) ; Sub=Collections: SRI=ARC;  
Clerk: JMB;



VISIT LOG: 15-AUG-74

VISIT LOG: 15-AUG-74

Stuart Umpleby, George Carter, Nancy de Young, Vicki McMahon -  
 PLATO  
 [Computer-Based Education Research Lab; University of Illinois -  
 Urbana]

## ADDRESS:

252 ERL

Urbana, Illinois 61801

## REASON FOR VISIT:

Carter is principal investigator of a just-completed Plato development project funded by NSF. Stu Umpleby has directed & worked on several related projects; he has been in correspondence with ARC people many times in the past. McMahon and de Young are Plato programmers. All four work under Dr. Donald L. Bitzer, director of ERL. They are touring the Western states this summer to demonstrate the Plato system at various universities & research centers. Before they came to California they had expressed an interest in our work and in meeting us during their upcoming visit.

Several ARC people attended their presentation on Thursday afternoon, arranged by another SRI group. At their presentation, the Plato people displayed a fair amount of knowledge, though dated, of certain aspects of our work. Particularly, they made comparisons of each group's objectives and approaches to teleconferencing and non-real-time recorded dialog. DCE encouraged me to demonstrate our system and talk to them about the roles and relationships of ERL and ARC in an information community.

## EVENTS

Several ARC people participated in their Plato demonstration, during which we discussed with them the issues of teleconferencing, synchronous and asynchronous dialog, applications of a recorded dialog system, etc, and experimented with the Plato System. That meeting was held in the DEIS conference room.

Then KIRK and I brought them down to ARC. KIRK gave them a demonstration of NLS. They were most interested in dialog capabilities, text-handling, and our system configuration. Their conclusion from the latter was that it would be very

VISIT LOG: 15-AUG-74

difficult to interface Plato and NLS. They remain interested  
in ARC as cousins,

1d2

We exchanged Documentation:

We received a pamphlet outlining the Plato system <XDOC 23845>,  
and I gave them copies of Coordinated Information  
Services--12445,> and Augmented Knowledge Workshop--14724,>

1d3

Video taping of DNLS demonstration.

(J23882) 27=AUG=74 10:56;;; Title: Author(s): Robert N.  
Lieberman/RLL; Distribution: /SRI=ARC( [ INFO=ONLY ] ) ;  
Sub=Collections: SRI=ARC; Clerk: RLL;

RL 27-AUG-74 10:56 23882

Video taping of DNLS demonstration,

Comments on the script and taping are welcomed, see  
(lieberman,script,)

Video taping of DNLS demonstration.

To all: For the rest of this week and all of next week ( 27 AUG to 6 Sept) we will be filming (video taping) in the confernce room and occasionally elsewhere. This will be fr the ONR contract but the video tape is intended to be our prime medium for showing off DNLS to everyone. I would appreciate your cooperation for the brief ( yes brief) scenes in which I might call upon some of you to sit at the consoles wth the lights on (OH my eyes!!!). If anyone has some reason for using the conference room during th next two weeks please let me know. Thank you,

1

KIRK 27-AUG-74 15:57 23883

New sort key: Sort alphabetic

(J23883) 27-AUG-74 15:57;;; Title: Author(s): Kirk E, Kelley/KIRK;  
Distribution: /SRI-ARC( [ INFO-ONLY ] ) ; Sub-Collections: SRI-ARC;  
Clerk: KIRK;

New sort key: Sort alphabetic

A new sort key available in directory <programs> named  
sortalphabetic.sk can be used to sort ignoring non alpha-numeric  
characters at the beginning of the statement and regardless of  
character case,

Visit Log of PLATO People

(J23884) 27=AUG=74 16:45;;; Title: Author(s): Jeanne M. Beck, Dirk  
H. Van Nouhuys/JMB DVN; Distribution: /PGK( [ INFO=ONLY ] Pam, I am  
sending you this journa item of a journal item for purposes of secondary  
distribution...Dirk) ; Clerk: DVN; Origin:  
<HJOURNAL>23881,NLS:1, 27=AUG=74 15:21 XXX ;;;; Title: Author(s):  
Jeanne M. Beck/JMB; Distribution: /SRI=ARC( [ INFO=ONLY ] ) ;  
Sub=Collections: DEIS SRI=ARC; Clerk: JMB;

####;



## Visit Log of PLATO People

VISIT LOG: 15-AUG-74

Stuart Umpleby, George Carter, Nancy de Young, Vicki McMahon =  
 PLATO  
 [Computer-Based Education Research Lab; University of Illinois =  
 Urbana]

## ADDRESS:

252 ERL

Urbana, Illinois 61801

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Visit Log of PLATO People

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and I gave them copies of Coordinated Information  
Services--12445,> and Augmented Knowledge Workshop--14724,>

1d3

Documentation request

(J23885) 27-AUG-74 16:57;;; Title: Author(s): James H. Bair/JHB;  
Distribution: /SLJ( [ ACTION ] ) JCN( [ INFO-ONLY ] ) ; Sub=Collections:  
SRI=ARC; Clerk: JHB;

Documentation request

please send documentation listed to following (request: 27-AUG-74 ): 1

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

1a

- 2 TNLS Calculator User Guides
- 5 Journal User Guides
- 2 L-10 Guides (first chapter is Content Analyzer Primer)
- 2 User Program Users' Guides

1a1

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

1b

- 2 DNLS User Guides

1b1

- 2 L-10 Guides (first chapter is Content Analyzer Primer)

1b2

Inez Mattiuz  
Room 1105  
620 Belmont St,  
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- 2 DNLS User Guides

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DRAFT Brief Document To Aid Transition from Old to New TNLS

(J23886) 28-AUG-74 09:30;;; Title: Author(s): Dirk H. Van  
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DRAFT Brief Document To Aid Transition from Old to New TNLS

Please consider this as something to send out to the utility users to prepare them for change. The sooner I get your comments, the sooner it goes out.

## DRAFT Brief Document To Aid Transition from Old to New TNLS

This is a very brief account of the most important ways in which New TNLS (TNLS=8) is different to use from Old TNLS (TNLS=7),

## Questionmark (?)

TNLS=8 is blessed with excellent questionmark facilities. In both display and TNLS, ? at any point will print out the choices available to you,

Note ? changes its output with each new step in a command, and its result depends on the recognition scheme you are using,

In Terse and Demand recognition modes, "<>" before a command means that you have to type a space to begin that command,

<Control=o> stops printing,

When the reponse has printed out, you are still just where you were in the command syntax,

## HELP

<Control=q> puts you into the HELP command and into the HELP data base at a point corresponding to what you were doing in TNLS when you struck the character. HELP provides command syntax and explanations of NLS concepts with menus of related topics. Once you have begun the Help Command, you can continue asking for topics by name or menu number until you hit a Command Delete,

## Subsystems:

The commands in NLS have been grouped into subsystems. The commands we use most are in the Base subsystem. Others are available through: Calculator, Sendmail, Identification, Programs, Tenex, and Useroptions,

You "Goto" another subsystem. Type G for Goto and then first letter of the subsystem's name. Quit returns you to the previous subsystem in a ring,

By default the herald is on in TNLS. It is the first four letters of the subsystem. "<" prints out your subsystem ring,

Execute allows you execute one command in a subsystem and pop back to the previous subsystem,

## The Journal:

The journal has become the Sendmail subsystem,

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Whereas the Journal had two command levels (& and &&) Sendmail has all commands on the same level, 5b

Changed Commands: 5c

Whereas you used to submit Statement, Branch, Plex, Group or File; Statement, Branch, Plex, Group, and File are now commands at the herald the way Message has always been, 5c1

Submit Hardcopy has become the Offline command at the herald, 5c2

Place Link = Insert Link 5c3

Execute Secondary Distribution = Forward 5c4

Distribute = Distribute  
for Action  
for Information 5c5

Execute Catalog Preassigned numbers = Reserve 5c6

Go = send (followed by two CA's) 5c7

Status = Show Status 5c8

New Functions 5d

Initialize 5d1

You can leave your work in the Sendmail system half-finished. That is, you can begin a submission, go to some other subsystem, or logout, and when you go back to the Sendmail system, everything will be the way you left it. If you want to erase the information you have given, use the Initialize command to wipe the slate clean. When you have sent an item, the system initializes for you, 5d1a

Copy Status 5d2

Show Status lists what Sendmail knows at that moment about the item you are sending. Copy Status writes that same information at an address you supply. It writes in the correct format for the Process Sendmail Form Command. It is often useful to copy your status to a scratch file, edit it at leisure, and then use the edited statement to send the item via Process Sendmail Form, 5d2a

Unrecorded 5d3



## DRAFT Brief Document To Aid Transition from Old to New TNLS

The Unrecorded command will keep your item from being cataloged.

5d3a

## Private

5d4

To this command you give a list of idents, then only people logged in with those idents can read the file.

5d4a

## Public

5d5

The public command reverses the private command; it returns the journal item to general access.

5d5a

## Functions that have gone away:

5e

The idea of a Clerk is gone from the system.

5e1

## Recognition:

6

New TNLS has several recognition schemes. The default is terse recognition. <documentation,help,recognition> explains the others. You may select one of the other schemes for yourself through the Useroptions subsystem.

6a

In terse mode, some list of command words is possible at any point following the prompt C:. From that list, NLS will recognize and echo the most commonly used command by its first character. To use a command word that is not commonest, you have to type a space and then type characters until NLS can recognize. E.g. from the Base Subsystem herald "S" will evoke "substitute", but to get "Set" you must type " se" and to get Stop " st". I have found that 3/4 or more of my commands are first-character commands.

6b

In terse mode, if you type an impossible letter, TNLS will ring your bell and wait for you to type in a possible letter. I.e. O D P will succeed although the command is now Output Printer because no "D" may follow "Output".

6c

## Changed Commands:

7

## Old Commands:

7a

The most important commands that have changed the first command word are as follows, with the old name first. They are in Base Subsystem unless noted:

7a1

Execute Assimilate = The filter option in the commands that copy, move, or delete statements

7a1a

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Execute Content Analyser = Set Content To	7a1b
Execute Device Type = Simulate Terminal Type in the Terminal subsystem	7a1c
Execute File Verify = Verify File	7a1d
Execute Insert Sequentialq = Copy Sequential	7a1e
Execute Logout = Logout	7a1f
Execute Status = Show + varios alternatives	7a1g
Execute Unlock = Delete Modifications	7a1h
Execute Viewchange = Goto Useroptions	7a1i
Execute Journal = Goto sendmail	7a1j
Link (in TENEX) = Connect to Terminal in the Terminal Subsystem	7a1k
Null File = Create File	7a1l
Output Device Printer = Output Printer	7a1m
Output File =Update File Compact	7a1n
Space (move the CM)= Jump	7a1o
Update = Update File + various alternatives	7a1p

New Commands:

7b

Directory Commands:

Now You can deal with your directory in NLS as well as in TENEX, Delete File, Undelete File, and Expunge are NLS commands, Copy Directory copies your directory into a file as a plex, Options in Copy Directory allow You to see the information TENEX has about your files sorted in various ways, Show Directory prints the information without putting it in an NLS file,

7b1

Set Commands:

With alternatives following Set you can control several paramatars, Yhe most frequently used is is what used to be called a content analyser pattern,

7b2

Privacy:

## DRAFT Brief Document To Aid Transition from Old to New TNLS

There are now two systems in NLS for controlling access to files. One is the Protect File command which calls the TENEX protection provisions, based on usernames and groups. The second is the Set Private/Public command which limits read access to a list of idents. You have to separately edit the list of idents into the origin statement of the file in the following exact format:

AccessList: IDENTLIST;

7b3

## Repetition:

8

By default the system now returns to the herald after every command, BUT, if you end any command with a Repeat Character the system will carry out the command, return to the herald, and go forward in the same command until it meets a field that is not a command word. The Repeat character is <control-b> by default,

8a

The parser will continue to repeat the command in that way until you hit Command Delete. The effect is very much like creating a mode for each command like the old DNLS jump mode,

8a1

If you hit Repeat Character at command reset, it will repeat your last command out to the first field that is not a command word. You may then step back through the command word-by-word with <"A">.

8b

## Options and Alternatives

9

When several command terms may follow a given command term (as Plex, Branch, etc, may follow Delete) we speak of alternatives. When typing the option character, <control-u> allows you to put in command terms otherwise inaccessible, we speak of options. Options include, for example, the filter step in the Copy commands that replaces Assimilation, and the commands that select various kinds of information in Show Directory. With full prompting on, square brackets, [], inclose optional terms.

9a

## Addressing

10

Addresses in TNLS-8 are synonymous with links except that links may include viewspecs. The prompt is A:. Following A: you can put a "directoryname,filename," separated by commas. You may omit them and default to the directory you are connected to and the current file. After the filename position you may use the intrafile address forms in any order as in old TNLS-7. Following A: you may omit the parentheses that normally surround links. The prompt T: expects a link in certain situations, for example when it expects a file name, and then you may omit the parentheses.

10a

## Periods in Addresses

10b

## DRAFT Brief Document To Aid Transition from Old to New TNLS

DO NOT put periods in front of statement names or numbers or SID's; instead put them in front of structural relationships (i.e., .u .d .b .a or .2d or .5p etc.),

10b1

## Content Addresses

10c

Quotation Marks have replaced square brackets and angle brackets to mark off content searches used in addresses. Thus an address that moves your CM to statement 5, then to its successor, then to the first occurrence of the string "xxx", would have been --.5 s [xxx] -- in the old system and is -- 5 .s "xxx" -- in the new.

10c1

To limit search to a single statement as you did with semi-colon sin the old system, you must append "=s" to the address of the string. I.e., to limit the search above to the successor of 5 you would use -- 5 .s "xxx"=s --,

10c1a

In the old system you searched for a word rather than a string by inclosing the characters in angle brackets. In the new system you append =w. Thus the address of a certain word in a file of mine is (vannouhuys,onetest, "cryptobiotic"=w)

10c1b

## Prompting

11

You can set prompting in one of three modes: Full, Partial, or off. The default is Partial. Partial does not show options and some alternatives. The complete list of prompts is:

11a

C: calls for a Command Word

11a1

A: calls for an Address,

11a2

T: calls for you to type something in, e.g., free text, or an ident,

11a3

OK: calls for confirmation of the command or a field within a command, usually CA or REPEAT (<control=b>),

11a4

CA: calls for a command accept,

11a5

Y/N: calls for "y" for "yes" or "n" for "no" in commands like substitute where NLS wants to know if you want to repeat a specification step,

11a6

[ ], Square Brackets indicate that you have to use the option character <control-u> to specify the thing named inside the brackets,

11a7

## DRAFT Brief Document To Aid Transition from Old to New TNLS

[\*\*] shows that you may use <control-u> to gain access to a list of optional command word, 11a8

V: calls for viewspecs, 11a9

L: calls for level adjustment, 11a10

SP: calls for a space as a quasi CA, 11a11

RPT: calls for a <control=b> to repeat the use of some buffer as in content searches, 11a12

Space/Jump: 12

Where you hit space at the herald before to move your CM, type J A for jump to Address. The whole list of DNLS Jump commands (Jump to Return, Jump to Name, etc.) are now also available in TNLS. Space retains its meaning within addresses. 12a

From/To 13

Now you Move and Copy things FROM someplace TO someplace else instead of vice versa. It's not too hard to get used to and the noise words help, but the changeover is confusing for a while. 13a

Herald: 14

By default the herald is the first four letters of your subsystem. In the Useroptions subsystem you can reset the length of the herald or change it to a \* for all subsystems (called terse herald). 14a

Omissions: 15

In general, user programs written for Old NLS will not run or compile. To have your user program converted to run in New NLS, see Elizabeth Micheal, 15a

Query will not run in New NLS, 15b

The Programs Subsystem 16

It replaces and augments the old "Go to Program" commands, 16a

Important old Commands with New Names: 16b

Get = Load 16b1

Status = Show 16b2

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For information on new commands, Goto HELP and show "Prorgrams",

16c

The Useroptions Subsystem

17

The Useroption Subsystem takes over some of the work of the old Viewchange System and adds many new ways for you to cut NLS to suit yourself. It controls feedback in the form of heralds, prompts, noise words, etc.; it controls recognition and default viewspecs; it redefines control characters (like the old NLSControlCharacters branch); and it formats pages in the TNLS print command. Execution of commands in the usroption subsystem rewrites a file (the profile) that determines how these parameters are set when you log in from then on.

17a

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This is a very brief account of the most important ways in which New TNLS (TNLS-8) is different to use from Old TNLS (TNLS-7).

#### Questionmark (?)

TNLS-8 is blessed with excellent questionmark facilities. In both display and TNLS, ? at any point will print out the choices available to you.

Note ? changes its output with each new step in a command, and its result depends on the recognition scheme you are using.

In Terse and Demand recognition modes, "<>" before a command means that you have to type a space to begin that command.

<Control-o> stops printing.

When the response has printed out, you are still just where you were in the command syntax.

#### HELP

<Control-q> puts you into the HELP command and into the HELP data base at a point corresponding to what you were doing in TNLS when you struck the character. HELP provides command syntax and explanations of NLS concepts with menus of related topics. Once you have begun the Help Command, you can continue asking for topics by name or menu number until you hit a Command Delete,

#### Subsystems:

The commands in NLS have been grouped into subsystems. The commands we use most are in the Base subsystem. Others are available through: Calculator, Sendmail, Identification, Programs, Tenex, and Useroptions.

You "Goto" another subsystem. Type G for goto and then first letter of the subsystem's name. Quit returns you to the previous subsystem in a ring.

By default the herald is on in TNLS. It is the first four letters of the subsystem. "<" prints out your subsystem ring.

Execute allows you execute one command in a subsystem and pop back to the previous subsystem.

#### The Journal:

The journal has become the Sendmail subsystem.

Whereas the Journal had two command levels (& and &&) Sendmail has all commands on the same level.

#### Changed Commands:



Whereas you used to Submit Statement, Branch, Plex, Group or File; Statement, Branch, Plex, Group, and File are now commands at the herald the way Message has always been.

Submit Hardcopy has become the Offline command at the herald.

Place Link = Insert Link

Execute Secondary Distribution = Forward

Distribute = Distribute  
for Action  
for Information

Execute Catalog Preassigned numbers = Reserve

Go = Send (followed by two CA's)

Status = Show Status

#### New Functions

##### Initialize

You can leave your work in the Sendmail system half-finished. That is, you can begin a submission, go to some other subsystem, or logout, and when you go back to the Sendmail system, everything will be the way you left it. If you want to erase the information you have given, use the Initialize command to wipe the slate clean. When you have sent an item, the system initializes for you.

##### Copy Status

Show Status lists what Sendmail knows at that moment about the item you are sending. Copy Status writes that same information at an address you supply. It writes in the correct format for the Process Sendmail Form Command. It is often useful to copy your status to a scratch file, edit it at leisure, and then use the edited statement to send the item via Process Sendmail Form.

##### Unrecorded

The Unrecorded command will keep your item from being cataloged.

##### Private

To this command you give a list of idents. Then only people logged in with those idents can read the file.

##### Public

The public command reverses the private command; it returns

the journal item to general access.

Functions that have gone away:

The idea of a Clerk is gone from the system.

#### Recognition:

New TNLS has several recognition schemes. The default is terse recognition. <documentation,help,recognition> explains the others. You may select one of the other schemes for yourself through the Useroptions subsystem.

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In terse mode, if you type an impossible letter, TNLS will ring your bell and wait for you to type in a possible letter. I.e. O D P will succeed although the command is now Output Printer because no "D" may follow "Output".

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##### Old Commands:

The most important commands that have changed the first command word are as follows, with the old name first. They are in Base Subsystem unless noted:

Execute Assimilate = The filter option in the commands that copy, move, or delete statements

Execute Content Analyser = Set Content To

Execute Device Type = Simulate Terminal Type in the Terminal subsystem

Execute File Verify = Verify File

Execute Insert Sequentialq = Copy Sequential

Execute Logout = Logout

Execute Status = Show + various alternatives

Execute Unlock = Delete Modifications

Execute Viewchange = Goto Useroptions

Execute Journal = Goto Sendmail

Link (in TENEX) = Connect to Terminal in the Terminal Subsystem  
Null File = Create File  
Output Device Printer = Output Printer  
Output File = Update File Compact  
Space (move the CM) = Jump  
Update = Update File + various alternatives

#### New Commands:

##### Directory Commands:

Now you can deal with your directory in NLS as well as in TENEX. Delete File, Undelete File, and Expunge are NLS commands. Copy Directory copies your directory into a file as a plex. Options in Copy Directory allow you to see the information TENEX has about your files sorted in various ways. Show Directory prints the information without putting it in an NLS file.

##### Set Commands:

With alternatives following Set you can control several paramatars. The most frequently used is what used to be called a content analyser pattern.

##### Privacy:

There are now tow systems in NLS for controlling access to files. One is the Protect File command which calls the TENEX protection provisions, based on usernames and groups. The second is the Set Private/Public command which limits read access to a list of idents. You have to separately edit the list of idents into the origin statement of the file in the folowing exact format:

```
AccessList: IDENTLIST;
```

#### Repetition:

By default the system now returns to the herald after every command, BUT, if you end any command with a Repeat Character the system will carry out the command, return to the herald, and go forward in the same command until it meets a field that is not a command word. The Repeat character is <control-b> by default.

The parser will continue to repeat the command in that way until you hit Command Delete. The effect is very much like creating a mode for each command like the old DNLS jump mode.

If you hit Repeat Character at command reset, it will repeat your last command out to the first field that is not a command word. You may then step back through the command word-by-word with <TA>.

#### Options and Alternatives

When several command terms may follow a given command term (as Plex,

Branch, etc. may follow Delete) we speak of alternatives. When typing the option character, <control-u> allows you to put in command terms otherwise inaccessible, we speak of options. Options include, for example, the filter step in the Copy commands that replaces Assimilation, and the commands that select various kinds of information in Show Directory. With full prompting on, square brackets, [/], inclose optional terms.

### Addressing

Addresses in TNLS-8 are synonymous with links except that links may include viewspecs. The prompt is A:. Following A: you can put a "directoryname,filename," separated by commas. You may omit them and default to the directory you are connected to and the current file. After the filename position you may use the intrafile address forms in any order as in old TNLS-7. Following A: you may omit the parentheses that normally surround links. The prompt T: expects a link in certain situations, for example when it expects a file name, and then you may omit the parentheses.

### Periods in Addresses

Do NOT put periods in front of statement names or numbers or SID's; instead put them in front of structural relationships (i.e. .u .d .b .a or .2d or .5p etc.).

### Content Addresses

Quotation Marks have replaced square brackets and angle brackets to mark off content searches used in addresses. Thus an address that moves your CM to statement 5, then to its successor, then to the first occurrence of the string "xxx", would have been --.5 s [xxx] -- in the old system and is -- 5 .s "xxx" -- in the new.

To limit search to a single statement as you did with semi-colon sin the old system, you must append "=s" to the address of the string. I.e. to limit the search above to the successor of 5 you would use -- 5 .s "xxx"=s --.

In the old system you searched for a word rather than a string by inclosing the characters in angle brackets. In the new system you append =w. Thus the address of a certain word in a file of mine is (vannouhuys,onetest, "cryptobiotic"=w)

### Prompting

You can set prompting in one of three modes: Full, Partial, or off. The default is Partial. Partial does not show options and some alternatives. The complete list of prompts is:

C: calls for a Command Word

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T: calls for you to type something in, e.g. free text, or an ident.

OK: calls for confirmation of the command or a field within a command, usually CA OR REPEAT (<control-b>).

CA: calls for a command accept.

Y/N: calls for "y" for "yes" or "n" for "no" in commands like substitute where NLS wants to know if you want to repeat a specification step.

[ ], Square Brackets indicate that you have to use the option character <control-u> to specify the thing named inside the brackets.

[\*\*] shows that you may use <control-u> to gain access to a list of optional command word.

V: calls for viewspecs.

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SP: calls for a space as a quasi CA.

RPT: calls for a <control-b> to repeat the use of some buffer as in content searches.

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Where you hit space at the herald before to move your CM, type J A for jump to Address. The whole list of DNLS Jump commands (Jump to Return, Jump to Name, etc.) are now also available in TNL. Space retains its meaning within addresses.

#### From/To

Now you Move and Copy things FROM someplace TO someplace else instead of vice versa. It's not too hard to get used to and the noise words help, but the changeover is confusing for a while.

#### Herald:

By default the herald is the first four letters of your subsystem. In the Useroptions subsystem you can reset the length of the herald or change it to a \* for all subsystems (called terse herald).

#### Omissions:

In general, user programs written for Old NLS will not run or compile. To have your user program converted to run in New NLS, see Elizabeth Micheal.

Query will not run in New NLS.

#### The Programs Subsystem

It replaces and augments the old "Go to Program" commands.

Important old Commands with New Names:

Get = Load

Status = Show

For information on new commands, Goto HELP and show "Programs".

The Useroptions Subsystem

The Useroption Subsystem takes over some of the work of the old Viewchange System and adds many new ways for you to cut NLS to suit yourself. It controls feedback in the form of heralds, prompts, noise words, etc.; it controls recognition and default viewspecs; it redefines control characters (like the old NLSControlCharacters branch); and it formats pages in the TNLS print command. Execution of commands in the Usroption subsystem rewrites a file (the profile) that determines how these parameters are set when you log in from then on.

JMB 28=AUG=74 12:21 23888

The NLS=8 command summary has been moved.

(J23888) 28=AUG=74 12:21;;; Title: Author(s): Jeanne M. Beck/JMB;  
Distribution: /DIRT( [ INFO=ONLY ] ) ; Sub=Collections: SRI=ARC DIRT;  
Clerk: JMB;

The NLS-8 command summary has been moved.

This is the command summary of New NLS as it was around  
22-AUG-74--not actually the state of NLS-8 as it will be released,  
but I imagine the more up-to-date versions will also be located there  
as we construct them.



The NLS=8 command summary has been moved.

The file==documentation,summary,> has been moved  
to==userguides,commands,>

DCE 28-AUG-74 16:23 23889

(J23889) 28-AUG-74 16:23;;; Title: Author(s): Douglas C.  
Engelbart/DCE; Sub=Collections: SRI=ARC; Clerk: DCE;

The California Assembly Education Committee is sponsoring an Energy Research And Higher Education Project. A questionnaire is being circulated; this hierarchy is used to categorize the type of energy research being done by respondees. The questionnaire is stored in XDOC (23847,). The author, Robert Kuntz, visited 28 Aug 74; visit log recorded in (23890,).

## Energy Conservation

This will include methods for reducing energy consumption, through the use of alternate methods which accomplish the same objective or increased component and system efficiency.

## Reduced Consumption

Land Use planning

Mass Transit Systems

Material Recycling

Water Treatment Systems

Reduced Speed Limit

Car Pooling

Other

## Increased Efficiency

Internal Combustion systems (including stratified charge, fuel conditioning, carburetion, ignition, etc.)

Two-Cycle Spark Ignition Engines

Four-Cycle Spark Ignition Engines

Diesel Cycles

Gas Turbine Cycles

Non-Conventional Expanders

Combined Cycles

Other

## External Combustion Systems

Rankine Cycles

Sterling Cycles

Brayton Cycles

1

1a

1a1

1a2

1a3

1a4

1a5

1a6

1a7

1b

1b1

1b1a

1b1b

1b1c

1b1d

1b1e

1b1f

1b1g

1b2

1b2a

1b2b

1b2c

Other	1b2d
Building Heating, Cooling and Lighting	1b3
Heating	1b3a
Cooling	1b3b
Insulation	1b3c
Architectural	1b3d
Lighting	1b3e
Water Heating	1b3f
Other	1b3g
Electric Power Plant Cycles	1b4
Topping Cycles	1b4a
High Temperature Gas Turbine	1b4a1
Magnetohydrodynamics	1b4a2
Liquid Metal Systems	1b4a3
Other	1b4a4
Bottoming Cycles	1b4b
Waste Heat Utilization	1b4b1
Rankine Cycles Using Waste Heat	1b4b2
Biological	1b4b3
Other	1b4b4
Power Transmission	1b4c
Super Conductivity	1b4c1
Microwave	1b4c2
High Voltage Direct Current	1b4c3
Other	1b4c4

Other	1b4d
Fuel Cells	1b5
Other	1b6
Fossil Fuels	2
Petroleum	2a
Location and Resource Assessment	2a1
Secondary and Tertiary Recovery	2a2
Stimulation of Formations	2a3
Drilling Technology	2a4
Refining Technology	2a5
Liquified Petroleum Gas	2a6
Environmental Considerations	2a7
Other	2a8
Natural Gas	2b
Location and Resource Assessment	2b1
Stimulation of Formations	2b2
Drilling Technology	2b3
Liquification, Storage and Transportation	2b4
Environmental Considerations	2b5
Other	2b6
Coal	2c
Location and Resource Assessment	2c1
Mining	2c2
Coal Gasification	2c3
Coal Liquification	2c4

In Situ Gasification	2c5
Direct Combustion	2c6
Synthetic Liquid Fuels	2c7
Environmental Consideration	2c8
Other	2c9
Oil Shale	2d
Location and Resource Assessment	2d1
Mining	2d2
Ore Processing	2d3
Environmental Considerations	2d4
Other	2d5
Other Combustion Fuels	2e
Waste Combustion	2e1
Municipal Refuse	2e1a
Direct Combustion	2e1a1
Synthetic Fuels	2e1a2
Sewage Refuse	2e1b
Direct Combustion	2e1b1
Synthetic Fuels	2e1b2
Other	2e1c
Methane	2e2
Alcohol	2e3
Hydrogen	2e4
Other	2e5
Nuclear Fission	3

Uranium Fuel Processing	3a
Fast Breeder Reactor	3b
Liquid Metal Cooled	3b1
Gas Cooled	3b2
Safety	3b3
Fuel Processing and Handling	3b4
Other	3b5
Boiling Water Cooled Reactor	3c
High Pressure Water Cooled Reactor	3d
Gas Cooled Reactor	3e
Safety of Reactors and Power Plants	3f
Waste Management	3g
Environmental and Siting Consideration	3h
Other	3i
Fusion	4
Fuels (deuterium, tritium, etc.)	4a
Magnetic Confinement	4b
Laser Induced	4c
Combined Laser Induced and Magnetic Confinement	4d
Safety	4e
Waste Management	4f
Environmental Considerations	4g
Other	4h
solar Energy	5
Direct Conversion	5a



Photoelectric	5a1
Photochemical	5a2
Hydrogen Production	5a2a
Other	5a2b
Photosynthesis	5a3
Other	5a4
Heating and Cooling	5b
Collector Technology	5b1
Systems and Components	5b2
Heating	5b2a
Cooling	5b2b
Energy Storage	5b3
Other	5b4
Wind	5c
Resource Assessment and Location	5c1
Systems and Components	5c2
Energy Storage	5c3
Other	5c4
Ocean Thermal Gradients	5d
Resource Assessment and Location	5d1
Systems and Components	5d2
Energy Transmission and Storage	5d3
Other	5d4
Ocean Tides, Waves and Currents	5e
Resource Assessment and Location	5e1

Systems and Components	5e2
Energy Transmission and Storage	5e3
Other	5e4
Hydroelectric	5f
Resource Assessment and Location	5f1
Systems and Components	5f2
Energy Transmission and Storage	5f3
Environmental Considerations	5f4
Other	5f5
Other Solar Related Power Sources	5g
Geological Related Energy	6
Geothermal	6a
Resource Assessment and Location	6a1
Drilling Technology	6a2
Liquid Dominated (hot water)	6a3
Systems and Components	6a3a
Environmental Considerations	6a3b
Energy Transmission and Storage	6a3c
Other	6a3d
Vapor Dominated (steam)	6a4
Systems and Components	6a4a
Environmental Considerations	6a4b
Energy Transmission and Storage	6a4c
Other	6a4d
Hot Rock	6a5

Systems and Components	6a5a
Environmental Considerations	6a5b
Energy Transmission and Storage	6a5c
Other	6a5d
Geopressure	6b
Resource Assessment and Location	6b1
Systems and Components	6b2
Environmental	6b3
Energy Transmission and Storage	6b4
Other	6b5
Energy Storage Techniques (this is a general category to be used when research not specifically related to a particular energy source)	7
Hydrogen	7a
Batteries	7b
Thermal Beds	7c
Melting and Solidifying Salts	7d
Other	7e
Energy Economics (research relating energy to the social and economic system)	8

DCE 28-AUG-74 16:31 23890

Visit Log: 28 Aug 74, Robert Kuntz, contractor for California  
Assembly Education Committee

(J23890) 28-AUG-74 16:31;;; Title: Author(s): Douglas C.  
Engelbart/DCE; Distribution: /JCN( [ INFO-ONLY ] ) BC( [ INFO-ONLY ] ) ;  
Sub-Collections: SRI-ARC; Clerk: DCE;

Visit Log: 28 Aug 74, Robert Kuntz, contractor for California  
Assembly Education Committee

Robert J. Kuntz, President  
Professional Engineering & Research Consultants (PERC)  
7899 Willowcrest Way  
Fair Oaks, Ca. 95628  
(916) 967-8905

Mr. Kuntz is on contract to the State Legislature, specifically for the California Assembly Education Committee related to an "Energy Research and Higher Education Project" (Project E=E). He had contacted Ernie Moore (see Moore's memo, XDOC == 23846,), and I had lunched with Kuntz, Moore, and Harvey Dixon (Director of the Urban and Social Systems Division).

After lunch we were joined by George Hopkins (Director, Engineering Systems Division). Kuntz outlined the purpose of the project, and his interest in getting SRI to fill out a questionnaire form for each of its people involved in Energy R&D (see his brochure-questionnaire in XDOC == 23847,). This E=E Project is collecting this "Human Resource" data, in this specific area, as a start toward facilitation of a "Human Resource Communication System".

He mentions that California, under the Warren-Alquist State Energy Resources Conservation and Development Act (AB 1575), is setting up a State Energy Resources Conservation and Development Commission, to be housed within the existing Resources Agency == this Commission will open shop next January. I think he mentioned a \$35 million budget (or upward??); the money is to be accumulated by a surcharge on the kilowatt-hours sold in California (like 0.1 mil/kwh). After Jan 76, the surcharge rate goes by a schedule based upon a budget as authorized by the Legislature.

Apparently the collected questionnaire data is to be put into a State computer center; Kuntz as yet doesn't have a specific plan for the data-base management system. Does hope for there being an online access someday.

Apparently there is hope of approaching the Federal Energy Administration for a grant to study the implementation of this system.

I left the discussion (in Moore's office after lunch) where they were discussing whether/how SRI might participate in the questionnaire business.

Kuntz came by my office after that discussion to see our system. Told him of our approach to supporting communities, and that his start seemed directly in line with the idea of facilitating

Visit Log: 28 Aug 74, Robert Kuntz, contractor for California  
Assembly Education Committee

Collaborative Dialogue as an early step. Showed him how NLS can facilitate the process. Give him a copy of (12445,), and of the ARPANET Directory (22979,). JML had typed into a file this morning the hierarchical categorization that his questionnaire uses (see XDOC item == 23847,); I have put that file into the Journal (see == 23889,). I gave Kuntz some different-level printouts of this hierarchy, plus a printout filtered on the string "Technology".

3

Miscellaneous Note: Regarding SPIRES/SCRIPT at Stanford University; Kuntz says that it is being used now for holding a human-resource data base on research people at Stanford. Apparently UCB is interested possibly in applying the same system. (The man at SU is Jason Mavis, manager of the "Sponsored projects Office". Beverly Burlison is the custodian of the files.)

4

Dream Group

(J23891) 28-AUG-74 20:03;;; Title: Author(s): Dirk H. Van  
Nouhuys/DVN; Distribution: /DVN( [ ACTION ] ) JML( [ INFO-ONLY ] ) ;  
Sub-Collections: SRI-ARC; Clerk: DVN;

Dream Group

Alexander Graham Bell created the telephone



computers are fun

(J23892) 28-AUG-74 20:36;;; Title: Author(s): Dirk H. Van  
Nouhuys/DVN; Distribution: /DVN( [ ACTION ] ) JML( [ INFO-ONLY ] ) ;  
Sub-Collections: SRI-ARC; Clerk; DVN;

computers are fun

Alexander Graham Bell created the telephone

computers

(J23893) 28-AUG-74 21:05;;; Title: Author(s): Dirk H. Van  
Nouhuys/DVN; Distribution: /DVN( [ ACTION ] ) JML( [ INFO-ONLY ] ) ;  
Sub-Collections: SRI=ARC; Clerk: DVN;

computers

I think I am finally beginning to understand this

1

computers, number two

(J23894) 28-AUG-74 21:17;;; Title: Author(s): Dirk H. Van  
Nouhuys/DVN; Distribution: /DVN( [ ACTION ] ) JML( [ INFO-ONLY ] ) ;  
Sub-Collections: SRI-ARC; Clerk: DVN;

computers, number two

Dirk to \dirk to Lise to Dirk\* this is the second one I have  
gotten through to you tonight.

hope

(J23895) 28-AUG-74 21:55;;; Title: Author(s): Dirk H. Van  
Nouhuys/DVN; Distribution: /DVN( [ ACTION ] ) D( [ INFO-ONLY ] ) ;  
Sub-Collections: SRI=ARC D; Clerk; DVN;

hope

Lise McGilvery to Dirk van Nohuys: I ho

1



Watch Out for Light Fingered People

(J23896) 29-AUG-74 22:21;;; Title: Author(s): Harvey G.  
Lehtman/HGL; Distribution: /SRI=ARC( [ ACTION ] ) ; Sub=Collections:  
SRI=ARC; Clerk: HGL;

## Watch Out for Light Fingered People

My wallet was lifted this afternoon (Thursday) probably from my pack in my office, though it could have disappeared elsewhere at SRI. I notified the SRI police and proceeded to call all groups with which I have credit. (Most have toll free numbers and remove all liability after notification.) This was a pain since I had too many (7) cards. Also a pain was the consideration of getting copies of my driver's license, social security card, etc. There was also a traveller's check, a \$17 orchestra seat to the San Francisco Opera "Salome", and about \$10 in cash. After notifying all agencies, I was working on debugging the journal when I received a call from security: the wallet was found by the foreman of the F wing custodians in a men's room in F wing! (I don't think I've ever been there!) Missing was the cash and a Shell credit card; everything else was there (but the other cards are now invalid. The thief was obviously not a music lover. Anyway, watch your possessions around here and watch for unknown kleptos. (There was a stranger wandering down the hall suspiciously who was asked by Norton if he was lost; he came up with an excuse plausible at the time -- looking for someone's office.)

1

Call for review on Line Processor User's Guide, TNLS transition document, Final Report Training Section.

(J23897) 30-AUG-74 08:35;;; Title: Author(s): Dirk H. Van Nouhuys/DvN; Distribution: /JHB( [ ACTION ] ) JCN( [ ACTION ] ) CHI( [ INFO-ONLY ] ) DIA( [ INFO-ONLY ] ) MEH( [ INFO-ONLY ] ) ; Sub-Collections: DIRT DPCS SRI=ARC; Clerk: DVN;

Call for Review on Line Processor User's Guide, TNLS transition document, Final Report Training Section,

This is just to remind you guys that two documents of interest to the utility are waiting your thoughts, the description of new TNLS for old users (hjournal,23886,) and the Line processor User's Guide (vannoughuys,lineguide,). Jim Bair has suggested we might CDM the former. If so, Monday evening would be a good time to send it to DDSI. I could get it ready if I heard today,

1

While I'm thinking of it, the section on training for the final report (documentation,final,#train) is awaint Jim Norton's review,

2

JCN 30-AUG-74 12:34 23898

Possible Contact with Darringer of IBM at Arrowhead Meeting

(J23898) 30-AUG-74 12:34;;; Title: Author(s): James C. Norton/JCN;  
Distribution: /HGL( [ ACTION ] ) DCE( [ INFO-ONLY ] ) JHB( [ INFO-ONLY ]  
) CHI( [ INFO-ONLY ] ) RWW( [ INFO-ONLY ] ) RLL( [ INFO-ONLY ] ) ;  
Sub=Collections: SRI=ARC; Clerk: JCN;

## Possible Contact with Darringer of IBM at Arrowhead Meeting

Harvey, I got a call from John Darringer of IBM, Yorktown Heights (914) 945-1975 today as we discussed. He is just starting into a program aimed at increasing the support to programmers in their working environment. We found that he will be at the Lake Arrowhead meeting when you are. Can you find him and talk a bit. He would like some of our latest papers (communitites, AKW, and some programming document, ?). I told him of the recent contact we had with 2 guys from IBM very near to him. Jim Bair recorded that visit in the Journal, but I see I have typed too far and can't give the link easily oh, well, you can find it. Let me know what you find? We are very interested in developing a relationship with the right group...this might be one of them.. Jim

DVN 30-AUG-74 17:23 23899

Name 'string'=3 seems to Loop

(J23899) 30-AUG-74 17:23;;; Title: Author(s): Dirk H. Van  
Nouhuys/DVN; Distribution: /NEWNLS( [ ACTION ] ) ; Sub=Collections:  
SRI-ARC NEWNLS; Clerk: DVN;

Name 'string'=3 Seems to Loop

If you jump to an address as follows, the system runs indefinitely without conclusion whether or not the addressed thing exists:

statementname "string"=3,

1

Control=0 does not stop it,

2



DVN 30-AUG-74 17:33 23900

Where Ann Weinburg Stands

(J23900) 30-AUG-74 17:33;;; Title: Author(s): Dirk H. Van  
Nouhuys/DVN; Distribution: /RWW( [ ACTION ] ) ; Sub-Collections:  
SRI-ARC; Clerk: DVN;

## Where Ann Weinburg Stands

Bob Wing did not reach Ann last week. He was on vacation the first three days of this week. Ann called Monday to find out what was going on. I conferred with Eleanor Sorensen who studied her papers and called personell. Eleanor determined that we could skip reference phoning because of documents we had from Stanford and the right amount of money to offer her, the same figure you had discussed with Wing. I called and made her the offer. She said she had another offer and could she come in to talk with me. It was clear that she expected/hoped for more money. I made an appointment with Ann on Thursday morning but had not talked to wing when she came, 1

On thursday morning, she asked question about growth opportunitis and money. I told hr what I clould about the former and said I could not really tell her anything about money atleast until I had talked with Wing, 2

I talked to Bob Wing on Thursday afternoon. He said 1) that Eleanor Soresen had been mistaken, we could not make her an offer, because he had not spoken to Bart about it, and 2) that he would try to figure out how to give her more money and how much by looking at the tables generated by the management consultats. I have not heard from him since. Later that afternoon I stalled Ann off till Tuesday, 3

In the mean time I have told Toumanoff and May that we have made an offer to some one else, that we expectit will be accepted, that it might not work out, and that in that case we would come back, 4

You and/or I have to get our heads together with Wing on this on Tuesday, 5

Draft of Agenda for second KWAC Meeting, September 9-13, 1974

(J23902) 30-AUG-74 19:02;;; Title: Author(s): James C. Norton/JCN;  
Distribution: /DCE( [ ACTION ] ) JHB( [ ACTION ] ) RLL( [ ACTION ] )  
RWW( [ INFO-ONLY ] ) CHI( [ INFO-ONLY ] ) ; Sub-Collections: SRI=ARC;  
Clerk: JCN; Origin: < NORTON, KWACAGENDA,NLS;3, >, 30-AUG-74  
18:53 JCN ;;; #####

Draft of Agenda for Second KWAC Meeting, September 9-13, 1974

Here is a FIRST draft of the agenda for KWAC. Doug: I would like to send the final version out to KWAC and ARC Wednesday 9/4. Can we get together Tuesday with JHB and RLL? Jim N

Draft of Agenda for Second KWAC Meeting, September 9-13, 1974

Monday 9/9		1
9:00	Welcome and agenda discussion	1a
10:00	Introduction of Architects and ARC Applications,	1b
11:00	Doug Engelbart on the Architect Community (KWAC)	1c
12:30	Lunch at the I-Building	1d
2:30	Remote meeting, recreation, repasts at Jim Norton's house	1e
Tuesday 9/10		2
9:00	Talks by Architects: Experiences to date	2a
10:30	Role of the Architect	2b
12:00	Lunch	2c
1:30	NLS-8 Introduction: What is Changed/Added and Why	2d
2:30	NLS-8: training, discussion, use (by experience groups)	2e
Wednesday 9/11		3
9:00	ARC Development, NSW: Status and plans	3a
11:00	The Utility: Status and plans	3b
12:30	Lunch	3c
2:00	More New NLS-8: training, discussion, use	3d
Thursday 9/12		4
9:00	Discussion of other Communities: Management, DDPCS	4a
10:30	Informal discussions of KWAC local training plans	4b
12:30	Lunch	4c
2:00	Discussion of plans for KWAC: activity and next meeting	4d
4:00	Recreation, more repasts at Doug Engelbart's house	4e
Friday 9/13		5
9:00	Discussions of applications and plans	5a
12:30	Lunch	5b
2:30	Concluding discussions	5c

Draft of Agenda for Second KWAC Meeting, September 9-13, 1974

Architects:				6
ARPA	Connie McLindon	CKM		6a
BRL	Stan Taylor	SMT		6b
Bell	Inez Mattiuz	IMM		6c
ETS	Brian McNally	BJM		6d
Hudson	Rudy Ruggles	RLR		6e
MIT-Seismic	Bob Sheppard	RMS2		6f
NIC-OPER	Jake Feinler	JAKE		6g
NSRDC	Frank Brignoli	FGB		6h
RADC	Duane Stone	DLS		6i
SRI	Mike Placko ?	?		6j
ARC Utility Staff:				7
ARC Director	Doug Engelbart	DCE		7a
Manager/Liaison	Jim Norton	JCN		7b
Contracts/Hardware	Martin Hardy	MEH		7c
User Development	Jim Bair	JHB		7d
Software	Dave Hopper	JDH		7e
Marketing	Robert Lieberman	RLL		7f
TENEX/User Help	Jeff peters	JCP		7g
Secretary	Sandy Johnson	SLJ		7h
Consultant	Bob Ratner	RSR		7i
Tymshare Utility Staff:				8
Manager/Liaison	Edward Pollack	EEP	set it up	8a
TENEX	Jerry Wheat	?		8b
TENEX/Operators	Bob Martinez	?		8c

Draft of Agenda for Second KWAC Meeting, September 9-13, 1974

Architects Identfile Entries: These need some changes/updates 9

(BJM) ETS  
McNally, Brian J.  
ETS

Phone: (609) 921-9000;  
Delivery: Online;  
Local Network Mailbox Address: ANASTASIO;  
Host: OFFICE-1;  
User: MCNALLY;  
NLS-8 host: OFFICE-1;  
Groups: CBIG KWAC;

(CKM) ARPA  
McLindon, Connie K.  
ARPA-TIP

User: MCLINDON;  
Delivery: Online;  
Phone: (202) 694-3506;  
Local Network Mailbox Address: MCLINDON;  
Host: USC-IGI;  
Groups: KWAC TU ARPA-TIP;  
NLS-8 host: OFFICE-1;

(DLS) RADC  
Stone, Duane L,  
Rome Air Development Center (ISIM)  
Griffiss Air Force Base  
Rome, New York 13440

Phone: (315) 330-3857;  
Delivery: Online;  
Capabilities: NLS-8;  
Subcollections: NIC;  
Sub-Collection: RADC;  
Local Network Mailbox Address: STONE;  
Host: OFFICE-1;  
NLS-8 host: OFFICE-1;  
Groups: KWAC RADC-TIP RBMS TU IIG DPCS FINAL;

(FGB) NSRDC  
Brignoli, Frank G.  
Naval Ship Research and Development Center  
Code 1833  
Bethesda, Maryland 20034

Draft of Agenda for Second KWAC Meeting, September 9-13, 1974

Phone: (202) 227-1618;  
 Delivery: Network Online;  
 User: BRIGNOLI;  
 Groups: NSRDC USING NAG KWAC;  
 NLS-8 host: OFFICE-1;  
 Local Network Mailbox Address: BRIGNOLI;  
 Host: OFFICE-1;

9d

(IMM) BELL-CANADA  
 Mattiuz, Inez M.  
 Room 1105  
 620 Belmont Street  
 Montreal, Quebec

Delivery: Online;  
 Phone: (514) 870-4981;  
 Function: Bell Workshop Architect;  
 Sub-Collection: bell-canada;  
 NLS-8 host: OFFICE-1;  
 Groups: KWAC BELL-CANADA;

9e

(JAKE) SRI-ARC  
 Feinler, Elizabeth J. (Jake)  
 SRI-ARC

Phone: (415) 326-6200 ext 3695;  
 Delivery: Online;  
 User: FEINLER;  
 Local Network Mailbox Address: FEINLER;  
 Host: SRI-ARC;  
 Groups: UDEF HELPDOC NIC-QUERY WAR USING CIG COM NIC DIRT DPCS PROF  
 SRI-ARC TU IRG FINAL NICSTA RFC KWAC;  
 Capabilities: Ident=wheel;

9f

(RLR) HUDSON  
 Ruggles, Rudy L.  
 HUDSON

Phone: (914) 762-0700;  
 Delivery: Online;  
 User: RUGGLES;  
 NLS-8 host: OFFICE-1;  
 Function: Workshop Architect;  
 Groups: HUDSON KWAC;

9g



Draft of Agenda for Second KWAC Meeting, September 9-13, 1974

(RMS2) MIT-SEISMIC  
Sheppard, Robert M.  
LLANTS

Phone: (617) 523-7856;  
Function: Workshop Architect;  
Groups: LLANTS KWAC;  
Delivery: Online;  
User: sheppard;  
Local Network Mailbox Address: SHEPPARD;  
Host: OFFICE=1;

9h

(SMT) BRL  
Taylor, Stan M.  
BRL

Function: ANTS Technical Monitor;  
Phone: (301) 278-4149;  
Groups: USERS BRL USING KWAC;  
Delivery: Online;  
Local Network Mailbox Address: taylor;  
Host: office=1;  
User: taylor;

9i

JCN 1-SEP-74 10:25 23903

JCN Calculator Notes on Use NLS-8,,First Cut

(J23903) 1-SEP-74 10:25;;; Title: Author(s): James C. Norton/JCN;  
Distribution: /EKM( [ ACTION ] ) DCE( [ INFO-ONLY ] ) CHI( [ INFO-ONLY ]  
) DSM( [ INFO-ONLY ] ) ; Sub-Collections: SRI-ARC; Clerk: JCN;

## JCN Calculator Notes on Use NLS=8.,First Cut

Calculator notes for EKM 9/1/74 from Jim N

As You know, the accumulator totals running are NOT displayed so they stay where you can see them,..ugh! won't do!

After setting commas on and 0 places to the right of the decimal, when I gave show accumulators, it said: exceed capacity" 2 tries.....! I think it's tied to the commas thing.....

When I had 733728 in the accumulator and then set format to commas=yes and did an insert after the "word" 733728, I got a funny number as follows :

123,456.00	12,789	733728	733728,00,00
			==

I get the impression that changing the format of a number that has already been put into the accumulator fouls things up and in many cases doesnt take effect, like changing to NO DOLLAR SIGNS after a number has been in the accumulator, and dollar signs keep showing,..but if you clear the accumulator and then re-enter a number, dollar signs aren't printed,..hmm like you really SHOULD be able to change the display/print format of any number in the accumulator regardless of whether it was placed there before or after the format instruction right?

The format of the accumulators as displayed with format left set on, need changing; it now reads

1126  
2200  
300,00 etc it should be

1; 126  
2, 200  
3, 300 so as to make it clear which is the accumulator number and whivch is the value

When I quit the calculator and then return with a goto calculator later, the numbers in my accumulator are lost, Hmm Bad we used to keep them for subsequent session use,..what happened? I do think that the formats i set up live across sessions but not the values in the accumulator,.

Where is the jump command in the calculator,..to be added right??

What does insert plex imply? like the same as insert statement AFTER the statement..? but insert plex inserts the total as a new statement at the place in the plex you bug not at the end as I would expect??

JCN Calculator Notes on Use NLS=8.,First Cut

When I had a 3 column set of numbers and totaled the last column and did a replace number in it, it was 3 places off to the right...:

				11
136245,00	314472,00	724452,00		111
95508,00	409980,00	1217151,00		112
82719,00	492699,00	1709850,00		113
314472,00	1217151,00	3651453,00		114
		---		115

After setting dollar signs on, when I replaced a number that already had the \$ in the text, I got a second \$ as shown below:

				11
136245,00	314472,00	724452,00 \$	\$ 1217151,00	111
95508,00	409980,00	1217151,00 "	"	112
82719,00	492699,00	1709850,00		113
314472,00	1217151,00	3651453,00		114

Before I did this it looked like this:

				115
136245,00	314472,00	724452,00 \$	1217151,00	116
95508,00	409980,00	1217151,00		117
82719,00	492699,00	1709850,00		118
314472,00	1217151,00	3651453,00		119

Incidentally I have been using the WORK,nls tho have also tested also in nls ,,

The absence of "column" as an entity still slows effective use.

All in all, its hard to tell the feeling of the calculator with the present bugs,,,it doesn't flow when you can't see the running accumulator and/or stumble into the formatting stuff. Let's talk when you can soon! Jim