1 This is an impromptu message to demonstrate Sendmail items.

(J32929) 8-JUL-75 13:06;;; Title: Author(s): Jeanne M. Beck/JMB; Distribution: /PAW2([INFO-ONLY]); Sub-Collections: SRI-ARC; Clerk: JMB;

1 Thanks for the note on archiving, Glenn. I wasn't aware of archiving processes in Tenex that prevent archiving. As it turns out, all these commands are also available in NLS. To see them type Archive File FILENAME, then hit the Control-u. You will be prompted for an option. If you hit the ? then, a list will be presented.

(J32930) 8-JUL-75 13:09;;;; Title: Author(s): Raymond R. Panko/RA3Y; Distribution: /GAS2([INFO-DNLY]); Sub-collections: SRI-ARC; Clerk: RA3Y;

MENU	
1a APPETIZERS	16
1a1 ANTIPASTO	1a:
1a2 ASPARAGUS VINAIGRETTE	1a2
1a3 ESCARGOT	1a:
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1 <sub>b</sub> soups	1)
161 COLD SOUPS	1b
1b1a VICHYSUISSE	1016
1b1b BORSCHT	1611
1blc GAZPACHO	1610
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1b2 HOT SOUPS	1ь:
1b2a BORSCHT	1b2e
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1b2c SPINACH	1520
1c SALADS	10
1c1 CAESAR	10
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1c2a WITH ANCHOVIES	1026
1c3 TOSSED GREEN	103
1d ENTREES	10
1d1 FISH AND SHELLFISH	1d1

	1d1a SOLE	1d1a
	1d1b SCALLOPS	1d1b
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	1d1b2 SAUTEED	1d1b2
	1d1c LOBSTER	1d1c
	idici i LB.	1d1c1
	1d1c2 2 LB.	1d1c2
	1d2 CHICKEN	1d2
	1d2a CACCIATORE	1d2a
	1d2b TETRAZZINI	1d2b
	1d2c MARENGO	1d2c
	1d3 MEAT	1d3
	1d3a FILET MIGNON	1d3a
	1d3b PRIME RIBS	1d3b
	1d3c ROAST BEEF	1d3c
ie	STARCH	1e
	1e1 POTATOES	1e1
	1e1a BAKED	1e1a
	1e1a1 WITH SOUR CREAM	1e1a1
	1elala AND CHIVES	1e1a1a
	1e1a2 WITH MELTED CHEESE	1e1a2
	1e1b FRENCH FRIED	1e1b
	1e1c WHIPPED	1e1c
	1e2 RICE	1e2
	1e2a PLAIN	1e2a

1e2b	PILAF	1e2b
DESSERT		1 f
1f1 PIE		1f1
1f1a	APPLE	1f1a
1f1b	BLUEBERRY	1f1
1f1c	CHERRY	1f1c
1f2 CAK	E	1£2
1f2a	WALNUT	1f2e
1f2b	LEMON	1f2b
1f2c	DEVILS FOOD	1f20
1f3 ICE	CREAM	1 f 3
1f3a	VANILLA	1138
1f3b	GINGER	1131
1f3c	PISTACHIO	1f30
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BEVERAGE	ES	19
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1g1a	ESPRESSO	191a
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1g2b	LAPSANG SOUCHONG	192b
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193 MILH		193
	DESSERT  1f1 PIE  1f1a  1f1b  1f1c  1f2 CAK  1f2a  1f2b  1f2c  1f3 ICE  1f3a  1f3b  1f3c  1f3d  BEVERAG  1g1 COF  1g1a  1g1b  1g1c  1g2 TEA  1g2a  1g2b  1g2c	1f1 PIE  1f1a APPLE  1f1b BLUEBERRY  1f1c CHERRY  1f2 CAKE  1f2a WALNUT  1f2b LEMON  1f2c DEVILS FOOD  1f3 ICE CREAM  1f3a VANILLA  1f3b GINGER  1f3c PISTACHIO  1f3d SPUMONI  BEVERAGES  1g1 COFFEE  1g1a ESPRESSO  1g1b MOCHA  1g1c KONA

menu

194 HOT CHOCOLATE

1h BON APPETIT

194

1h

(J32931) 8-JUL-75 13:10;;; Title: Author(s): Jeanne M. Beck/JMB; Distribution: /PAW2( [ INFO-ONLY ] ); Sub-Collections: SRI-ARC; Clerk: JMB; Origin: < BECK, MENU.NLS;3, >, 29-MAY-75 07:02 JMB;;;;####;

I sue, dont drink too much mint julip. this is simply a practice message.

(J32932) 8-JUL-75 13:40;;;; Title: Author(s): Priscilla A. Wold/PAW2; Distribution: /SGR([ACTION]) JMB([ACTION]) PKA([ACTION]) BEV([INFO-ONLY]); Sub-Collections: SRI-ARC; Clerk: PAW2;

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

(J32933) 8-JUL-75 15:01;;;; Title: Author(s): Jeanne M. Beck/JMB; Distribution: /PAW2([ACTION]); Sub-Collections: SRI-ARC; Clerk: JMB; Origin: < BECK, BLAP.NLS;2, >, 8-JUL-75 14:57 JMB;;;;####;

This is for info. only; it covers a lot of information which I thought might be of interest to a lot of you. It sounds like he's doing interesting work. I'll be following up on the TALK system he mentions.

1 Mike -

2 Thanks for your message (JNL-32913) to me at OFFICE-1 and the request for a copy of the TNLS User's Guide. I will mail a copy to you in the morning.

3 I will be very interested to receive any comments and your

reactions.
As I tolld you in the note with the document, this is an experiment because I have long felt a serious lack of documentation in that area, and because my past experience with teaching in a NETWORK environment, as against a local classroom environment where all conveniences were at hand, showed (1) A completely different set of problems being faced by the user, (2) no cut and dried, easy way of solving them, (3) a need for an easily searchable HARDCOPY document that allowed the user to pause in the middle of his command syntax, find an answer, and continue without losing his train of thought and place in his working

4 I found the problems in teaching/learning in a Network environment were almost as much a matter of "mechanics" -- or physical termiinal/use layout, as anything else. Sooo...this was my trial answer.

sequence by having to use his terminal to query a HELP database, no

- 5 Of first importance in an approach such as this is the ease of finding a quick answer. If you find an illogical layout, or confusing ssequence, or difficulty in finding anything, I would very much appreciate discussing it with you.
- 6 Since this is a first-time experiment in this approach input/feedback from a user will be a very great favor to me.

matter how comprehensive or good it is.

7 I have copies of some of your documents...I am appending a list....
I would VERY much appreciate being placed on your mailing list to
receive copies of what I have missed in the last year and for future
documents. I have been following your cross impact studies and
the analysis of user habits, usage patterns and needs with a
great deal of interest. My main field of interest is the user
interface
to systems and how to organize information in the most logically

8

10

Text of sndmessage from Mil Jernigan to Mike Bedford re his work in evaluation of new systems, developing training manuals, etc.

findable manner -- it has long been my contention that the most sophisticated and best information retrieval system the world can offer will be wasted effort and money if it is inconvenient to the user

or complicated or frightening or "in-human" in its user-interface. It is wasted money if the user won't use it.

8 This is particularly true -- double in spades -- where project management

or top level management operated user-interfaces are concerned. In systems, as in all design, elegant simplicity is the true sophistication.

9 I know of Turoff's work and the FORUM package developed by Jacques Vallee and Roy Amara at the Institutte for the Future. FORUM and a version

or improvement(?) at ISI called NCONFER is a good vote-taking mechanism where leisurely collection and storing of comments is the approach to teleconferencing.

10 So far, there has been developed a really first class teleconferencing

system on the ARPANET. So far as communication is concerned where one is

willing to type-talk, Jim Calvin's two systems on the Net are preferred

by many, including myself. Jim built a quickie prototype he named DOUG for Doug Engelbart to use at the NATO conference several years ago.

This was when he was an undergraduate at CASE Western Reserve. He developed it further under the name of SCR, then as his thesis built a Network resident prototype called TALK/TELSER which allows users to link and converse, storing a typescript with other goodles, while

are logged in at different computers. TALK/TELSER is now resident on the

Net at most TENEX sites.

11 TALK/TELSER has a smaller buffer than FORUM, a chairman, and the "feel"

of immediacy that I liked about SCR so much; however, it too is still a prototype. Jim has developed these systems on his own time, simply as

a challenge to his "grey cells" and because he is very user-oriented in

his approach and likes to build goodies for users.

12 Your attempts to build a consistent approach to communication is

quite interesting. Jean Iseli, who you may know and whose account I am using,	
has been working on a comprehensive user working environment, mainly based on Doug Engelbart's work with NLS, in which a uniform cushion or	
environment is available to the user on a network resident, or network	
wide basis. He is giving a paper at the COMPCON on it calls it the Collaboration Support System. I have a copy of his paper online if	
you would like to read it I can send it to you.	12
13 Thanks for the news of Bell Canada in recent times I have missed reading your reports. And thank you very much for what you can do to send me copies of recent papers. My mailing address is on the	
documentI included my card.	13
14 Mil Jernigan	14
15 Enclosure:	15
16 L. H. Day, The Corporate Role in Technology Assessment: A Case Example;	
Bell Canada, BPG, Montreal, Quebec, Canada, BP Paper #13, May 1973, 37p.	16
17 M. T. Bedford, A Technology Assessment of Future Home Communications	
Services - A Study Proposal; Bell Canada, BPG, Montreal, Quebec, BP Paper #12, May 1973, 17p.	17
18 M. T. Bedford, Technology Assessment and the Future of Educational Technology; Bell Canada, BPG, Montreal, Quebec, BP Paper #14, May 1973,	
23p.	18
19 D. M. Atkinson, Three Papers on Telecommunications and Social Environment With an Impact on Business; Bell Canada, BPG, Montreal, Quebec, BP Paper #11, April 1973, 15p.	19
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Substitutability; Bell Canada, BPG, Montreal, Quebec, BP Paper #18, October 1973, 29p.	21

22 L. H. Day, Design of a Futures Information System; Bell Canada, BPG,	
Montreal, Quebec, BP Paper #4, January 1973, 16p.	22
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26 P. Feldman, Cross Impact Matrix Applications in Technology and	
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28 J. H. Kollen, Transportation-Communication Substitutability - A	
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29 A. D. Ryan, cross Impact Analysis in Bell canada; Bell canada,	
BPG, Montreal, Quebec, BP Paper #10, March 1973,37p.	29

(J32934) 9-JUL-75 05:38;;; Title: Author(s): Michael T. Bedford/MIKE; Distribution: /BELL-CANADA([INFO-ONLY]); Sub-Collections: NIC BELL-CANADA; Clerk: MIKE;

1 frank, i finally made it to nord on wednesday july 9; i spoke to duane stone about the delay on our equipment . our money people are working on it now, hope you have a good trip, i'll see you next week....bob

(J32935) 9-JUL-75 07:17;;;; Title: Author(s): Frank G. Brignoli/FGB; Distribution: /FGB([INFO-ONLY]); Sub-Collections: NIC; Clerk: FGB;

now is the time

(J32936) 9-JUL-75 14:05;;; Title: Author(s): Pamela K. Allen/PKA; Distribution: /JMB([ACTION]); Sub-Collections: SRI-ARC; Clerk; PAW2;

THE CURRENT STATE OF TECHNOLOGY TRANSFER IN COMPUTER AIDED INSTRUCTION

Some months ago I was asked what the state-of-the-art was in 'computer aided instruction' by a group external to ARC. This 7 page paper is my necessarily brief answer. It also relates to one of the areas of investigation for the Applications Development Group which is concerned with new instructional methods and tools for NLS training. It is intended for persons with a background in computers but not necessarily programmers, although it may be interesting anyway.

1a

# THE CURRENT STATE OF TECHNOLOGY TRANSFER IN COMPUTER AIDED INSTRUCTION James H. Bair

la The application of computer technology to instructional processes and education in general has paralleled the evolution of computer technology for the past 15 years. This review of the current state of technology transfer will briefly deal with the history, hardware, constraining factors, economic viability, and on-going research and applications of CAI. Since there is a discernable, general set of CAI system characteristics, no effort has been made to review all existing systems. Systems that are most exemplary of current capabilities will be described as well as notable organizations in the area.

1b Largely through government funding, CAI has progressed from the highly experimental system with a first generation processor supporting a single typewriter terminal, to multiprocessing, third generation, timesharing systems serving over 1,000 geographically distributed terminals. Circa 1966 a most important milestone was reached -- that of timesharing multiple access in an interactive mode. A few years later, the introduction of display terminals and higher speed keyboards provided the crucial attractiveness for the educational community. The proliferation of systems and organizations involved with CAI was rapid, and by the 70's they numbered in the hundreds. It is clear that hardware and software advances were requisite to the attractiveness of CAI -- the introduction of higher order languages and concommitant documentation that moved programming out of the dark ages were as important as interactive user-computer dialogues. The availability of random addressable, graphics screens around 1970, which reflected serious attention to human factors, provided the final touch for layman utility, relegating the impact of further advances to increased reliability and lower cost. 16

Ic Clarification of the term "aided" is necessary for this discussion. CAI appears to be generally that case in which computers assist human instructors without the intent to eliminate them. CBI, on the other hand, connotes instruction based totally on the computer system out of the context of the traditional classroom. A less sophisticated innovation is known as CMI, where instruction is managed through computer aids applied to routine practices such as scheduling, student roles, grade reporting, etc. The concern here is with CAI exclusive of CMI, and also exclusive of the profound philosophical issues surrounding the elimination of direct human contact as integral to the education process. CAI potentially humanizes the process through individual customization

and the release of teaching personnel for personal student attention (cf. Suppes, 1970).

10

2 Hardware

2

2a Technological evolution is most evident at the man-computer interface where hardware has permitted serious concern with the age-old communication adage, "a picture is worth a 1,000 words." The state-of-the-art includes CRT displays, televisions, and plasma panels with student addressable screens. Pointing to the CRI screen with either a cursor control device or the student's finger is interactively interpreted as responses from the keyboard. Line drawing by the computer or the student permits non-verbal interaction, where the line drawings can be interpreted and evaluated by the system (Bitzer & Skaperdas, 1971). The digital storage of line figures permits full computational manipulation and is employed to portray dynamic pictorials such as lunar module descent replete with altimeter gauge, to caged mice being conditioned to press levers. The addition of color slides furthers the graphic dimensions. The transparent plasma display permits the rear projection of slides which can be coordinated with digital screen locations to permit pointing for identification; for example, locations on a map.

2a

2b The TV monitors can be driven by high-resolution character generators to combine text with display. Although the video source could be live, tape, or fixed camera, computer coordination requires video disc refresh memory. TV has the added advantage of much lower cost, but at present, wide geographical distribution is precluded by the required video connection. TV has been widely employed in CAI (and Instructional TV), but limits student responses to the keyboard alone.

26

2c In addition to the visual component, audio feedback has been introduced with limited vocabulary. Computer controlled, pre-recorded vocalization can be stored on tape locally at the terminal or provided via an audio link to the central unit. This application appears to be a novelty, albeit an integral component of some existing systems, e.g., CAMELOT using a CRT with slides and graphics.

20

2d The selection of terminal hardware is dependent upon the location of the computer mainframe. Two configurations are being pursued: the centralized "mega-processor" with widely distributed terminals linked by phone lines, and the stand-alone mini-processor and peripherals supporting one to about 300 terminals. Representative examples are obvious due to their leadership in the CAI community. One such example, PLATO,

developed at the University of Illinois Computer-based Education Research Laboratory, uses the centralized approach. Another example, TICCET (Time-shared Interactive Computer-Controlled Educational TV), at MITRE Corporation, employs an on-site TV terminal system and a mini-computer (Stetten, 1971).

20

2e PLATO appears to represent the most advanced attempt at technology transfer currently in operational use. Using a large mainframe (2.5 million words of memory), CDC CYBER 73 now supports 1,000 terminals throughout North America. The interface is a plasma display with a magazine of 256 micro-fiche slides, and a keyset containing special function keys as well as the ASCII character set. The 8 1/2 inch square display has a 512 x 512 matrix of addressable points which can be pointed to with an optional touch panel. Also optional are audio systems, tape recorders, film projections, and analytical equipment. As the exemplary CAI System, PLATO will be discussed further.

2e

2f TICCET is designed to minimize the cost of CAI technology by lower terminal costs (portable TVs), no telecommunications, and a small facility operation. Currently, a 64,000-word memory plus disc drives (120 million character) can support 100-300 terminals simultaneously at each school. The standard refresh video-disc also supports a digitized audio (not pre-taped) channel to headphones. Curriculum material is not developed by the user nor is dialogue with other geographical locations possible with this hardware configuration.

25

## 3 Technological Constraints on CAI

3a Hardware, software, general reliability, procedures and methodologies are constraints on current transfer progress. software for the two CAI systems discussed does not represent the most sophisticated capability that currently can be programmed. Bordering on artificial intelligence, "mixed initiative dialogue" as used in the SCHOLAR system developed by Carbonell at BBN (Bolt, Beranek& Newman, Inc.) permits the greatest student freedom and the approximation of instructor-student tutoring (the ideal instructor that is). SCHOLAR has a natural language-parsing algorithm enabling the student to ask questions rather than being presented with the forced choice response used in operationally available systems. Unlike PLATO and TICCIT, SCHOLAR, although it has been applied to prototype teaching situations, will not be transferrable for perhaps 8-10 years. It is "computer bound," requiring vast computer power to search an ever-growing semantic net to interpret input and reconstruct responses using an abstract grammar.

3a

3b Reliability

3b

3b1 Reliability of the overall system is significantly more constraining than software design. Dettinger (Harvard) states the extreme position. "Education's institutionalized rigidity combined with infant technology's erratic behavior preclude really significant progress in the next decade . . " (Dettinger, 1970), in the "meaningful" application of CAI technology.

3b1

3b2 "Erratic" system behavior is a function of five factors:
mainframe downtime, peripheral failure, software bugs and
errors, telecommunication noise, and response time. The
downtime of a large system such as PLATO is approximately 5-10
percent. Distributed mini-processor systems may fail more
frequently but are simpler to restart. Noise in data
transmission (most commonly via telepone lines) becomes
increasingly problematic with increased data, speed, quantity,
and traffic density. These factors are not prohibitive with
the latitude inherent in experimental applications.
Consideration of user sophistication, standby repair manpower
at remote installations, and economic losses are necessary for
each situation. In the case of large, centralized systems,
slowdown in response time, particularly due to the load of
large numbers of users, may be more constraining than failure. 3b2

3c Procedures and methods employed in the system design and curriculum development, programming and maintenance are widely variable. PLATO represents the most imaginative and advanced design yet transferred. The turnkey system sold by Computer Curriculum Corporation (Palo Alto) represents constrained design through the use of teletype terminals or CRT's in a line-at-a-time mode (teletype simulation) access to a mini-computer. Although a minimal transfer of technology, it is commercially viable with 32 systems in elementary schools and adult remediation programs.

3 c

3d Curriculum development is perhaps the most critical area constraining the transfer. The curriculum is the substantive portion of the interaction and thus controls the way in which the technology is to be applied. It is expensive to prepare an individualized curriculum and, as Suppes (1970, 204) points cut, it is currently based on pedagogical intuition similar to that used for textbooks. There are three types of instructional programs:

3d

3d1 1. Individual drill and practice, primarily to assist a conventional teacher.

3d1

3d2

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3f

30

- 3d2 2. Tutorial systems, which allow more flexibility to student progression.
- 3d3 3. Dialogue systems, permitting genuine interaction and maximum flexibility. 3d3

3e Computer Curriculum Corporation (CCC) represents the first level as do most current military implementations of "instructional technology", PLATO the tutorial level, and SCHOLAR the dialogue level. There is extensive dialectic arguing the constraints (cf. Nelson, 1974) of lower level methods, emphasizing the implications for educational systems and the need for open, minimally directive, dialogue systems.

3f The method and language for curriculum programming is integral to the constraints of curriculum development, and a major obstacle to CAI in general (Rubin, 1972, 17). Two basic approaches are a function of hardware configuration: user generation of curriculum from distributed locations, and supplier-operator centralized development. In the former, the teachers are free, once having mastered the programming language (e.g., PLATO'S Tutor), to devise instructional scenarios from their offices and collaborate with other "authors." Special attention must be given to the author interface, as illustrated by PILOT, a transferable language oriented toward the non-programmer (Rubin, 1973). The centralized TSS offers this advantage, while the mini-computer systems do not support any "write privileges" at respective installations. TICCIT, for example, requires the shipment of disc packs to users covering the complete curriculum.

3g The present constraints notwithstanding, CAI has evolved from a laboratory curiosity to amply demonstrated applications with substantial potential. In every case, it has proven to be effective, flexible, and well received (Alpert, 1970). But each case has raised the question about economic viability.

### 4 Economic Viability

4a Economic viability has been a major objective of the CAI community, and in the early seventies, its attainment was judged merely a matter of time (cf. Bitzer, 1970). PLATO'S SI.2 million per year computer facility plus a comparable amount for terminal and communications lines breaks down to approximately 35 cents per student contact hour, a figure very much a result of economies of scale. TICCET'S costs, which incorporate economic tradeoffs (Stetten, 1970), break down to about 20 cents per contact hour with high system reliability, and has spun off a commercial

vendor, "Courseware", emphasizing the sale of curriculum development.

4a

4b Perhaps the best indicator of cost effective CAI is the existence of commercial enterprises, such as Computer Curriculum Corp, which is by far the largest (the largest application is the CCC operation in Chicago schools with 645 terminals on a Univac 1110). Their charging algorithm varies widely across configurations, but appears to be in the range of \$1.35 to \$3.00 per student month (120 hours), something less than 1 cent per contact hour. Hardware costs that decrease almost daily, and variations among manufacturers and systems, preclude any set figure. CAI has been demonstrated to be economically viable, and the implementation of drill and practice systems is expanding rapidly, particularly with the Defense Department, in spite of general economic distress.

46

5 Research and Applications

-71

5a PLATO and TICCET reflect the major R & D efforts funded primarily by NSF (over \$2 million each) that have been transferred to prototype applications. The proliferation of much smaller scale investigations and systems is extensive. Florida State University's CAI Center has been investigating the effectiveness of CAI, has been developing systems (e.g., STATSIM, a statistical simulation tutorial), and has been applying over 100 instructional packages within the college curriculum. Results there and at the UCLA Behavioral Technology Lab have been positive, and basic behavioral experiments are providing data for theories of CAI (e.g., the effects of anxiety on CAI).

5a

5b Texas University, Austin, has a CAI lab emphasizing instructional design and procedures. The Educational Testing Service, Princeton, is evaluating PLATO and supporting EDUCOM'S efforts toward interchange and collaboration among efforts such as those at the Harvard Computation Center, MIT Lincoln-Labs, Stanford (R. Atkinson), and Dartmouth.

5b

5c The Defense Department is putting money into numerous efforts, the most central of which is ARPA's Advanced Training Technology Office. Numerous projects are funded through this agency, notably an SRI study surveying the use of educational technology in the military (Brown, 1973). Each service has applications under development; the Army's comprehensive suport is coordinated through project IMPACT involving the Human Resources Research Organization in Washington, D.C. The Navy's concern is with drill and practice courseware in areas such as electronics training at installations such as the Navy Personnel and Training Lab, San

Diego. The Air Force has been involved for some time at the Air Force Institute of Technology (Denver) and The Human Resources Lab (Texas), where drill and practice programs are being deployed and developed for subjects ranging from aircraft maintenance to officer training. The SRI Report (Brown, 1973) treats the scope and strategies involved.

5c

#### 6 CONCLUSION

6

6a The current state of technology transfer in CAI is represented by two major systems, PLATO and TICCET, where the latest hardware and software are being utilized as prototype implementations with reasonable costs. Economic viability has been attained through more basic approaches by companies such as Computer Curriculum Corp. Broad-based research efforts are dealing with theoretical, developmental and behavioral questions, while extensive applications of drill and practice systems are being deployed by the military. Hardware and software technologies are relatively well developed while critical issues remain in curriculum development and control. Suppes (1970, 209) summarizes the potential and impact of CAI:

68

6al Just as books freed serious students from the tyranny of overly simple methods of oral recitation, so computers can free students from the drudgery of doing exactly similar tasks unadjusted and untailored to their individual needs."

Odr

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1

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7a

7b 2. Bitzer, D. L. and D. Skaperdas, "The Design of an Economically Viable Large-Scale computer Based Education System," in Computers in Instruction: Their Future for Higher Education, NSF, Carnegie Commission, Rand Report R-718-NSF/COM/RC (July, 1971). Brown, Dean et al., Survey of the Use of Educational Technology in the Armed Services, SRI Final Report ISU-1775 (Nov. 1973).

7 b

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7c

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7 d

7e 6. Stetten, K. J. "The Technology of Small, Local, Facilities for Instructional Use" in Computer in Instruction: Their Future

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7g1 Oettinger, A. G., "The Schools," p. 210.	791
7g2 Suppes, Patrick, "The Schools," p. 203.	792
7h 9. Conversations with Peter Rowell, programmer and David Munson, Vice-president, Computer Curriculum Corp., Palo Alto, California, (12 March 1975).	7h

THE CURRENT STATE OF TECHNOLOGY TRANSFER IN COMPUTER AIDED INSTRUCTION

(J32937) 9-JUL-75 18:25;;; Title: Author(s): James H. Bair/JHB; Distribution: /SRI-ARC([INFO-ONLY]) KWAC([INFO-ONLY]) possibly of some interest) LEG([INFO-ONLY]) some interest/controversy?) MIKE([INFO-ONLY]) EJK([INFO-ONLY]); Sub-Collections: SRI-ARC KWAC; Clerk: JHB; Origin: < BAIR, CBI.NLS;8, >, 9-JUL-75 17:47 JHB;;;;####;

1 32937 Distribution

la J. D. Hopper, Charles H. Irby, Harvey G. Lehtman, James C. Norton, Jeffrey C. Peters, Dirk H. Van Nouhuys, Kenneth E. (Ken) Victor, Richard W. Watson, Don I. Andrews, Glenn A. Sherwood, Kathey L. Mabrey, Jeanne M. Beck, David A. Potter, Robert N. Lieberman, Terry H. Proch, Ronald P. Uhlig, Susan Gail Roetter, Michael A. Placko, Stanley (Stan) M. Taylor, Elizabeth J. Feinler, Rudy L. Ruggles, Frank G. Brignoli, Robert M. Sheppard, Richard W. Watson, Douglas C. Engelbart, James C. Norton, James H. Bair, Duane L. Stone, Inez M. Mattiuz, Connie K. McLindon, Laura E. Gould, Michael T. Bedford, Edmund J. Kennedy,

ib Andy Poggio, David L. Retz, Laura J. Metzger, Karolyn J. Martin, Jan A. Cornish, Larry L. Garlick, Priscilla A. Wold, Pamela K. Allen, Delorse M. Brooks, Beverly Boli, Rita Hysmith, Log Augmentation, Joseph L. Ehardt, Raymond R. Panko, Susan Gail Roetter, Robert Louis Belleville, Rene C. Ochoa, Ann Weinberg, Joan Hamilton, Adrian C. McGinnis, Robert S. Ratner, David S. Maynard, Robert N. Lieberman, Sandy L. Johnson, James H. Bair, Jeanne M. Leavitt, Rodney A. Bondurant, Jeanne M. Beck, Marcia L. Keeney, Elizabeth K. Michael, Jonathan B. Postel, Elizabeth J. Feinler, Kirk E. Kelley, N. Dean Meyer, James E. (Jim) White, Douglas C. Engelbart, Martin E. Hardy

Does anyone else have this problem when using 0-1 DNLS frm ELF or AI?

1 Whenever I Goto Tenex from DNLS, my terminal type is somehow changed to #7 (TI) from #11 (LP). When I quit back to NLS, I do get DNLS, but the terminal type change seems to cause errors upon using the tty wndow (like with the slash in an address). This happens consistently when I use 0-1 DNLS here at ARC; does this happen to anyone else?

JMB 10-JUL-75 09:42 32938

Does anyone else have this problem when using 0=1 DNLS frm ELF or AI?

(J32938) 10-JUL-75 09:42;;; Title: Author(s): Jeanne M. Beck/JMB; Distribution: /ARC-APP([ACTION]); Sub-Collections: SRI-ARC ARC-APP; Clerk: JMB;

1 32938 Distribution
1a Laura J. Metzger, Priscilla A. Wold, Pamela K. Allen, Joan
Hamilton, Rene C. Ochoa, Jeffrey C. Peters, Marcia L. Keeney, Jeanne
M. Beck, Geoffrey S. Goodfellow, Rodney A. Bondurant, Douglas C.
Engelbart, Jeanne M. Leavitt, Susan Gail Roetter, Raymond R. Panko,
Adrian C. McGinnis, James C. Norton, J. D. Hopper, Elizabeth J.
Feinler, James H. Bair, Robert N. Lieberman, N. Dean Meyer, Sandy L.
Johnson, Martin E. Hardy,

Inez M. Mattiuz Room 1105 620 Belmont Street Montreal, Quepec

> To: Master Copy

32939ntly doing wit viewspec K will show you that Jim Bair wrote enough of it to deserve the blame for any deficiencies; I, of course, will cheerfully accept whatever credit is due, plus whatever I can get...

DAP####;

# APPLICATION DESCRIPTION: ETS (Educational Testing Service, Princeton)

Introduction

.

NLS (On-Line System) is a text-editing, dialog-support, and communications system developed and managed by the Augmentation Research Center at Stanford Research Institute. It provides users with a state-of-the-art tool for document production, communication, and information management and retrieval.

2a

Use of NLS at ETS grew initially out of access to the system provided as a part of a research contract with ARPA (Advanced Research Projects Agency), an arm of the Department of Defense. Brian McNally, a research assistant on the ARPA Project, was the first active ETS user; all of his NLS work revolved around the ARPA Project.

26

In addition to ARPA use, David Potter in October, 1974 began to use the system as a support tool for project and proposal-related document production and control. His use of the system grew until by January of this year he was using the system for virtually all of his clerical support, and had gained sufficient expertise in its use to assume the role of system Architect at ETS. As the Architect, he began to build a group of other ETS users and to develop system applications that would allow ETS to fully exploit the system scapabilities.

20

Full support of the system came from ARPA for the first six months of the current fiscal year. In January of this year, an agreement was reached whereby ARPA and ETS would share the costs, resulting in a 50-50 split for the remaining six months of the current fiscal year (ARPA s10,000; ETS s10,000). Discussions with ARPA are underway to determine the feasibility and desirability of continuing this arrangement through the next fiscal year; regardless of the outcome of these discussions, however, the use of NLS at ETS has grown to a level at which even full ETS support would seem desirable and could be justified on a cost-effectiveness basis.

2 d

This paper reviews the progress made over the past six months toward the development at ETS of an active NLS user group. The intent is to document the uses to which NLS is currently being put, in order to enable ETS to effectively evaluate its usefulness.

2e

Currently, NLS is being put to three major uses at

ETS: document production and correspondence; data base construction and management, including bibliographies; and instrument construction.

2f

The following descriptions include application strategies, generalizable descriptions of the specific uses of NLS, and a content specific description of the work being done.

20

Correspondence

Correspondence is written in the usual manner using NLS editing functions. The output is intended for non-NLS users, and therefore must be formatted for hardcopy printing. The formatting was done manually until recently when a special program was written called ETSMEMO (currently in directory <meyer>).

3a

Document Production

Document production involves everything from writing an initial outline through the production of camera-ready copy. It includes composition (creative and formatting), editing, and revising, as well as the production and review of intermediate working copies. NLS is well-suited to all phases of this process; the application descriptions below summarize several examples. Of particular interest is the work of walton's group on a Report on Health Planning.

4a

Data Base Management

5

Several users are utilizing NLS as an information management and retrieval tool. This capability is particularly useful in building bibliographic data bases which may be explored interactively as well as being readily updated; again, the application description below contain several examples.

5a

CBI Data Base (Anastasio, Sinnott; ARPA support)

6

The CBI (Computer Based Instruction) community is planning to use an NLS data base of literature in CBI. Loraine Sinnott is continuing the entry of citations in a data base that is to be searched by keyword, author, titleword, and the usual NLS search functions. This may be done with the catalog production programs --- the data base was started using the tagged field format necessary for the programs. The following is a sample entry from this data base:

6a

(CBI1) \*a1 Marian H. Beard \*a2 Paul V. Lorton \*a3
Barbara W. Searle \*a4 Richard C. Atkinson #2 org #3 #4
#5 Stanford, California 94305 \*b2 Stanford University #3
\*c1 Comparison of Student Performance and Attitude Under
Three Lesson-Selection Strategies in CAI #1 #6 16p. \*d1
31 December 1973 \*f1 r \*p1 Optimization and Instruction
Theory Application #1 Richard C. Atkinson #3
(415)321-2300 #4 Dept. of Psychology #5 Stanford,
California 94305 \*s1 ARPA #1 ONR #7 22212 \*w4 \*y1 \*y4 #1
#2 #3 #4 \*z3 new \*

6a1

Report on Health Planning (Walton, Fortna, et al; HEW, Region 2 support)

16

A large report concerned with the technical assistance needs of the Public Health Service is being written in part through NLS. The project will discuss the Public Law requirements for a Center for technical Assistance to the Health Service. The report must be written with input and review from several geographically distributed contributors. Thus, NLS will be ideally suited to the numerous revisions that will be collected initially via phone converations with Barbara Esser, who is supervising the report preparation.

7a

Len Swanson has developed and implemented a number of interesting applications:

## 1. Committee selection (internal P/J)

8 a

The system is being used to record and maintain information on people who are being considered for membership on a committee. The names were originally entered from notes and memos suggesting nominees. After sorting the names, addresses and information about each nominee were entered. Periodically additional information was added. The aggregate list was then printed so that several people could "rate" the nominees and selct their top choices. The consensus of these choices were then culled from the original file and put into a second file, which will be used to record expanded biographical data and prepare a summary report listing the desired names in order of selection.

8a1

#### 2. Mailing List (ARPA support)

Len Swanson is about to use the system to enter a 700 name mailing list and sort it (geographically) in order to remove duplicates. The result will be used to prepare mailing labels for distribution of project reports, and to produce listings of subsets of names. He expects to maintain the mailing list on OFFICE-1 (i.e., to add to it and make address changes).

3. Book (misc.)

Len and two associates are beginning work on a textbook, and they expect to use the system, at least in part, for preparation of the text. Len has entered a topical outline, with notes; they will subsequently divide the list of chapters and work independently on each, but with review, comments, and modifications by the other two authors.

4. Report (internal P/J)

Len has used the system to prepare several working documents and one (brief) formal report. The report was prepared in several stages, with intermediate external review. The first step was to enter the topics (sections and subsections) and basic content. He next wrote sections (at random) as they occurred to him. After two editings and one restructuring of the file it was prepared for output and distribution. The result is now being reviewed and will probably be further modified before final printing.

5. Joint Papers (ARPA support)

Loraine sinnott and Len Swanson are working on three documents which they expect to prepare jointly. Initial drafts of each have been entered by Len, and Lorraine will modify them and/or suggest changes through the system. These papers include an interview guide for TRAIDEX interviewers, a list of information to be obtained prior to interviews, and a paper on the catalog of non-DOD information resources.

8b

80

8c1

8 d

8b1

20

8d1 8e

8e1

Page 5

11a1

6. TRAIDEX scratch pad (information management; ARPA 8 f support) Len has created a file to maintain miscellaneous information related to one of his projects. The file contains a list of key people (with addresses and phone numbers) related to the project, a bibliography of relevant reports and documents, a set of notes on various phases of the project, and a list of project 8f1 milestones and date-related events. Sex pifferences and piscrimination in Education Data Base 9 (Harris, Ekstrom, Lockheed; internal P/J) Currently 470 bibliographic citations extracted from other more general data bases have been entered in a single file for searching using the standard NLS search functions, particularly content filters. Searching is done by author, titlewords, journal, date, and the other elements of a standard bibliographic entry (Pschological Abstracts 9a Format). [Citation sample: ] Abel, H. And Sahenkaya, R. gmergence of sex and race friendship preferences. CHILD 9a1 DEVELOPMENT, 1962, Vol. 33, 939-943. Abstracts are available and it is planned to enter them in a separate file linked to the appropriate citation in the bibliography. This would form the basis of a free 96 text search and retrieval function on the abstracts. Volunteer Activities of Women Data Base (Harris, Lockheed, 10 Ekstrom; FIPSE support) This bibliographic data base of 34 items is part of a study to evaluate and analyze the volunteer activities of women to establish a means of assigning academic credit to 10a those activities. 11 Teacher Behavior Research (Potter; internal P/J) 11a Online Teacher Behavior Data Base David Potter is working in the area of educational assessment, developing evaluative tools and instruments for the assessment of teacher behavior in the public

NLS at ETS Page 6

schools. The methodologies are sociometric and involve various techniques common to social psychology, e.g., shadowing, case studies, interviews, and questionnaires

-- the latter using the online index.

The online index is a structured list of statements that describe the behavior of teachers in the classroom. is based on the "Florida Catalog of Teacher Competencies". 11a2

The index is accessed through a locator modeled after the Locator in Userguides at Office=1. It is not limited to teacher behavior, and includes additional top level headings such as Pupil Level, Object of Change, etc., and Teacher Behavior. Each of the 8 categories has lower level headings such as Developing Personal Skills, Performing Administrative Duties, etc. The next level contains more specific behavior categories such as Accepting Responsbility, Confering with Parents, Motivating /Reinforcing Students, and so on. 11a3

### Instrument Development

116

The online teacher behavior data base described above is being used by Potter to develop questionnaires, rating scales, and other instruments to be used in his job Analysis of Teaching project. Use of the system in this manner has allowed working copies of these instruments to be produced quickly and efficiently, which enables him to make much better use of outside review than is the case when each instrument -- and all revisions thereof -- must be typed separately. 1161

Example of question item with scale (instructions are added to the beginning of each questionnaire of course): 1152

#### [Heading =] PLANNING INSTRUCTION

11b2a

Selecting and specifying goals, aims, and objectives

Time Teachers SHOULD Spend	11	.1		Hours/ Month
Time Teachers DO Spend	l			Hours/ Month
Time YOU Spend	0 10	1 .1	1	Hours/ Month 11b2b

Directives are used in the questionnaires and are inserted manually due to the highly structured nature of the questionnaire. One difficulty is encountered in the

NLS at ETS Page 7

1164

use of the directive .Plexnum; which will number every statement in a plex sequentially, e.g., i. 2.... This is perfect for questionnaires except for the fact that all the questions are not in one plex. The headings ("Planning Instruction" in the above case) are logically at a higher level, yet the questions they subsume must be numbered from the beginning of the questionnaire. This limitation has been circumvented by putting the headings of other questionnaires at a level below the questionnaire items.

Other Guestionnaires are constructed from the locator using different scales. For example, the respondents are asked to rate the importance of each category:

8. Selecting and specifying goals, aims, and objectives 11b4a

The work Diary, also created from the locator category list, is best described by including the instructions for the respondent:

"This work diary is intended to help us understand how you spend your time as a teacher -- that is, how is your time distributed across the 44 teaching tasks listed below? We would like you to fill this form out three times a day: (1) around noon, to tell us how you spent the morning; (2) at the end of the school day, to describe the afternoon; and (3) around the end of the evening, so we can find out what job-related tasks you've been working on since the end of the school day. (check the appropriate category:)

Page 8

[Example:] PERFORMING ADMINISTRATIVE DUTIES

11b5a1

23.\_\_\_\_Supervising aides, tutors, etc.

11b5a1a

24.\_\_\_\_Arranging physical environment

11b5a1b

(There are 44 statements total in the questionnaire under approximately 12 headings.)

11b5a1c

The Critical Incident Record Form (Type I) uses an open ended questionnaire design that when generated from NLS allows the reiteration of the instrument design to proceed without re-keying the highly formatted pages (produced by manually inserted directives). Example of instructions and questionnaire item:

1166

"Think back over a period of time (six months or so) long enough for you to have observed the activities of all your teachers. Focus your attention on any one thing that one of your teachers may have done which made you think of him/her as an outstandingly good or very effective teacher. In other words, think of a critical incident which has added materially to the overall success of your school or department. Please do not record any names of persons involved in the following incident.

What were the general circumstances leading up to this incident?"

11b6a

Document Composition and Production

110

Potter has for some months been doing virtually all of his writing on the system. This has included proposals, reports, letters, and memoranda.

NLS at ETS Page 9

General Comments:

12

The ETS architect's general intent is, at least in part, the augmentation of clerical functions. It may be that additional capabilities have been added that would take an unreasonably large task force of clerical personnel, and therefore would not have been accomplished outside of an augmented knowledge workshop. The typing of questionnaires with scales is laborious at best, while the repetitive functions can be easily accomplished in NLS. The job would become odious if there were numerous revisions necessitating complete retyping of the questionnaires each time. This editing augmentation is extended beyond the traditional word processing systems when the data bases, locator, and automatic generation of special subsets are considered.

12a

In sum, ETS's application includes questionnaire production and bibliographic storage, search and retrieval, in addition to the usual functions of communication, and document composition and production.

12b

1 32939 Distribution 1a Lawrence H. Day, Michael T. Bedford, Gwen C. Edwards, Anand Kumar, text of letters to be printed on Bell letterhead, including addresses.

I would like this letter printed out twice on Bell letterhead; the names, addresses, and salutations are included in the text; you will have to do a little reformatting so that both names don't print on the same letter. (Try the command Set Temporary Modifications in order to write on a journal item.) There is no rush here....one week okay.

Thanks.

text of letters to be printed on Bell letterhead, including addresses.

1 Mr. M. Healy
Planning Analyst
Commercial Planning and Development
Institute for Industrial Research and Standards
Ballyum Road
Dublin 9, Ireland

1

2 Mr. John Gerha Ecolgical Impact Analysis Staff Washington Environmental Research Center Environmental Protection Agency Washington D.C. 10460

1

3 Dear Mr. Healy:

3

4 Dear Mr. Gerba:

4

5 Let me first excuse the delay involved in responding to your request for a copy of "The SPRITE Technique - Its Use in A TEChnology Assessment of the Wired City". While this paper was delivered at the Technology and Growth conference in Ottawa early this February, their was no prepared text available prior to its delivery. The copy which I have enclosed was generated from the transcript taken during the conference.

.

6 (Proceedings of the entire conference will be available through this office within the next month, I understand.)

7 I have also taken the liberty of enclosing some of the other papers prepared by members of Bell Canada's Business Planning Group, with the hope that they will give you the subsance and flavour of our work better than I could do in several pages of text. I suspect that there are a number of areas of research and research methodologies which our groups may have in common, ad I would be most interested in learning if the enclosed materials are of use to you.

\*\*

8 Again, please excuse my tardy response. I hope this reply is not too late to be of use.

.

9 Yours sincerely,

Michael T. Bedford

Supervisor - Business Planning

9

text of letters to be printed on Bell letterhead, including addresses.

(J32943) 11-JUL-75 06:20;;; Title: Author(s): Michael T. Bedford/MIKE; Distribution: /LN([ACTION]) IMM([INFO-ONLY]); Sub-Collections: NIC; Clerk: MIKE;

1

1

1a	(BUCCIERO)	07JUN05JUL	.00	.00		1a
1b	(CALICCHIA)	07JUN05JUL	.00	.00		1b
10	(DIMAGGIO)	07JUN05JUL	.00	.00		10
1 d	(FEMIA)	07JUN05JUL	.00	.00		1 d
1 e	(KESSELMAN)	07JUN05JUL	.00	.00		1 e
1f	(LOMBARDO)	07JUN05JUL	.00	.00		1 f
19	(MCLEAN)	07JUN05JUL	.00	.00		19
1h	(VANALSTINE)	07JUN05JUL	.00	.00		1h
11	(WWMMCS)	07JUN05JUL	.00	.00		11
15	(STINSON)	07JUN05JUL	.02	.43		13
1k	(LORETO)	07JUN05JUL	.03	.49		1k
11	(NELSON)	07JUN05JUL	.02	,93		11
1 m	(BARNUM)	07JUN05JUL	.04	1.87		1 m
1n	(PATTERSON)	07JUN05JUL	.04	1,99		1n
10	(IUORNO)	07JUN05JUL	.10	2.49		10
1p	(MCNAMARA)	07JUN05JUL	.05	3.83		1p
19	(RZEPKA)	07JUN=-05JUL	.12	6,09		19
1r	(BERGSTROM)	07JUN05JUL	.16	6,34		1r
18	(RUPLE)	07JUN05JUL	.16	10.32		15
1t	(LAWRENCE)	07JUN05JUL	.39	11.65		1t
1u	(LIUZZI)	07JUN05JUL	.25	11,69		1 u
1 v	(KRUTZ)	07JUN05JUL	.25	14.70		1 V
1 w	(HILBING)	07JUN05JUL	.19	14.73		1 w
1×	(WINGFIELD)	07JUN05JUL	.45	17,59		1×
14	(IOMAINI)	07JUN05JUL	.26	17.66		19

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	1z (RWALKER)	07JUN05JUL	.29	22.14	12
	1ae (LAFORGE)	07JUN05JUL	.81	23,30	188
	1aa (WEBER)	07JUN05JUL	.22	25.16	1aa
	1ab (PANARA)	07JUN05JUL	,83	26.05	1ab
	1ac (CAVANO)	07JUN==05JUL	.75	28.29	1ac
	1ad (SLIWA)	07JUN05JUL	.74	29.30	1ad
	1ae (CARRIER)	07JUN05JUL	1,84	60,57	1ae
	1af (STONE)	07JUN05JUL	2,00	66.29	1af
	1ag (KENNEDY)	07JUN05JUL	4,81	105.77	lag
	1ah (RADC)	07JUN05JUL	15.28	557.98	1ah
	CALICCHIA)	07JUN05JUL	.00	.00	2
	2a CALICCHIA	28-JUN-75	*00	,00	2a
1	2b CALICCHIA	21-JUN-75	.00	.00	2b
	2c CALICCHIA	14-JUN-75	.00	.00	2c
	2d CALICCHIA	7-JUN-75	,00	.00	2 d
	3 (FEMIA)	07JUN05JUL	.00	.00	3
	3a FEMIA	28=JUN=75	.00	.00	3a
	3b FEMIA	21-JUN-75	.00	.00	3ъ
	3c FEMIA	14-JUN-75	.00	.00	3с
	3d FEMIA	7-JUN-75	,00	.00	3 d
	(LOMBARDO)	07JUN05JUL	.00	.00	4
	4a LOMBARDO	28-JUN-75	.00	.00	4a
	4b LOMBARDO	21-JUN-75	,00	.00	4b
	4c LOMBARDO	14-JUN-75	.00	.00	4c
)	4d LOMBARDO	7-JUN-75	,00	.00	4d

				DLS	11-JUL-75	08:23	32944
TIME USED	IN JUNE HOURS	OF	CPU	CONNECT			

				Comme	
5 (	(MCLEAN)	07JUN05JUL	.00	.00	5
	5a MCLEAN	28-JUN-75	.00	.00	5a
	5b MCLEAN	21-JUN-75	.00	.00	56
	5c MCLEAN	14-JUN-75	.00	.00	5c
	5d MCLEAN	7-JUN-75	.00	.00	5 d
6 (	(RUPLE)	07JUN05JUL	.16	10.32	6
	6a RUPLE	28-JUN-75	.04	2.74	6a
	6b RUPLE	21-JUN-75	.08	4.74	6b
	6c RUPLE	14-JUN-75*	.04	2.84	6c
	6d RUPLE	7-JUN-75	.00	.00	6 d
7 (	(WEBER)	07JUN05JUL	.22	25,16	7
4	7a WEBER	28-JUN-75	.21	24.45	7a
	7b WEBER	21-JUN-75	.00	.00	76
	7c WEBER	14-JUN-75	.00	.00	7c
	7d WEBER	7-JUN-75	.01	.71	7 d
8 (	(WWMMCS)	07JUN05JUL	.00	.00	8
	8a WWMMCS	28-JUN-75	.00	.00	8 a
	8b WWMMCS	21-JUN-75	.00	.00	8 b
	8c WWMMCs	14-JUN-75	.00	.00	8c
	8d WWMMCS	7-JUN-75	.00	.00	8 d
9 (	(DIMAGGIO)	07JUN05JUL	.00	.00	9
	9a DIMAGGIO	28-JUN-75	.00	.00	9a
	9b DIMAGGIO	21-JUN-75	.00	.00	96
	9c DIMAGGIO	14-JUN-75	.00	.00	90
	9d DIMAGGIO	7=JUN=75	.00	.00	9d

TI	ME USED IN JUNE	EHOUR	s OF	CPU		11-JUL-75 08:23	32944
10	(KESSELMAN)	07JUN-	-05JUL	.00	.00		10
	10a KESSELMAN		28-JUN-75	.00	.00		10a
	10b KESSELMAN		21-JUN-75	.00	.00		10b
	10c KESSELMAN		14-JUN-75	.00	.00		10c
	10d KESSELMAN		7=JUN=75	,00	.00		10d
11	(VANALSTINE)	07JUN-	-05JUL	.00	.00		11
	11a VANALSTINE		28-JUN-75	.00	.00		11a
	116 VANALSTINE		21-JUN-75	.00	.00		116
	11c VANALSTINE		14-JUN-75	.00	.00		110
	11d VANALSTINE		7-JUN-75	.00	.00		11d
12	(PATTERSON)	07JUN-	-05JUL	.04	1.99		12
	12a PATTERSON		28-JUN-75	.01	.16		12a
	12b PATTERSON		21-JUN-75	.02	1.46		12b
	12c PATTERSON		14-JUN-75*	.00	.16		12c
	12d PATTERSON		7-JUN-75	.01	.21		12d
13	(BUCCIERO)	07JUN-	-05JUL	.00	.00		13
	13a BUCCIERO		28-JUN-75	.00	.00		13a
	13b BUCCIERO		21-JUN-75	.00	.00		13b
	13c BUCCIERO		14-JUN-75	.00	.00		13c
	13d BUCCIERO		7-JUN=75	,00	.00		13d
14	(STINSON)	07JUN-	-05JUL	.02	.43		14
	14a STINSON		28-JUN-75	.01	.08		14a
	14b STINSON		21-JUN-75	.00	.00		145
	14c STINSON		14-JUN-75*	.01	.32		14c
	14d STINSON		7-JUN-75	.00	.03		14d

DLS	11-JUL-75	08:23	32944
and I			

TIME USED IN JUN	EHOURS OF	CPU		11=JUL=75 08:23	32944
15 (NELSON)	07JUN05JUL	.02	.93		15
15a NELSON	28-JUN-75	.02	.74		15a
15b NELSON	21-JUN-75	.00	.13		15b
15c NELSON	14-JUN-75*	.00	.06		15c
15d NELSON	7-JUN-75	.00	.00		150
16 (BARNUM)	07JUN05JUL	,04	1.87		16
16a BARNUM	28-JUN-75	.03	1.44		16a
16b BARNUM	21-JUN-75	.00	.00		16b
16c BARNUM	14-JUN-75	.00	.00		16c
16d BARNUM	7-JUN-75	.01	,43		160
17 (MCNAMARA)	07JUN05JUL	.05	3.83		17
17a MCNAMARA	28-JUN-75	.00	.00		17a
17b MCNAMARA	21=JUN=75	.04	3.27		175
17c MCNAMARA	14-JUN-75*	.01	.56		17c
17d MCNAMARA	7-JUN-75	.00	.00		17d
18 (LORETO)	07JUN==05JUL	.03	.49		18
18a LORETO	28-JUN-75	.02	.31		18a
18b LORETO	21=JUN=75	.00	,05		18b
18c LORETO	14-JUN-75	.00	.00		18c
18d LORETO	7-JUN-75	.01	.13		18d
19 (HILBING)	07JUN05JUL	.19	14,73		19
19a HILBING	28-JUN-75	.13	12,03		19a
19b HILBING	21=JUN=75	.01	.22		19b
19c HILBING	14-JUN-75	.00	.00		190
19d HILBING	7-JUN-75	.05	2.48		19d

	DLS	5 1	1-JUL-75	08:23	3294
CPU	CONNECT				

TIN	E USED IN JUNE	HOURS OF		PU	CONNECT	11-JUL-75 08:23	32944
20	(IUORNO)	07JUN05J	UL .	10	2.49		20
	20a IUORNO	28-	JUN-75	.05	1.12		20a
	20b IUORNO	21-	JUN=75	.02	.17		20b
	20c IUORNO	14-	JUN=75*	.02	.73		20c
	20d IUORNO	7-	JUN-75	.01	.47		20d
21	(RWALKER)	07JUN05J	UL.	.29	22.14		21
	21a RWALKER	28=	JUN=75	.08	7.78		21a
	21b RWALKER	21-	JUN=75	.16	10,81		21b
	21c RWALKER	14-	JUN=75*	.05	3,55		21c
	21d RWALKER	7-	JUN=75	.00	.00		21d
22	(BERGSTROM)	07JUN05J	UL.	16	6,34		22
	22a BERGSTROM	28=	JUN=75	.02	,63		22a
	22b BERGSTROM	21-	JUN=75	.01	.15		22b
	22c BERGSTROM	14=	JUN=75*	.02	1.25		22c
	22d BERGSTROM	7=	JUN-75	.11	4.31		22d
23	(SLIWA)	07JUN05J	UL .	74	29,30		23
	23a SLIWA	28-	JUN-75	,56	21.36		23a
	23b SLIWA	21=	JUN-75	.09	3,33		23b
	23c SLIWA	14-	JUN=75*	,03	1,09		23c
	23d SLIWA	7-	JUN-75	.06	3,52		23d
24	(LIUZZI)	07JUN05J	UL .	, 25	11,69		24
	24a LIUZZI	28=	JUN=75	.00	.00		24a
	24b LIUZZI	21-	JUN=75	,22	7.39		24b
	24c LIUZZI	14-	JUN=75*	.01	1.87		24c
	24d LIUZZI	7-	JUN=75	.02	2,43		24 d

			DLS	11-JUL-75	08:23	32944
JUNE HOURS	OF	CPU	CONNECT			

	TI	ME USED IN JUN	EHOURS OF	CPU	CONNECT	11-JUL-75 08:23	32944
	25	(WINGFIELD)	07JUNOSJUL	.45	17.59		25
		25a WINGFIELD	28-JUN-75	.00	.00		25a
		25b WINGFIELD	21-JUN-75	.19	7,69		25b
		25c WINGFIELD	14-JUN-75*	.02	.78		25c
		25d WINGFIELD	7=JUN=75	.24	9,12		25 d
	26	(LAFORGE)	07JUN05JUL	.81	23.30		26
		26a LAFORGE	28-JUN-75	.12	2,86		26a
		26b LAFORGE	21-JUN-75	.40	9,38		26b
		26c LAFORGE	14-JUN-75*	.01	.43		26c
		26d LAFORGE	7-JUN-75	.28	10,63		26d
	27	(KRUTZ)	07JUN05JUL	.25	14.70		27
		27a KRUTZ	28-JUN-75	.05	3,19		27a
		27b KRUTZ	21-JUN-75	.08	3,20		27b
		27c KRUTZ	14-JUN-75*	.02	1,43		27c
		27d KRUTZ	7-JUN-75	.10	6,88		27d
	28	(CAVANO)	07JUN05JUL	.75	28.29		28
		28a CAVANO	28-JUN-75	.26	8,49		28a
		28b CAVANO	21-JUN-75	.22	9,32		28b
		28c CAVANO	14-JUN-75*	.03	1,16		28c
		28d CAVANO	7-JUN-75	.24	9,32		28d
	29	(RZEPKA)	07JUN05JUL	.12	6.09		29
		29a RZEPKA	28-JUN-75	.05	1.94		29a
		29b RZEPKA	21-JUN-75	.06	3.03		29b
		29c RZEPKA	14-JUN-75	.00	.00		29c
		29d RZEPKA	7-JUN-75	.01	1,12		29d
_							

DLS	11-JUL-	-75	08:23	32944
en en				

TIME	USED	IN	JUNE HOURS	OF

CPU CONNECT

2						
	30	(PANARA)	07JUN05JUL	,83	26.05	30
		30a PANARA	28-JUN-75	.12	3.77	30a
		30b PANARA	21-JUN-75	.09	1.81	30b
		30c PANARA	14-JUN-75*	.21	7.20	30c
		30d PANARA	7-JUN-75	,41	13,27	30d
	31	(TOMAINI)	07JUN05JUL	,26	17.66	31
		31a TOMAINI	28-JUN-75	.03	1,52	31a
		31b TOMAINI	21-JUN-75	.07	6.25	31b
		31c TOMAINI	14-JUN-75*	.04	2,51	31c
		31d TOMAINI	7-JUN-75	.12	7,38	31d
	32	(LAWRENCE)	07JUN==05JUL	,39	11.65	32
		32a LAWRENCE	28-JUN-75	.07	2,00	32a
4		32b LAWRENCE	21-JUN-75	.03	1.03	32b
		32c LAWRENCE	14-JUN-75*	.00	.10	32c
		32d LAWRENCE	7-JUN-75	,29	8,52	32d
	33	(STONE)	07JUN==05JUL	2,00	66.29	33
		33a STONE	28-JUN-75	.54	14.85	33a
		33b STONE	21-JUN-75	.52	13.73	33b
		33c STONE	14-JUN-75*	.16	8.15	33c
		33d STONE	7-JUN-75	.78	29,56	33d
	34	(CARRIER)	07JUN05JUL	1.84	60.57	34
		34a CARRIER	28-JUN-75	.73	23.90	34a
		34b CARRIER	21-JUN-75	.57	15.60	34b
		34c CARRIER	14-JUN-75*	.22	8,65	34c
)		34d CARRIER	7-JUN-75	,32	12,42	34d

DLS	11	-JUL-75	08:23	3294
-				

# TIME USED IN JUNE -- HOURS OF

~	***		C	0	MEN	150.4	M H
	$\sim 1$	1	- 10		DI N	шч	

35	(KENNEDY)	07JUN05JUL	4.81 1	05.77	35
	35a KENNEDY	28-JUN-75	1.12	24.04	35a
	35b KENNEDY	21-JUN-75	1.34	33.02	35b
	35c KENNEDY	14-JUN-75*	.62	14.75	35¢
	35d KENNEDY	7-JUN-75	1.73	33,96	35 d
36	(RADC)	07JUN05JUL	15.28	557,98	36
	36a RADC	28-JUN-75	4,42	166.31	36a
	36b RADC	21-JUN-75	4.33	145.63	36b
	36c RADC	14-JUN-75	1.56	70.90	36c
	36d RADC	7=JUN=75	4.97	175 - 14	36d

Weekly Office-1 Stats for June

(J32944) 11-JUL-75 08:23;;; Title: Author(s): Duane L. Stone/DLS; Sub-Collections: RADC; Clerk: DLS;

1	1 GENERAL	1
	ia NLS has facilities to let you do almost everything you nee with text: compose it; edit it; send it to (and receive it for other persons; file it in one or more categories; cite and ear obtain documents; search for documents by author and subject; search in documents by word or phrase; and print in practical any format.	rom) sily
2	2 HARDWARE	2
	2a Here and Now	2 ē
	2a1 IMLAC, mouse and keyset.	2a1
	2b Elsewhere	25
	2bi Line Processor, any of several commercially available display devices ie. Datamedia, mouse and keyset.	251
	2b2 Terminet 300, Execuport, TI Silent 700 and many others	, 2b2
3	3 TENEX	3
	3a Log in and log out	3 4
	3b dir ectory	3 b
	3c gro up status	30
	3d dir ectory	3 d
	3d1 pro tection	3d1
	3d2 siz e	3d2
	3d3 dat e of last read	3d3
	3e dsk status	3€
	3f snd message	3 f
	3g mes sages	39
	3h rea d messages	31
	3h1 date:	3h1
	3h2 rev erse order	3h2

31	typ e file	3:
3 5	cop y file	3
3 k	del ete file	3)
31	exp unge	3.
3 m	lin k to	31
3 n	sys tem status	31
4 BAS	E	
4a	File Manipulation Commands	4.
	4a1 Create File - creates a new file	4a
	4a2 Update File - makes a fresh copy of the file with recent changes	4a:
	4a3 Load File - calls up a previously saved file	4a
46	Creating Text	41
	4b1 Insert Statement	4b
	4b2 Insert Text	4b
40	Editing	4
	4ci Delete statement	4c
4 d	Moving around In The File	4
	4d1 Jump to A: ADDRESS <cr> - moves you to the address specified by ADDRESS.</cr>	4d
4 e	Seeing Your File	4
	4e1 \ - prints the current statement	4 e
	4e2 Print Rest - prints from your current statement to the end of the file.	4 e :
4 £	Other Commands	4:
	454 Vonh Forms	4.5

4fla Move, Copy, Transpose, Append, Replace, Force(case)	4f1a
4f2 Noun Forms	4f2
4f2a Character, Word Text, Statement, Branch, Plex, File	4f2a
5 CALCULATOR	5
6 MESSAGE	6
7 SENDMAIL	7
7a Sending Your File To Other Persons	7a
7al Goto Subsystem Sendmail	7a1
7a1a File - sends this file.	7a1a
7alb Title - gives your item a title	7a1b
<pre>7alc Send for Actionspecifies the recipient(s) and that you expect some action.</pre>	7a1c
7aid Send for Information specifies recipient(s) for information purposes.	7a1d
8 MODIFY	8
9 FORMAT	9
10 PROGRAMS	10
11 HELP	11
11a Typing <ctrl-g> will give you information based on what you</ctrl-g>	

were doing before you typed <CTRL=Q>. Then it will prompt you "T/\_:". For more information, type in any term you see or the number of one of the "menu" of subjects that appears below each explanation and then type a <CR>.

If you type \_ you will be able to return to the last explanation you were reading. If you say yes by typing "y", you will see this last explanation again. If you say no by typing "n", you will be given the chance to see the previous explanation and so on.

11a

Demonstration of SENDMAIL Subsystem

(J32945) 11-JUL-75 08:20;;; Title: Author(s): Edmund J. Kennedy/EJK; Distribution: /FJT([ACTION]) EJK([ACTION]) RJC([ACTION]) DLS([INFO-ONLY]); Sub-Collections: RADC; Clerk: EJK;

Summary of Office=1 Use for June

For weekly detail see (,32944,)

Summary of Office-1 Use for June

4

-1

1a	(BUCCIERO)	07JUN05JUL	.00	.00	1a
1b	(CALICCHIA)	07JUN05JUL	.00	.00	16
10	(DIMAGGIO)	07JUN05JUL	.00	.00	10
1 d	(FEMIA)	07JUN05JUL	.00	.00	1 d
1e	(KESSELMAN)	07JUN05JUL	.00	.00	1 e
1f	(LOMBARDO)	07JUN05JUL	.00	.00	1 f
19	(MCLEAN)	07JUN05JUL	.00	.00	19
1 h	(VANALSTINE)	07JUN05JUL	.00	.00	1h
11	(WWMMCS)	07JUN05JUL	.00	.00	11
13	(STINSON)	07JUN05JUL	.02	,43	1 j
1k	(LORETO)	07JUN05JUL	.03	.49	1 k
11	(NELSON)	07JUN05JUL	.02	.93	11
1 m	(BARNUM)	07JUN05JUL	.04	1.87	1 m
1n	(PATTERSON)	07JUN05JUL	.04	1,99	1n
10	(IUORNO)	07JUN05JUL	.10	2,49	10
1p	(MCNAMARA)	07JUN05JUL	.05	3,83	1p
19	(RZEPKA)	07JUN05JUL	.12	6.09	19
1r	(BERGSTROM)	07JUN05JUL	.16	6,34	1 r
15	(RUPLE)	07JUN05JUL	.16	10,32	15
1t	(LAWRENCE)	07JUN05JUL	.39	11.65	1t
1 u	(LIUZZI)	07JUN05JUL	,25	11,69	1 u
1 v	(KRUTZ)	07JUN05JUL	.25	14.70	1 v
1 W	(HILBING)	07JUN05JUL	.19	14.73	1 W
1×	(WINGFIELD)	07JUN05JUL	,45	17.59	1 ×
14	(TOMAINI)	07JUN05JUL	,26	17.66	19

# CPU CONNECT

1 z	(RWALKER)	07JUN05JUL	.29	22,14		1z
1ae	(LAFORGE)	07JUN05JUL	.81	23,30	1	a@
1aa	(WEBER)	07JUN05JUL	.22	25.16	1	aa
1ab	(PANARA)	07JUN05JUL	.83	26.05	1	ab
1ac	(CAVANO)	07JUN05JUL	.75	28,29	1	ac
1ad	(SLIWA)	07JUN05JUL	.74	29.30	1	ad
1ae	(CARRIER)	07JUN05JUL	1.84	60.57	1	ae
1af	(STONE)	07JUN05JUL	2.00	66.29	1	af
1ag	(KENNEDY)	07JUN05JUL	4,81	105.77	1	ag
1ah	(RADC)	07JUN05JUL	15,28	557.98	1	an

Summary of Office-1 Use for June

(J32946) 11-JuL-75 08:29;;;; Title: Author(s): Duane L. Stone/DLS; Distribution: /RADC([INFO-DNLY]); Sub-Collections: RADC; Clerk: DLS;

1 32946 Distribution
1a William E. Rzepka, Rocco F. Iuorno, Thomas J. Bucciero, Roger B.
Panara, John L. McNamara, Joe P. Cavano, Duane L. Stone, Marcelle D.
Petell, Thomas F. Lawrence,
1b Samuel L. Ruple, Stephen P. Sutkowski, Richard Calicchia, William
W. Patterson, Francis J. Hilbing, Robert K. Walker, Frank P. Sliwa,
Joe F. Femia, Roger W. Weber, Melville J. Draper, Robert D. Krutz,
James W. Hyde, David T. Craig, Fred N. Dimaggio, Robert E. Doane,
Robert J. Kenyon, Richard Nelson, William F. Stinson, Daniel R.
Loreto, John B. McLean, Murray L. Kesselman, Edward F. LaForge,
Agatha C. Deconde, Alan R. Barnum, Larry M. Lombardo, Anna A.
Cafarelli, Roberta J. Carrier, Donna R. Robilotta, Richard H. Thayer,
Frank J. Tomaini, Mike A. Wingfield, Edmund J. Kennedy, Ray A.
Liuzzi, Donald VanAlstine, Deane F. Bergstrom, Frank S. LaMonica

1	Links:	1
	1a <dirt> &lt;5&gt; for documentation library</dirt>	1a
	1b <us> &lt;6&gt; User Development action</us>	1b
	ic <action> <info> <journal> <author> <directory></directory></author></journal></info></action>	10
	1d <userguides,locator,1:x></userguides,locator,1:x>	1 d
	le Feedsearch: <feedback, feed,0:wmhki1;["zzzz"];=""></feedback,>	1 e
	1f DEMOS: Coordinated by RLL; Reports to: RLL JCN JHB DCE SGR DVN	1f
	1g Classes & User Services: <beck, reports,=""></beck,>	19
	1h User Services Weekly Report: <roetter, usreport,=""></roetter,>	1h
	11 Directory requests [10 per slot; 3 days if course]: Sndmsg: To: feedback Message: form at == feedback, dirs,>	11
	1j ARC personnel data <sri-arc,leavitt,arc,></sri-arc,leavitt,arc,>	1 1
2	Journal items (most recent first):	2
	2a JHB 10=JUL-75 20:55 32607 TNLS COURSE OUTLINE #2: INTRODUCTION TO STRUCTURE AND VIEWING	
	Location: (HJOURNAL, 32607, 1:W)	2a
	2al Comments: This the third release of the second level TNLS course including significant revisions. It is intended to be given by an experienced trainer to users who have completed course I and have had experience with the system at level I. In addition to introducing structure and viewspecs, it significantly expands addressing. Printed copies should be obtained from Trainers, Feedback or JHB.	2a1
	2b JBP 5-JUL-75 22:37 26111 Eight Bit Byte Inter-Host DPS Protocol Format Location: (HJOURNAL, 26111, 1:w)	2b
	2c JBP 5-JUL-75 22:37 26110 Eight Bit Byte Inter-Host DPS Protocol Format Location: (HJOURNAL, 26110, 1:w)	
		20

2d KIRK 10-JUL-75 18:05 26108
Applications-Development interface, multifile help, weekly DOC report
Location: (JOURNAL, JRNL27, J26108:gw)

cation: (JOURNAL, JRNL27, J26108:gw)	2 d
2d1 Message:	2d1
2d1a BEV	2d1a
2d1a1 This Week	2d1a1
2dlaia Edited article for Doug (IEEE Conference Digest)	2d1a1a
2dlaib Met with Jim B., Dick and Dirk, and Jim N. in various meetings to work out cooperative relationship between Dev. and App. documentation.	2d1a1b
2diaic Began work on ARC Help.	2d1a1c
2d1aid Wrote Intro. to Sec. Func. Guide.	2d1a1d
2d1ale Took most of Third Course with Susan.	2d1a1e
2dlaif Met with App. group, Ann, to discuss viewgraphs.	2d1e1f
2d1a1g Spent a lot of time "managing" which I am having a hard time accounting for now!	2d1a1g
2d1a2 Next Week	2d1a2
2d1a2a Complete proofing Glossary and entering edits online.	2d1a2a
2d1a2b Meet with Jon P. to work out milestones for doc.	2d1a2b
2d1a2c Incorporate App. suggested revisions into sample sessions.	2d1a2c
2d1a2d Meet with Jim B. to further discuss review procedures, etc.	2d1a2d
2d1a2e Complete Third Course.	2d1a2e
2d1a2f Try to get stuff off to SRI printing.	2d1a2f

2d1b 2d1b KIRK 2dibi Done: 4 days vacation, wrote multi-file help system. Introduced BEV to ARC tool interface file. 2d1b1 2d1b2 To do: debug help system, start on Letter program. 2d1b2 2e PKA 10-JUL-75 13:54 32942 Statistical Summary of April Feedback Location: (HJOURNAL, 32942, 1:W) 2e 2f SLJ PKA 10-JUL-75 13:42 32941 Feedback Dialogue-April 1975 Location: (HJOURNAL, 32941, 1:w) 2 £ 2f1 2f1 Comments: 86 pages long 2g PKA 10-JUL-75 13:36 32940 Statistical Summary of April Feedback Location: (HJOURNAL, 32940, 1:w) 20 3 3 (hold) Holding branch for journal items to be read 3a JHB 9-JUL-75 18:25 32937 THE CURRENT STATE OF TECHNOLOGY TRANSFER IN COMPUTER AIDED INSTRUCTION Location: (HJOURNAL, 32937, 1:W) \*\*\*\*\*Note: possibly of some interest\*\*\*\* 3a 3b GAS2 7-JUL-75 15:45 32919 RETRIEVE user-subsystem Location: (HJOURNAL, 32919, 1:W) 3b 3c GAS2 3-JUL-75 18:10 32902 Retrieve Documentation Location: (HJOURNAL, 32902, 1:w) 3 C 3c1 Comments: The following is the documentation that I have developed for the usersubsystem RETRIEVE. I would appreciate your comments, especially those concerning accuracy, and suggestions. I have tried to keep it simple and present it in 3c1 a "safe" way.

3d DAP 2-JUL-75 07:14 32885 NLS at ETS Location: (HJOURNAL, 32885, 1:w)

3 d

3di Comments: For your interest and edification, here is a description of what we're currently doing with NLS. Printing it with viewspec K will show you that Jim Bair wrote enough of it to deserve the blame for any deficiencies; I, of course, will cheerfully accept whatever credit is due, plus whatever I can get...

3d1

4 Library: journal items already read and filed by date for reference

4a JEW 9-JUL-75 17:00 26104 NSW Protocols Weekly Status Report: 9-JUL-75 Location: (HJOURNAL, 26104, 1:w)

4a

4b RLL 9-JUL-75 14:47 26103 BUG: TRIM command not reporting files trimmed. Location: (JOURNAL, JRNL27, J26103:gw)

46

4c JEW 8-JUL-75 18:46 26100 Proposed DPS-10 Efficiency-Related Enhancements Location: (HJOURNAL, 26100, 1:w)

40

4d RLL 8-JUL-75 14:54 26098 BUG: Reconnecting to directory Location: (JDURNAL, JRNL27, J26098:gw)

4d

4di comments: a bug and a design fault here.

4d1

4e JBP 7-JUL-75 18:02 26097 New staff member: Andy Poggio Location: (JOURNAL, JRNL27, J26097:gw)

4e

4f CHI 4-JUL-75 11:30 26092 NSW Frontend Status: 4-July-75 Location: (HJOURNAL, 26092, 1:w)

4£

4g EKM 3-JUL-75 10:50 26086 NLS Weekly Report - Week ending June 27, 75

Location: (HJOURNAL, 26086, 1:w)	49
4h DVN 3-JUL-75 12:30 26088	
Tennis Ladder Location: (JOURNAL, JRNL27, J26088:gw)	4h
41 JEW 2-JUL-75 19:56 26084	
NSW Protocols Weekly Status Report: 2-JUL-75 Location: (HJOURNAL, 26084, 1:w)	41
4j RLL 2-JUL-75 13:42 32887	
BUG: too severe punishment for bugging an empty window. Location: (JOURNAL, JRNL27, J32887:gw)	45
4k ARC-DEV CHI RWW 2-JUL-75 12:24 26083	
Response to Strawman Requirements Document for a Standard DoD High Order Language	
Location: (HJOURNAL, 26083, 1:w)	4 k
41 JBP 30=JUN=75 20:12 26076 Weekly Report	
Location: (JOURNAL, JRNL27, J26076:gw)	41
4m JCN 30-JUN-75 18:46 25903 SRI Proposel No. ISU 75-114	
NLS Workshop Support for RADC Location: (HJOURNAL, 25903, 1:w)	
	411
4m1 Comments: This is the proposal sent to RADC in June 1975.	4m1
4n JCN 30-JUN-75 19:13 25902 SRI Proposal No. ISU 75-117	
NLS Workshop Support for AFDSDC Location: (HJOURNAL, 25902, 1:w)	
	40
4n1 Comments: This the proposal sent to AFDSDC in June 1975.	4n1
40 JCN 30-JUN-75 19:07 25901 SRI Proposal No. ISU 75-116	
NIC PARCHAS CHAPART SAN OSUA	

Location: (HJOURNAL, 25901, 1:w)	40
401 Comments: This is the proposal sent to OSHA in June 1975.	401
4p JCN 30-JUN-75 19:00 25900	
SRI Proposal No. ISU 75-115 NLS Workshop Support for AMC Location: (HJOURNAL, 25900, 1:w)	
	4p
4p1 Comments: This is the proposal sent to AMC in June 1975.	4p1
4q JCN 30-JUN-75 18:41 25899 SRI Proposal No. ISU 75-113	
NLS Workshop Support for AFAA Location: (HJOURNAL, 25899, 1:W)	40
4g1 Comments: This is the proposal sent to AFAA in June 1975.	4q1
4r RLL 29-JUN-75 21:02 26072	
Tennis: yes. Location: (JOURNAL, JRNL27, J26072:gw)	
*****Note: [ ACTION ] *****	41
4s CHI 27-JUN-75 21:22 26069	
Frontend status 27-jun-75 Location: (HJOURNAL, 26069, 1:w)	45
4t CHI DSM JEW 27-JUN-75 16:26 32851	4.0
Milestone Location: (JOURNAL, JRNL27, J32851:gw)	
	4t
4u JEW 27-JUN-75 15:29 26068 IMP PM Schedule Change	
Location: (JOURNAL, JRNL27, J26068:gw) *****Note: [ ACTION ] *****	
	40
4v DVN POOH 27-JUN-75 14:11 26067 Tennis: Augmented Cross-Net Interface	
Location: (HJOURNAL, 26067, 1:w) ****Note: [ ACTION ] *****	40

4w RwW 27-JUN-75 08:38 32840
Recent Message Committee Dialog for Week through June 27
Location: (HJOURNAL, 32840, 1:w)

4w

4x NDM 25-JUN-75 15:41 32832 Experimental Sort Command Location: (HJOURNAL, 32832, 1:w)

4×

4x1 Comments: Optionally allows reverse sorts, ignoring case, and beginning from other than the first character in the statement. This documentation updates 26039.

4×1

4y JEW 25-JUN-75 09:52 32824 NSW Protocols Weekly Status Report: 25-JUN-75 Location: (HJOURNAL, 32824, 1:w)

4v

4z CHI 24-JUN-75 21:08 26057 Frontend Weekly Status Report - 20-Jun-75 Location: (HJOURNAL, 26057, 1:W)

42

4a@ JBP 23-JUN-75 18:01 26053 Weekly report Location: (JOURNAL, JRNL27, J26053:gw)

4ae

4aa JHB 23-JUN-75 15:21 32810 New person in Applications Location: (JOURNAL, JRNL27, J32810:gw)

4aa

4ab RWW 20-JUN-75 19:11 26046 Cost of a Development Person for a Yearr Location: (JOURNAL, JRNL27, J26046:gw)

4ab

4ac RWW 23-JUN-75 11:31 32806 Some Recent Dialog among the Message Service Committee Location: (HJOURNAL, 32806, 1:w)

4ac

4ad DCE 21-JUN-75 11:06 32795
To NDM re new, experimental Sort Subsystem (26039,)
Location: (JOURNAL, JRNL27, J32795:gw)

4ad

4ae JAKE 20-JUN-75 03:44 26031 ident system woe Location: (HJOURNAL, 26031, 1:w)

4ae

4af NDM 19-JUN-75 21:39 26039 Experimental Sort Command Location: (JOURNAL, JRNL27, J26039:gw)

4af

4ag JAKE 18-JUN-75 04:57 26028 Interfacing NLS to a DMS - Interest is growing Location: (HJOURNAL, 26028, 1:w)

4ag

4ah KIRK 17-JUN-75 21:48 32768
The Whole Universe Catalog: a new tool Location: (HJOURNAL, 32768, 1:w)

4ah

4ai JBP 16-JUN-75 20:36 26017 Debugging Location: (JOURNAL, JRNL27, J26017:gw)

4ai

4aj JBP 16-JUN-75 20:34 26016 Debugging Location: (JOURNAL, JRNL27, J26016:gw)

4aj

4ak IMM 16=JUN=75 06:27 32754
Delete modifications command in 'process commands branch'
Location: (JOURNAL, JRNL27, J32754:gw)
\*\*\*\*\*Note: [ ACTION ] \*\*\*\*\*

4ak

4al RA3Y 13-JUN-75 08:18 32746 Process Commands in Office-1's new 133 exec Location: (JOURNAL, JRNL27, J32746:gw)

4a1

4am DCE 12-JUN-75 18:40 32742 Phone Log, 12 Jun 75: Al Dean of Logicon Location: (HJOURNAL, 32742, 1:w)

4am

4am1

4aml Comments: Very promising development toward using NLS to interface to multiple data bases

4an JAKE 12=JUN-75 18:12 25998 what's my line??? Location: (JOURNAL, JRNL27, J25998:gw)

4an

4ao RA3Y 12-JUN-75 16:59 32741 Commands branch for active file handling Location: (HJOURNAL, 32741, 1:w)

440

4401

4ao1 Comments: The cited item contains a commands branch that I have found useful in keeping track of my online files. Enjoy.

4ap RA3Y 12=JUN=75 14:38 32740 Public Service Location: (JOURNAL, JRNL27, J32740:gw)

480

4aq KIRK 9-JUN-75 15:42 32715 Regarding RLL'S 25982 'Indicating a file is being modified' Location: (JOURNAL, JRNL27, J32715:gw)

4ag

4ar CHI 9-JUN-75 02:58 25983 Status of NSW prontend tasks as of 9-June-75 Location: (HJOURNAL, 25983, 1:w)

4ar

4as JBP 7-JUN-75 00:03 25981 petty privacy Location: (JOURNAL, JRNL27, J25981:9w)

4as

4at JBP 6=JUN=75 18:14 25976 Visitors June 9=13 Location: (HJOURNAL, 25976, 1:w)

4at

4au RWW 6-JUN-75 14:42 25974
Recommendation on Configuration and Operation of the ISIC System for ARC
Location: (HJOURNAL, 25974, 1:w)

4au

4av RA3Y 6-JUN-75 15:48 32696 More Comments on Stats on Feedback <32649,> Location: (JOURNAL, JRNL27, J32696:gw)

4av

4aw JBP 6-JUN-75 02:43 25969 Comments on User Productivity Report (32657,) Location: (JOURNAL, JRNL27, J25969:gw)

4aw

4ax RLB2 5=JUN=75 03:12 25964
Current graphics command set.
Location: (HJOURNAL, 25964, 1:w)
\*\*\*\*Note: [ ACTION ] \*\*\*\*\*

4ax

4ay JHB 4-JUN-75 22:07 32668 Some Highlights of SRI Quarterly review, 4-JUN-75 Location: (JOURNAL, JRNL27, J32668:gw)

4ay

4ay1 Comments: A few paragraphs briefly covering Anderson's report.

4ay1

4az JHB 3-JUN-75 21:21 32657
USER PRODUCTIVITY GROUP FINAL REPORT AND RECOMMENDATIONS
Location: (HJOURNAL, 32657, 1:w)
\*\*\*\*\*Note: special attention to suggestions from ARCers\*\*\*\*\*

482

4b@ JOAN 3-JUN-75 14:07 25955 Arc Applications Thursday Meeting Location: (JOURNAL, JRNL27, J25955:gw)

4b@

4ba <oldmail, library>

4ba

5 DIRT library: Documentation: Help, userguides, etc. (recent first)

470

5a DCE 30-JUN-75 16:42 32875 Announcement: Dirk van Nouhuys leaving ARC to become DDPCS Community Nucleator Location: (HJOURNAL, 32875, 1:w)

Sa

5b BEV POOH DVN 30-JUN-75 11:43 26073 Documentation Informal Weekly Report Location: (HJOURNAL, 26073, 1:w)

56

5c &SRI-ARC 30-JUN-75 09:05 32874
A BRIEF GUIDE TO USER PROGRAMS AVAILABLE IN NLS-8
Location: (HJOURNAL, 32874, 1:w)
\*\*\*\*Note: a copy will be mailed to you for your site

notebook\*\*\*\*

5c

5ci Comments: A new user programs subsystem has been brought up at Office-i. It is called LETTER and replaces the former runable program, Letter. A description of the new LETTER and all other user attachable programs is contained in this document which replaces the earlier document of the same name. The new Guide will be available in hardcopy from FEEDBACK and online in the directory USERGUIDES (as well as via the Journal).

501

5d DVN 26-JUN-75 08:39 32834 Beverly Boli Will Become DIRT Coordinator Location: (JOURNAL, JRNL27, J32834:gw)

5 d

5e DVN JHB 26-JUN-75 08:36 32833 Dialog On Change in Command Language in Format Subsystem Location: (HJOURNAL, 32833, 1:w)

5e

5f DVN 24-JUN-75 16:01 26054 DRAFT Format Sample Session Location: (HJOURNAL, 26054, 1:w)

5 f

5g DVN POOH BEV KIRK 23-JUN-75 12:19 26052 Documentation Weekly Report Location: (HJOURNAL, 26052, 1:w)

5 a

5h DVN 18-JUN-75 18:46 26029 Introduction to NLS 8 Glossary Location: (HJOURNAL, 26029, 1:w)

5h

5h1 Comments: Following helpful comments on my draft (gjournal, 25994,) the introduction to the Glossary (userquides, glossary, 1 .t) stands as shown here.

5h1

51 DVN KIRK POOH BEV 16-JUN-75 12:12 26008
NSW Review, Peogress on Sample Sessions, Several items to COM:
Documentation Informal Weekly Report
Location: (HJOURNAL, 26008, 1:w)

51

5j DVN 12-JUN-75 14:06 25994 DRAFT Introduction to NLS 8 Glossary Location: (HJOURNAL, 25994, 1:w)

51

5ji Comments: A couple of weeks ago Jim Biar asked that the introduction to the glossary be expanded to give more information to the user that would help her start ing out. Here is a draft. We are in the stage of trial COM proofs of the body of the glossary so I must ask for responses to this draft by Monday June 16.

511

5k DVN 11-JUN-75 18:43 25991 Cooperation on Works Manager Documentation Location: (JOURNAL, JRNL27, J25991:gw)

5k

51 JHB 10-JUN-75 18:15 32727
Free: the one and only TIP User's Guide (BBN)
Location: (JCURNAL, JRNL27, J32727:gw)
\*\*\*\*\*Note: [ ACTION ] \*\*\*\*\*

51

5m DVN BEV POOH KIRK 10-JUN-75 00:43 25985 documentation weekly report Location: (HJDURNAL, 25985, 1:w)

5 m

5m1 Comments: glossary sent to ddsi, command summary back from printing, demos, job functions, and schedules discussed ... (among other tings)

5m1

5n BEV 6-JUN-75 14:38 25973
Final Final Version of Editing Sample Session II
Location: (HJOURNAL, 25973, 1:w)
\*\*\*\*\*Note: [ ACTION ] \*\*\*\*\*

5n

5ni comments: This journal item supercedes the earlier one on Editing Sample Session II. A spacing problem slipped by in the first Final Versioon. Dee--Would you please put this version in the Dirt Notebook, rather than the other. (Should be NLS;7 rather than NLS;6.) Thanks.

5n1

50 BEV 6-JUN-75 13:21 25972 Final draft of "Help Services Sample Session" Location: (HJOURNAL, 25972, 1:w) \*\*\*\*Note: L ACTION ] \*\*\*\*\*

50

501 Comments: This is the final revision of the Help Services

Sample Session. Editing suggestions welcome. DeeWould you please put this in the Dirt Notebook. Thank you. Bev	501
5p BEV 6-JUN-75 13:06 25971	
Final Draft of 'Editing Sample Session II'	
Location: (HJOURNAL, 25971, 1:w)	
*****Note: [ ACTION ] ***** Superceded by <25973,>	5p
	26
5p1 Comments: This is the final revision of Editing Sample Session II. Any comments or suggestions for editing changes would be welcome. DeeWould you please put this in the DIRT Notebook. Thanks. Bev	5p1
5g DVN 6-JUN-75 01:01 25968	
Complete Draft of Glossary Goes to DDSI	
Location: (JOURNAL, JRNL27, J25968:gw)	
	59
5r DVN 5-JUN-75 11:52 25965	
Apology for Seeming Prod in <25957,>	
Location: (JOURNAL, JRNL27, J25965:gw)	
	5r
5s DVN BEV 3-JUN-75 15:33 25957	
Looking for Input on NSW Documentation	
Location: (JOURNAL, JRNL27, J25957:gw)	58
5t <oldmail,dirt:etb></oldmail,dirt:etb>	5t
US Library: User Services (most recent first):	6
6a SGR RH 2=JUL=75 15:25 32888	
USER SERVICES REPORT: COURSES AT BELL, MIT, and ARPA-NSW (Pentagon)	
Location: (HJOURNAL, 32888, 1:W)	
	6a
6b RA3Y 1-JUL-75 09:21 32878	
Charge numbers	
Location: (JOURNAL, JRNL27, J32878:gw)	
****Note: [ ACTION ] ****	6b
6b1 Comments: We now have a contract with RADC, so contingency number 9259 is going away. Here are the new project numbers for clients handled through the RADC contract. Note that the new contract number is !!!4395!!! and that all subnumbers are	
Hew confeder nampel TP :::4332:1: and ener arr ampunapels ate	

the same. Please begin charging all work for NSRDC, RADC, BRL,

ARPA, MIT-SEISMIC, ARPA-NSW and NSA to 4395 subnumbers rather than to 9259 subnumbers. This change is effective immediately. For work that benefits all clients about equally, charge to 3074. Bell Canada is 3075, and Hudson is 3619. For SRI work charge 930D61-329(w.o.). For ETS work, charge contingency project 9260.

Please refer questions to Ra3y panko (RA3y) ext. 4213

6b1

6b2 Message:

6b2

6b2a Here are old and new charge numbers: Dld No. New No. Organization 9259=2 4395-2 NSRDC RADC 9259-3 4395-3 BRL 9259-4 4395-4 ARPA 9259-5 4395=5 9259-6 4395-6 MIT-SEISMIC 9259-8 ARPA-NSW 4395=8 NSA 9259=9 4395=9

6b2a

6c PKA 30-JUN-75 17:54 32877 Weekly report--June 23-27 Location: (HJOURNAL, 32877, 1:w)

60

6d RLL 25-JUN-75 00:30 26058
Response to LINK vs Addresses <32811,> of JHB
Location: (JCURNAL, JRNL27, J26058:gw)

6 d

6e JHB 23-JUN-75 18:06 32811 Clarification of Links vs. Addresses in TNLS training Location: (HJOURNAL, 32811, 1:w) \*\*\*\*Note: [ ACTION ] \*\*\*\*\*

6e

6f JhB 18-JUN-75 19:18 32783
Response to 26007 on 32695 -- Viewgraphs for TNLS Instruction Location: (JOURNAL, JRNL27, J32783:gw)
\*\*\*\*\*Note: [ ACTION ] \*\*\*\*\*

6f

6g PKA 17-JUN-75 11:26 32761 USER SERVICES WEEKLY REPORT: JUNE 9-13 Location: (HJOURNAL, 32761, 1:w)

60

6h PUDH 16-JUN-75 12:02 26007 Response to 32695 Viewgraphs for User Services

Location: (HJOURNAL, 26007, 1:W) *****Note: [ ACTION ] *****	6h
61 PAW2 16-JUN-75 09:47 32755 weekly report	
Location: (HJOURNAL, 32755, 1:W)	61
6j PAW2 SGR RH PKA 13-JUN-75 14:10 32750 weekly report	
Location: (HJOURNAL, 32750, 1:w)	6 j
6k RA3Y 10-JUN-75 08:13 32721 Comment on FKA's Trip Report 32689,	
Location: (JOURNAL, JRNL27, J32721:gw)	6k
61 SGR PKA PAW2 RH 6=JUN=75 17:43 32697 User Services Report for Week of 6/2/75 Location: (HJOURNAL, 32697, 1:w)	
Bookerson, Chosenar, Stay, 1117	61
6m SGR 6-JUN-75 13:41 32695 Proposed Viewgraphs For User Services Location: (HJOURNAL, 32695, 1:w)	
	6 m
6m1 comments: This is submitted for consideratin by JHB. User Services will provide personpower if needed.	6m1
6n SGR 6-JUN-75 13:03 32693 Some Aspects of the ARPA Application needing thought	
Location: (HJOURNAL, 32693, 1:W)	6n
6n1 Comments: Any suggestions gladly accepted	6n1
60 SGR 6-JUN-75 12:22 32691 Response to (32584,) - Comments on Last tripreport Location: (JOURNAL, JRNL27, J32691:gw)	
Location: (Journal, DRadzi, Jazosi.dw)	60
6p PKA 6=JUN=75 09:32 32689 trip report	
Location: (HJOURNAL, 32689, 1:W)	6p

6q JHB 4-JUN-75 23:03 32608
THE INTERMEDIATE TNLS-8 COURSE OUTLINE Location: (HJOURNAL, 32608, 1:w)

69

6q1 Comments: This the second release of the third level TNLS course including significant revisions. It is intended to be given by an experienced trainer to users who have completed courses I and II and have had experience with the system at level II. The Programs and Useroptions subsystems are introduced, Output processing is covered, and the Base and Sendmail subsystems are expanded. Printed copies available from Trainers, Feedback or JHB.

691

6r SGR 5-JUN-75 07:35 32671
Some Feedback Statistics for March = Would you like more?
Location: (HJOURNAL, 32671, 1:W)
\*\*\*\*Note: [ ACTION ] \*\*\*\*\*

6T

65 JHB 3-JUN-75 22:27 32609 BASIC TNLS-8 COURSE OUTLINE Location: (HJOURNAL, 32609, 1:w)

65

6si Comments: This is the seventh release of the first course in NLS with refinements. It was designed by ARC to be minimally complex and yet contain the commands necessary to enable a user to enter, edit, and 'mail' text. Course completion time ranges from 1 to 2 days with a qualified trainer. Printed copies are available from Trainers, Feedback, or JHB.

651

6t PKA 3=JUN=75 11:37 32649 Statistical Summary of March Feedback Location: (HJOURNAL, 32649, 1:w)

6t

6u DVN KIRK POOH BEV 2-JUN-75 00:34 25947
Progress on Final Report, Glossary, NSW Help Data Bases Limited by Lack of Clarical Workers: Documenation Informal Weekly Report Location: (HJOURNAL, 25947, 1:w)
\*\*\*\*Note: [ INFO-ONLY ] \*\*\*\*\*

6 U

6v (oldmail, us)

6 V

7 Author: Journal documents authored

. 7

7a JMB 10-JUL-75 09:42 32938
Does anyone else have this problem when using 0-1 DNLS frm ELF or AI?
Location: (JOURNAL, JRNL27, J32938:gw)
\*\*\*\*\*Note: Author Copy\*\*\*\*\*

7a

7a1 Message:

7a1

7ala Whenever I Goto Tenex from DNLS, my terminal type is somehow changed to #7 (TI) from #11 (LP). When I quit back to NLS, I do get DNLS, but the terminal type change seems to cause errors upon using the tty window (like with the slash in an address). This happens consistently when I use 0-1 DNLS here at ARC; does this happen to anyone else?

7a1a

7b JMB 8-JUL-75 15:01 32933 elephant Meeting Location: (JOURNAL, JRNL27, J32933:gw) \*\*\*\*\*Note: Author Copy\*\*\*\*\*

7b1 Message:

7b

7bla Contradictions have been alledged in our description of the elephant.

7b1a

7b1b The review meeting will be at 3:00 in the project room.

7b1b

7bic A recursive redefinition plan should emerge.

7b1c

7c JMB 7-JUL-75 14:50 32916
'NLS system error' again and again
Location: (JOURNAL, JRNL27, J32916:gw)
\*\*\*\*Note: Author Copy\*\*\*\*

70

7d JMB 7-JUL-75 14:49 32915 BUG: the slash / doesn't work Location: (JOURNAL, JRNL27, J32915:gw) \*\*\*\*\*Note: Author Copy\*\*\*\*\*

7d

7e JMB 27-JUN-75 15:14 32848
Re: NDM's <32832,> Experimental Sort Command Location: (JOURNAL, JRNL27, J32848:gw)
\*\*\*\*\*Note: Author Copy\*\*\*\*\*

7 e

7f JMB 27-JUN-75 15:02 32847
Finding out about new editions of documentation Location: (JOURNAL, JRNL27, J32847:gw)
\*\*\*\*\*Note: Author Copy\*\*\*\*\*

7 £

7g JMB 27-JUN-75 14:49 32846
Can we try again for that meeting on Susan's proposed Viewgraphs (32695,)??
Location: (JCURNAL, JRNL27, J32846:gw)
\*\*\*\*\*Note: Author Copy\*\*\*\*\*

7 a

7h JMB 24-JUN-75 15:04 32821 Bug report Location: (JCURNAL, JRNL27, J32821:gw) \*\*\*\*\*Note: Author Copy\*\*\*\*\*

7 h

71 JMB 24-JUN-75 14:56 32820
More on weekly reports
Location: (JOURNAL, JRNL27, J32820:gw)
\*\*\*\*\*Note: Author Copy\*\*\*\*

71

7j JMB 24-JUN-75 14:54 32819
An informal request
Location: (JOURNAL, JRNL27, J32819:gw)
\*\*\*\*\*Note: Author Copy\*\*\*\*

75

7k <oldmail, author>

7K

8 Directory:

6

test

(J32948) 11-JUL-75 10:38;;;; Title: Author(s): Jeanne M. Beck/JMB; Distribution: /JMB( [ ACTION ] ); Sub-Collections: SRI-ARC; Clerk: JMB; Origin: < BECK, JMB.NLS;119, >, 10-JUL-75 08:44 JMB;;;;preassigned numbers: 24833###;

va	rio	Is co	o presents the current sizes in decimal words of the mponents of pFS-10. This breakdown does not include the e environment or writable storage.	1
2	155	30 To	tal	
	2a	184	Global catchphrases	28
	26	220	Main program	21:
	20	230	Record definitions	20
	2d	395	Main programs for various DPS contexts	20
	2 e	509	processor operation processing routines	20
	2 f	778	Incoming message processing routines	21
	2g	790	Read-only tables	29
		291	5 Processor operation dispatch table	291
		292	18 IPC dispatch table	2g2
		293	24 Message definitions	2g
		294	28 Data structure definitions	29
		2g5	100 System procedure definitions	295
		296	100 User call definitions	296
		2g7	105 Table definitions	297
		298	210 System call definitions	2g8
	2h	1555	Incoming system procedure call processing routines	21
		2h1	116 Channels	2h
		2h2	210 Procedures	2h2
		2h3	309 Packages	2h
		2h4	374 Processes	2h4
		2h5	546 Data stores	2h
	21	2895	System call processing routines	2:

	211 64	Packages	211
	212 99	Data stores	212
	213 145	Locks	213
	214 172	Subprocesses	214
	215 265	Events	215
	216 322	Channels	216
	217 437	Processors	217
	218 455	Processes	218
	219 936	Procedures	219
25	7974 Sup	port subroutines	25
	2j1 820	Operating system interface	211
	212 2221	Internal bookkeeping	2 1 2
	2j2a	85 Event management	2j2a
	2j2b	102 Error handling	2j2b
	2j2c	215 Context management	2520
	2526	226 Table searching	2520
	2j2e	234 Storage management	2j2e
	2j2f	634 Gueue and table management	2j2f
	2j2g etc.)	725 Table entry appendages (initialize, terminate,	2129
	213 4933	Communication	213
	2j3a calli	580 Message transmission; remote system procedure ng	2j3a
	2ქ3ь	738 Resource control (locking)	2 1 3 5
	213c	934 Inter-process communication	2 j 3 c
	24	2-1 45 Inter-host (skeleton only)	21301

## Current DPS-10 Storage Breakdown

2j3c2	410 Intra-host	21302
2j3c3	479 Common	21303
2138 1222	Data structure conversion	2530
2j3e 1459	Processor address space manipulation	2j3e

(J32949) 11-JUL-75 13:00;;;; Title: Author(s): James E. (Jim)
White/JEW; Distribution: /SRI-ARC([INFO-ONLY]]); Sub-Collections:
SRI-ARC; Clerk: JEW; Origin: < WHITE, DPSIZE.NLS;3, >, 11-JUL-75
13:00 JEW;;;;####;

1 32949 Distribution
1a J. D. Hopper, Charles H. Irby, Harvey G. Lehtman, James C. Norton,
Jeffrey C. Feters, Dirk H. Van Nounuys, Kenneth E. (Ken) Victor,
Richard W. Watson, Don I. Andrews,
1b Andy Poggio, David L. Retz, Laura J. Metzger, Karolyn J. Martin,
Jan A. Cornish, Larry L. Garlick, Priscilla A. Wold, Pamela K. Allen,
Delorse M. Brooks, Beverly Boli, Rita Hysmith, Log Augmentation,
Joseph L. Ehardt, Raymond R. Panko, Susan Gail Roetter, Robert Louis
Belleville, Rene C. Ocnoa, Ann Weinberg, Joan Hamilton, Adrian C.
McGinnis, Robert S. Ratner, David S. Maynard, Robert N. Lieberman,
Sandy L. Johnson, James H. Bair, Jeanne M. Leavitt, Rodney A.
Bondurant, Jeanne M. Beck, Marcia L. Keeney, Elizabeth K. Michael,
Jonathan B. Postel, Elizabeth J. Feinler, Kirk E. Kelley, N. Dean
Meyer, James E. (Jim) White, Douglas C. Engelbart, Martin E. Hardy

Lots of comments which I'll take out once I understand this. I finally follow your reasoning and I hope this backs me up on that. These RETURNS still bother me. A FALSE makes CML back up, calling that and previous procedures in backup mode but we don't habe a backup parsemode off the CASE statement in this procedure. And if a TRUE is returned, how does the CML pass back to the procedure for further processing?

1	(ch	eckwf) PROCEDURE % check if workfile empty %	1
	1 a	%FORMALS%	1a
		1a1 (result, %result record%	1a1
		1a2 parsemode, %parsing, backup, cleanup%	1a2
		1a3 pass); % if pass is TRUE, return TRUE only if file is full, if pass is FALSE return TRUE only if file is empty%	1a3
	16	LOCAL TEXT POINTER cptr1, cptr2;	16
	10	LOCAL STRING CStr[100] ;	10
	10	REF result, pass;	1d
	1 e	CASE parsemode OF	1e
		1el = parsing:	1 e 1
		ieia BEGIN %determine if file has anything past origin statement%	1e1a
		<pre>ieib IF (cptri _ getsub(wfstid) ) = wfstid THEN %workfile empty%</pre>	1e1b
		1e1b1 BEGIN	1e1b1
		<pre>ieib2 IF pass=TRUE THEN %user expected a full file, notify him that file is empty%</pre>	1e1b2
		1e1b2a BEGIN	le1b2a
		<pre>ie1b2b *cstr* _ "No effort in progress: Create or Modify before specifying fields"; %error message string%</pre>	le1b2b
		1e1b2c dismes (1, scstr);	le1b2c
		1e1b2d END;	le1b2d
		1e1b3 RETURN(IF pass=TRUE THEN FALSE ELSE &result);	1e1b3
		1e1b4 %if user expected something in file, i.e. an INTERROGATE, then at this point he would have been kicked out (is that literally correct) of the command and must	tatha

1e1b5 END;	1e1b5
leic %file is full, check for validity%	1e1c
1e1d IF (FIND SF(cptr1) "(J" *cptr1 8(LD) *cptr2 ") ") THEN %something valid in work file%	1e1d
1eld1 BEGIN	1e1d1
1e1d2 IF pass=FALSE THEN %user expected empty file, notify him which effort is underway%	1e1d2
1e1d2a BEGIN	1e1d2a
<pre>1e1d2b *cstr* _ cptr1 cptr2, " in progress: Update or Abort before new work"; %error message string%</pre>	1e1d2b
1e1d2c dismes (1, scstr);	1e1d2c
1e1d2d END;	1e1d2d
1e1d3 RETURN(IF pass=TRUE THEN & result ELSE FALSE); %if user expected a valid, full workfile, he has it and true is returned; if he expected an empty file, FALSE is returned and he will be kicked out of the command and must do an Update or Abort%	1e1d3
1eld4 END;	1e1d4
leie cleanwf(); %cleanup work file% %shouldn't this statement be an ELSE part of the IF testing for something valid: in other words garbage is in the file and will be cleaned out. But as I read this, it seems that cleanwf will be executed everytime. I think I don't understand where the CML starts up again in this branch after a RETURN is made%	1e1e
1elf IF pass=TRUE THEN %file was expected to be full but it has been wiped clean: notify user that this has happened and return FALSE so that he goes to another command%	1e1f
1e1f1 BEGIN	1e1f1
<pre>1e1f2 *cstr* = "No effort in progress: Create or Modify before specifying fields"; %error message string%</pre>	1e1f2
1e1f3 dismes (1, scstr);	1e1f3
1e1f4 END;	1e1f4

## comments for checkwf

	1elg RETURN(IF pass=TRUE THEN FALSE ELSE &result);	101
	1e1h END;	1e11
	1e2 ENDCASE;	1e:
1 f	RETURN(&result);	1
19	END.	10

comments for checkwf

(J32950) 11-JUL-75 14:11;;;; Title: Author(s): Joe P. Cavano/JPC; Distribution: /NDM([ACTION]); Sub-Collections: RADC; Clerk: JPC;

TNLS-8 PRIMER

SHI-ARC

11 July 75

Augmentation Research Center STANFORD RESEARCH INSTITUTE MENLO PARK, CALIFORNIA 94025

## INTRODUCTION

NLS or online system is the name of the computer system you will be using. Online means you receive immediate feedback about what you have just typed at your terminal.

NLS has facilities to let you do almost everything you need with text: compose it; edit it; send it to (and receive it from) other persons; file it in one or more categories; cite and easily obtain documents; search for documents by author and subject; search in documents by word or phrase; and print in practically any format.

This primer demonstrates the commands used for writing a memo, editing it, and distributing it to other people. This process is explained for TNLS, which is the typewriter version of NLS. You will find it useful to be at a terminal, typing in the commands and text as the primer describes them.

Although this primer describes specific functions, we add notes at each step which generalize the operation. Given this primer as a model, the inexperienced user should be able to perform any of the operations described here and refer to other NLS documentation for more information about the system.

Throughout this primer, we spell out the sequence of keys you strike to make something happen and separately show what will appear on your terminal in response. Keys that do not print, such as carriage return and escape (or "altmode" on some terminals) are named inside angle brackets, e.g. <CR>, <ESC>. <> represents a space. The notation for control characters is <CTRL-(some character)>, for example: <CTRL-C>. The control key (CTRL) is used like the shift key. You hold it down while you type the letter that is after the hyphen.

OOPS...If you type an incorrect letter or number, just type <CTRL-A> or your backspace key immediately following your error and then you can type the correct character.

Are you stuck?? Confused?? Don't know what to type next??

Typing "?" will show you the next possible alternatives.

Typing <Ch> will put you where you were before you typed "?"

Typing <CThL-Q> will provide you with information and explanations about NLS.

Typing <CThL-X> will put you where you were before you typed <CTRL-Q>.

For more about getting information via <CTRL-Q> see the last

what is the meaning of <Ch>?

section of this primer.

- A. County Registrar
- B. Cute keindeer
- C. Carriage keturn

The correct choice is C. When you see (Ch), use the return or carriage return key on your keyboard.

## INSTRUCTION

Most users of this primer will reach NLS through the ARPA Network. For the current connection procedures at your site, see someone knowledgeable in NLS. When you have made your connection you will see "TENEX 1.##.## SITENAME 1.##.##" which is called a "header," and the an "@" which is a signal called a herald. The herald tells you that TENEX (a system within the computer that assigns service to users) is waiting for you to type.

1.	1. First, to identify yourself to the TENEX	system at Office-1:
	If you type, you sho	ould see:
		TTY # DATE TIME
	If you do not know a DIRECTORYNAME (Sometimes called a USERNAME) or Password, ask the person in your organization wh usually helps people with NLS, or call (415) 326-6200 extension 3630 between 8am and 5pm Pacific time.  After the job information has been typed by the system, your login is completed and the TENEX herald "@" will again print at the left margin; it is again your turn to type:	
2.	2. To enter the TNLS system:	
	If you type, you sh	ould see:
	nls <ch> @nls BASE C:</ch>	
If you are using a group directory, you will be a an ident after you type "nls <cr>". Do this and identically."</cr>		will be asked to type this and follow with
	when you enter NLS, it prints "BASE" wh	ich is the herald of

Note: If you type <CTRL-A> enough times to back up over all the characters you've typed after BASE C:, the BASE C: will print out again. Then you may begin again.

its central subsystem called Base.

<ol> <li>Since you are going to w file (or workspace) in which that you can call it back in</li> </ol>	rite a memo, you will need an empty to put it. You give the file a name so future NLS sessions.
If you type,	you should see:
<>crfmemo <cñ></cñ>	BASE C: Create C: File T: memo < DIRECTORYNAME, MEMO, NLS; 1, > BASE C:
command word by prompti	o do something, it asks you for a ng you with a C:, and where it expects t, it prompts you with T:.
typed in the first lett less often, you have to three letters. This is of recognition are also	letes a command word after you have er. In the case of some comands used type a space and then one, two, or called Terse recognition. Other modes offered. To find out about them, type mmand recognition," and a <ch>.</ch>
he up to 29 letters and	empty file named MEMO. Filenames may /or digits, and must begin with a not include spaces, commas, or
file (or if you create any other stored file)	without finishing your work on this another file), you can retrieve it (or in TNLS by using the command, Load TO DO THIS NOW, because your file named us created it, but the command is shown se:
	you should see:
lfmemo <ch></ch>	BASE C: Load C: File T: memo

Now that you have created MEMO, the system has already inserted some information at the file's beginning, i.e., at the statement numbered 0. Statement 0 identifies the file MEMO and is generally unused by you except to cite the beginning of the file. To see the statement you are currently at, i.e., statement 0, type: \

The response will be:

BASE C: \ < DIRECTORYNAME, MEMO.NLS;1, >, DATE TIME IDENT ;;;; BASE C:

5. You begin writing your memo by indicating you are going to insert a statement into your file MEMO starting after statement 0, and then by actually typing in some text. Statements are comparable to paragraphs of text. The system will automatically move the print head back when it runs out of room at the end of a line. You do not need a carriage return at the end of each line. The lines may not be the same as in the examples. Note intentional typogoofical errors for future correction.

If you type,

you should see:

isO<CH> (Cn) description of the of the elephant. elephant. <Ch> BASE C:

BASE C: Insert C: Statement (to follow) A: 0 L: Contradictions have T: Contradictions have been been alledged in our alledged in our description

> Notice that you are prompted for specific types of input, in this case A: asks you for an address, T: for typein. An address specifies a point in a file. In this case, you gave an address of "after statement O" because that was where you wanted your new statement to begin. If you were creating a file that used an outline structure, L: would prompt you to specify the level in the outine where you wanted to put each statement. In this primer you can ignore L: by typing a (CH).

After this command is executed, the statement "Contradictions have been... ' is inserted after statement 0, i.e., at the beginning of the file, and assigned the statement number 1.

6.	As you enter sta	temen	ts into	the f	ile,	you will	periodically
	to check how the						
	file by printing ently, type: \	it.	To see	only	the s	statement	you are at

The response will be:

BASE C: \
1 Contradictions have been alledged in our description of the elephant.
BASE C:

Later on when there are more statements in your file you can see more by using the Print Rest command, described in step 9.

7. Step 5 showed you how to enter one statement; more commonly, you will want to enter several statements, one after the other. Instead of repeating the Insert Statement command for each new statement, type the character  $\langle \text{CTRL-E} \rangle$  at the end of your first statement (instead of  $\langle \text{CR} \rangle$ ). This tells the system to continue the Insert Statement command. We call this insert mode. Once you get in the insert mode by typing the  $\langle \text{CTRL-E} \rangle$ , you end each statement typed in with a  $\langle \text{CR} \rangle$ , and then (after a  $\langle \text{CR} \rangle$  for the L:) type in another statement. Follow your last statement with a  $\langle \text{CR} \rangle$  and a  $\langle \text{CTRL-X} \rangle$ . The  $\langle \text{CTRL-X} \rangle$  takes you out of the insert mode. To add (after statement 1) three more statements to your file, completing the rough draft of your memo:

If you type,

you should see:

is1<CR>
<CR>
The review meeting will
be at 3:00<CTRL-E>
<CR>
Only wise, blind men
should attend.<CR>
<CR>
A recurcive redefinition
plan should imerge.<CR>
<CTRL-X>

BASE C: Insert C: Statement (to follow) A: 1 L: T: The review meeting will be at 3:00<^E>

T: Only wise, blind men should attend.

CCR>
A recurcive redefinition
plan should imerge.
CCTRL-X>
L:
T: A recurcive redefinition
\*\*plan should imerge.
L:
BASE C:

check it for content of the Rest command shatement to the beginning of the command share command sha	now completed a rough draft of your memo and want to impleteness, typing errors, etc. To review the file you can use the Print Rest command. The Print nown in Step 9 starts printing from the current see end of the file, so you should first return to the file before you use it. (Other versions of the are described below). The command for going to the you wrote (statement 1) is:
If you ty	you should see:
ja1 <cr></cr>	BASE C: Jump (to) C: Address A: 1 BASE C:
memo from where	ne Print Rest command to print the content of your e you are to the end of your file.
If you ty	ype, you should see:
pr <ch></ch>	BASE C: Print C: Rest OK: 1 Contradictions have been alledged in our description of the elephant. 2 The review meeting will be at 3:00 3 Only wise, blind men should attend. 4 A recurcive redefinition plan should imerge. BASE C:
delete stateme	
If you	type, you should see:
ds3 <ch></ch>	BASE C: Delete C: Statement (at) A: 3 OK: BASE C:

11. You may also decide do so you use a command	e to add text to the end of statement 2. To similar to the Insert Statement command.
If you type,	you should see:
it2<>+e <cr> &lt;&gt;in the project room.<cr></cr></cr>	BASE C: Insert C: Text (to follow) A: 2 +e T: in the project room. BASE C:

The significant difference in this command from the way you used to insert statements is that you specify where in the statement you want the text to go. The "+e" after the statement number tells the system to insert the text at the end of that statement. Notice also that you use the command word Text instead of Statement; thus the insertion becomes part of an existing statement rather than a new statement.

Note also that our example directs you to type a space as the first character of the text you are inserting; that space avoids having "...3:00in the..." appear in the file.

12. If you want to insert text elsewhere in the statement you must specify exactly where. The easiest way to do so is to cite the place of insertion by content.

If you type, you should see:

it2<>"3:00"<Ch> BASE C: Insert C: Text (to follow) A: 2 "3:00"

T: sharp
BASE C:

The quotation marks indicate that you use quotes when you specify content in an Address. Note that the specific within-statement location follows the statement number. The system "reads" addresses from left to right.

13. If you strike \ after "BASE C:" appears, you can look at the statement you have just edited, statement 2, to check the changes.

The response			 	 	
2 The review BASE C:					

14. At this point you are ready to check your file for minor errors. You may print it again as you did in Steps 8 and 9 with Jump to Address and Print kest, or you may use one command (Print File, shown below) which prints the whole file, beginning with Statement 0, no matter where you were:

If you type, you should see:

pf < CR>

BASE C: Print C: File OK:

< DIR, MEMO.NLS;1, >, DATE TIME IDENT;;;
1 Contradictions have been alledged in our
description of the elephant.
2 The review meeting will be at 3:00 sharp
in the project room.
3 A recurcive redefinition plan should
imerge.
BASE C:

Note that when you deleted the old statement 3, the system renumbered the remaining statement.

15. The most convenient way to correct the kind of typographical errors found in this memo is with the Substitute Text command. This command asks you for the correct text and then the text you want replaced (or substituted for). You may specify only one change or several without repeating the command. Statement 3 contains two misspellings:

uf (Ch)

Substitutions made: 2 BASE C: Use this command cautiously. You must eliminate ambiguities and avoid causing the system to make substitutions that you don't want. For example in the first substitution if you had specified "e" for "i" instead of "eme" for "ime", the system would have changed ALL occurrences of the the letter "i". Make the text string unique to avoid surprises. 16. To check statement 3 strike \ when "BASE C:" appears: The response should look like: 3 A recursive redefinition plan should emerge. BASE C: 17. The memo is finished and you want to make a fresh version of your file that consolidates all your changes. you should see: If you type,

BASE C: Update C: File Ok:/C:

< DIRECTORYNAME, MEMO.NLS;2, >

BASE C:

. . .

18. A short Sendmail session is shown here to enable you to send MEMO to a specific distribution list. NLS has a very extensive system for sending, distributing, cataloging, indexing, and storing documents (files). However, most of these steps are done automatically (and invisibly) for you through the Sendmail system. You begin by going to a subsystem in NLS called Sendmail. You command the system to interrogate you for the basic information most necessary for distributing the item. In response, you indicate to whom you want it distributed and for what purposes, give your memo the title Elephant Meeting, and specify that you want to send the file you are in. You may choose to check the information collected before deciding to send the item. Finally, you return to the Base subsystem.

you should see: If you type, BASE C: Goto (subsystem) C: Sendmail OK: gs<Ch> SEND C: Interrogate OK: i(CR> jnb,sgr<Ch> (distribute for action to:) T: jhb,sgr (distribute for information-only to:) T: blephant Meeting<Ch> (title:) T: Elephant Meeting (type of source:) C: File A: f (CR> (show status?) Y/N: TITLE: Elephant Meeting AUTHOR(S): MYIDENT DISTRIBUTE FOR ACTION TO: jhb sgr FILE: < DIR, MEMO.NLS;2, >, DATE TIME IDENT ; (send the mail now?) Y/N: y Completed SEND C: Quit OK/C: q<CH> BASE C:

To name the recipents, you list their IDENTS. An IDENT is a string of characters that identifies a person. For each distribution list, you may type any number of IDENTS; they must be separated by spaces or commas.

19. The file you just composed in NLS has been submitted to the Journal, and a copy has been made for cataloging and future reference purposes. You will also receive an author copy or citation in your mailbox. It is thus not necessary (although permissable) for you to maintain your duplicate versions of the file. To delete your file:

if you type, dfmemo <ch> <ch></ch></ch>	you should see: BASE C: Delete C: File T: memo OK: Deleted Files are: < DIRECTORYNAME, MEMO.NLS;2, > < DIRECTORYNAME, MEMO.NLS;1, > BASE C:
20. Your work session	is over and you leave the system:
If you type,	you should see: BASE C: Logout OK: TERMINATED JOB #, USER DIRECTORYNAME, ACCT ###, TTY # AT DATE TIME USED # in #

w . . . . .

# HERE IS SOME TILS COMMAND VOCABULARY YOU HAVE USED AND SOME EASY EXTENSIONS TO IT.

#### More about Help

Typing <CTAL-Q> will give you information based on what you were doing before you typed <CTRL-Q>. Then it will prompt you "T/\_:". For more information, type in any term you see or the number of one of the "menu" of subjects that appears below each explanation and then type a <Ck>.

If you type \_ you will be able to return to the last explanation you were reading. If you say yes by typing "y", you will see this last explanation again. If you say no by typing "n", you will be given the chance to see the explanation previous to that, and so on.

### File Manipulation Commands

Create File - creates a new file

Update File - makes a fresh copy of the file with recent changes

Load File - calls up a previously saved file <

#### A Few Useful Control Characters:

<CTRL-A> deletes the last character you typed. Where you have typed one letter for an NLS command word, <CTRL-A> will back up over that word.

<CTRL-Q> gives you explanations about what you were doing and allows you to ask for the meanings of other terms.

<CTRL-E> allows you to continue to insert statements.

## Try also:

<CTRL-X> aborts a whole command, before you have confirmed it by typing <Ck>. In NLS, "BASE C:" will appear again, allowing you to begin the command again. <CTRL-X> also aborts insert mode.

<CTHL-W> deletes the last word you have typed in.

<CTRL-0> stops the printing in any Print command.

<CTRL-S> prints out a succinct description of your command.

Creating Text

Insert Statement

Insert Text

Iry Insert Word - the text you type is inserted after the word you address, and the system arranges spacing around it for a word. In this command, you specify the word for your new word to follow by addressing any of its characters.

Editing

Delete statement

Try Delete Text - it requires that you specify the beginning and ending locations of the text you want deleted.

Try Delete Word - you only have to specify one location anywhere in the word you want deleted and spaces, periods, commas, etc. are handled appropriately.

moving Around In The File

Jump to A: ADDRESS(CR) - moves you to the address you supply for ADDRESS.

The ways you have learned to address are:

whole statements by numbers;

within statements by "+e" for end of statement, and by content "text", which searches for text in the remainder of the file and if found moves you to the last character of the text you specify.

Seeing Your File

\ - prints the current statement

Try <LF> to print the next statement (<LF> is the Line Feed or LF key on your terminal).

TNLS-8 Primer

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Print File - prints your whole file, beginning with statement 0.

Print Rest - prints from your current statement to the end of the file.

Try Print Statement - it is similar to the "\" command used in Step 6 except that it allows you to specify the address of the single statement to be printed and (optionally) certain view control codes.

Sending Your File To Other Persons

Goto Subsystem Sendmail

Interrogate - asks you six questions needed to send a piece of mail.

Try the individual commands in Sendmail:

(Instead of using Interrogate, or if the Show Status info shows that you've made a mistake, you may use individual commands for each piece of information about your item. To correct a mistake made with Interrogate, just give the command for the specification you want to change.)

File - sends this file.

Message - sends a short impromptu message you type in.

Statement - allows you to send any individual statement you have already composed, by addressing it.

Title - gives your item a title

Distribute for Action--specifies the recipient(s) and that you expect some action.

Distribute for Information -- specifies recipient(s) for information purposes.

Show Status - types out the specifications collected so far.

Send - You specify when you're ready to send the mail.

Entering/Leaving NLS and TENEX

Login - The first instruction you give TENEX is your directory name and password; this gets you access to TENEX and your files.

NLS - calls up NLS from Tenex

Goto - To go from one subsystem to another in NLS

Logout - To leave NLS and TENEX

CML/L-10 Can be Fun (even if it doesn't work the first time)

My first attempt a CML/L-10 programming not only compiled, but executed flawlessly! I have a small problem with cinssta and pointers which caused the statements to be inserted in reverse order. It should only take me a couple of months to resolve. Hope you have as good luck Stoney

# DLS 11-JUL-75 16:58 32955

CML/L-10 Can be Fun (even if it doesn't work the first time)

1	< STONE, TEST.NLS;1, >, 11-JUL-75 16:43 DLS ;;;;directives	1
	1a Duane L. Stone Information Sciences Section Information Processing Branch	1 a
	1b RADC/isim isi is IN TURN	11:
	1c First test of the memo subsystem	10
	16 ISIM/3857 13 JUL 75	10
	ie This is statement 1 in the original file	1 e
	1f This is statement 2 in the original file	1 f
	1g This is statement 3 in the original file	10

CML/L=10 Can be Fun (even if it doesn't work the first time)

(J32955) 11-JUL-75 16:58;;; Title: Author(s): Duane L. Stone/DLS; Distribution: /JPC([INFO-ONLY]) FSL([INFO-ONLY]); Sub-Collections: RADC; Clerk: DLS;

This is a test message

1 This is a message to be sent for test of the journal mail system. We're sending it to paw2 and .allen with ident pka. This is the end.

(J32956) 11-JUL-75 17:12;;;; Title: Author(s): David L. Retz/DLR; Distribution: /DLR([ACTION]) PKA([INFO-ONLY]); Sub-Collections: SRI-ARC; Clerk: PAW2;

Towards an RADC MEMO Program

print plex 1 of this file if you don't have an IMLAC...and you will see statements and directives wonderously and automatically inserted into a test memo file. I stil need to deal with addressee, two line subjects, indentation and numbering of statements and attachments...but its a start. Told you I'd have one by Monday, Ed!!

Towards an RADC MEMD Program

1 < STONE, TEST.NLS;1, >, 11-JUL-75 16:43 DLS ;;;

4

ISIM/X3857		13 JUL 75	1a
A Test of the Memo	Program		1b
RADC/ISIM ISI ISM			
PMRB IN TURN			10
This is statement	1 in the original	l file	1 d
This is statement	2 in the original	l file	1e
This is statement	3 in the original	l file	1 f

DUANE L. STONE Information Sciences Section Information Processing Branch

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Towards an RADC MEMO Program

(J32957) 11-JUL-75 21:46;;; Title: Author(s): puane L. Stone/pLS; Distribution: /RJC([INFO-ONLY]) EJK([INFO-ONLY]) JPC([INFO-ONLY]); Sub-Collections: RADC; Clerk: DLS;

Viewspec Y - Can we do a simple bug fix?

I I believe that viewspec y is important to our users, who work with documents and who probably want to have a space between statements. On displays, viewspec y does not work properly when edits are made. Specifically, when an edit makes a statement a line shorter, the residual line is not blanked, making the screen exceptionally difficult to read. Would it be possible to make a brief change in viewspec y, so that blanking will take place properly?

A

Viewspec Y - Can we do a simple bug fix?

(J32959) 13-JUL-75 13:18;;;; Title: Author(s): Raymond R.
Panko/RA3Y; Distribution: /FEEDBACK( [ ACTION ] ) DCE( [ ACTION ] ) JCN( [ ACTION ] ) RWW( [ ACTION ] ); Sub-Collections: SRI-ARC FEEDBACK; Clerk: RA3Y;

1a

1b1

1c

2a

3a

1 Week of June 30 - July 3: JMB

la Trying to learn userprogramming. Bob Sheppard wanted a program written to break all statements at EOLs. Susan, Ann, and I got together with Dave Hopper for advice on this (after Susan & I attempted to write it with whzat we know about content analyzer programs) and found from him that it was a complex undertaking, requiring more advanced knowledge than we had. So he wrote it, explaining to us what he did. We understand what he did, but probably could not do it ourselves. I have attempted to get the program to compile, but there are still errors. Then we will make a sample file (hopefully sheppard will get back to us soon with a sample of exactly what he had in mind) and see what the program does to it.

1b Revising the Primer:

1b1 Correcting errors

1b2 Revising some commands to match the courses

ic Attended meetings to discuss proposed Viewgraphs. I promised to help Priscilla next week on getting terminal copy for the preliminary content we decided on.

2 USER SERVICES WEEKLY REPORT from SGR

2a I spent the week on the following projects: proofing the glossary and primer, working on a program for Bob Sheppard with JMB and JDH, writing my tripreport, meeting about viewgraphs, teaching the third course to Dee and Bev with Pam and Priscilla as observers. Also a certain amount of talking to people about various projects: JMB working half-time for JHB and pam's work on Feedback statistics.

3 USER SERVICES WEEKLY REPORT from RH

3a Week of June 23 = 27 This was quite a Crazy Week for me. I was not able to work physically at ARPA on Mon. and Tues, due to the building being closed. I did get the ARPA Orders finished but I was not able to XGP them until wed. Anyway they are done now and distributed to the interested parties. Both my workstation and Frank Brignoli's work station were on the blink so I spent time with him on Tues, at his shop trying to locate the trouble. I met the new girl in IPT and generally trouble-shooted my way around ARPA the remainder of the week. On Fri. morning I attended a meeting at SRI of the steering committee. So much for that excitement.

3b Week of June 30 - July 3 This was a somewhat normal week, except for the meeting I had with the SRI auditor on Tues. whew, glad I'm clean. On Monday I spent time with Clements of the NMRO discussing his Vela project which I also got in touch with JCN on. I helped him retrieve all his files which had been archived and a few other minor things. It seems we have a slight reprieve, (although Connie is in a hurry) because Clements has gone on vacation for 2 weeks. But we are going to get started on Vela as soon as he gets back. I've been talking and visitng with a lot of people here and I have succeeded (I hope) in drumming up enough interest for more classes. I am going to be giving them Tues, and Thrus. of next week. I hope we have a good response but time will tell, vacations are going to play a big part though with people being here or being able to break away from their offices. I have discussed the courses with Connie and she agreed and gave me the go ahead to use the courses ARC has developed although I am to leave out all the communicating section.

36

3c Frank and I are finally getting our equipment problems solved, we are simply shipping the bad pieces back. With Martin gone and Rod not there most of the time it is really difficult trying to get somebody who knows something (although Rene really tries) to help you, this equipment business has been going on almost two weeks. Betty Finney has been in touch, she also is having equipment problems and problems with being overallocated. over moving files and the messsage program again since that is a big file taking up too much space with junk mail. I told her to move the message file into NLS, delete what they don't want to keep and move the old message they do want into another file and archive it to save on space etc. It is a good thing I have been reading up on Content Analysers since Betty hit me with severl questions on Friday, (she must have called at least 6 times, each time different). Anyway her questions on CA's were easy since telling her what she had done wrong usually solved the problem instead of what she should do, In other words, correction worked instead of having to write a new one etc. She seemed satisfied which is the important thing. I've also been spending time the end of this week getting ready for the classes at ARPA next week.

3 C

#### 4 USER SERVICES WEEKLY REPORT from PAW2

4a Week of July 7-11. On Monday I spent the morning reviewing the Basic and Second Courses. Had meeting with Susan and Pam to discuss our course of action for the next two weeks while Susan will be away. Later, Susan and I got together to discuss the viewgraphs to be used by all of us for all three courses. I had a brief discussion with Ra3y Panco about the Monthly Use Report for Office-1 which is sent to the architects. I plan on working with him each month on this project. Tuesday I taught the Basic Course

User Services weekly Report - June 30th - July 3rd

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48

(J32960) 14-JUL-75 06:58;;; Title: Author(s): Jeanne M. Beck, Rita Hysmith, Susan Gail Roetter, Priscilla A. Wold/JMB RH SGR PAW2; Distribution: /JCN([INFO-DNLY]); Sub-Collections: SRI-ARC; Clerk: RH;

1 a

1b

101

1b2

10

2a

3a

1 week of June 30 - July 3: JMB

la Trying to learn userprogramming. Bob Sheppard Wanted a program Written to break all statements at EOLs. Susan, Ann, and I got together with Dave Hopper for advice on this (after Susan & I attempted to write it with wheat we know about content analyzer programs) and found from him that it was a complex undertaking, requiring more advanced knowledge than we had. So he wrote it, explaining to us what he did. We understand what he did, but probably could not do it ourselves. I have attempted to get the program to compile, but there are still errors. Then we will make a sample file (hopefully Sheppard will get back to us soon with a sample of exactly what he had in mind) and see what the program does to it.

1b Revising the Primer:

1b1 Correcting errors

1b2 Revising some commands to match the courses

ic Attended meetings to discuss proposed viewgraphs. I promised to help Priscilla next week on getting terminal copy for the preliminary content we decided on.

2 USER SERVICES WEEKLY REPORT from SGR

2a I spent the week on the following projects: proofing the glossary and primer, working on a program for Bob Sheppard with JMB and JDH, writing my tripreport, meeting about viewgraphs, teaching the third course to Dee and Bev with pam and priscilla as observers. Also a certain amount of talking to people about various projects: JMB working half-time for JHB and pam's work on Feedback statistics.

3 USER SERVICES WEEKLY REPORT from RH

3a Week of June 23 = 27 This was quite a Crazy Week for me. I was not able to work physically at ARPA on Mon. and Tues. due to the building being closed. I did get the ARPA Orders finished but I was not able to XGP them until Wed. Anyway they are done now and distributed to the interested parties. Both my workstation and Frank Brignoli's work station were on the blink so I spent time with him on Tues. at his shop trying to locate the trouble. I met the new girl in IPT and generally trouble-shooted my way around ARPA the remainder of the week. On Fri. morning I attended a meeting at SRI of the steering committee. So much for that excitement.

3b Week of June 30 - July 3 This was a somewhat normal week, except for the meeting I had with the SRI auditor on Tues. Whew, glad I'm clean. On Monday I spent time with Clements of the NMRO discussing his vela project which I also got in touch with JCN on. I helped him retrieve all his files which had been archived and a few other minor things. It seems we have a slight reprieve, (although Connie is in a hurry) because Clements has gone on vacation for 2 weeks. But we are going to get started on Vela as I've been talking and visitng with a lot of soon as he gets back. people here and I have succeeded (I hope) in drumming up enough interest for more classes. I am going to be giving them Tues, and Thrus, of next week. I hope we have a good response but time will tell, vacations are going to play a big part though with people being here or being able to break away from their offices. I have discussed the courses with Connie and she agreed and gave me the go ahead to use the courses ARC has developed although I am to leave out all the communicating section.

3c Frank and I are finally getting our equipment problems solved, we are simply shipping the bad pieces back. With Martin gone and Rod not there most of the time it is really difficult trying to get somebody who knows something (although Rene really tries) to help you, this equipment business has been going on almost two weeks. Betty Finney has been in touch, she also is having equipment problems and problems with being overallocated. we went over moving files and the messsage program again since that is a big file taking up too much space with junk mail. I told her to move the message file into NLS, delete what they don't want to keep and move the old message they do want into another file and archive it to save on space etc. It is a good thing I have been reading up on Content Analysers since Betty hit me with severl questions on Friday, (she must have called at least 6 times, each time different). Anyway her questions on CA's were easy since telling her what she had done wrong usually solved the problem instead of what she should do. In other words, correction worked instead of having to write a new one etc. She seemed satisfied which is the important thing. I've also been spending time the end of this week getting ready for the classes at ARPA next week,

#### 4 USER SERVICES WEEKLY REPORT from PAW2

4a Week of July 7-11. On Monday I spent the morning reviewing the Basic and Second Courses. Had meeting with Susan and Pam to discuss our course of action for the next two weeks while Susan will be away. Later, Susan and I got together to discuss the viewgraphs to be used by all of us for all three courses. I had a brief discussion with Ra3y Panco about the Monthly Use Report for Office-1 which is sent to the architects. I plan on working with him each month on this project. Tuesday I taught the Basic Course

3 b

3 c

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(J32961) 14-JUL-75 07:08;;;; Title: Author(s): Rita Hysmith/RH; Sub-Collections: SRI-ARC; Clerk; RH;

NWG/RFC#	The second secon			17-JUL-75	20:44	32962
Comments	on IMP/HOST	and HOST/IMP	Protocol Changes			
					Vin	t Cerf
1	Comments on	IMP/HOST and	HOST/IMP Protoco	1 Changes		1
2			t Cerf			
		Stanford	University			2
3 With r	eference to	RFC's 687. 69	0, and 692 (NIC	s 32564.	32699.	
			Walden, J. Postel			
			ffer some observa			0
			ecommendations fr			
			on of Information			
			this working gro			
			(International (			

4 The proposed packet header format is meant to interface hosts to packet networks. It is not a header for Host-to-Host protocol, nor is it an IMP-to-IMP header. The bulk of the header is taken up with

Committee on Telephony and Telegraphy of the International Telegraphics Union) for a standard packet (or DATAGRAM) header.

	nt maximum address space of the telephone system (14 digits)	4
48	LOCAL NETWORK FIELD - 4 bits	46
	4ai This field allows local networks to operate easily on multiple formats, since the 4 bits can be used in any fashion desired by the local network.	4a1
4b	DATAGRAM FORMAT - 4 bits	41
	4bl This field could be used by ARPANET to contain "1001" binary, so as to maintain backward compatibility with the existing message leader format.	451
4c	PACKET TYPE CODE - 8 bits	40
	4c1 This could be used for the HOST/IMP and IMP/HOST code.	401

NWG/RFC# 696 VGC JBP 17-JUL-75 20:44 32962 Comments on IMP/HOST and HOST/IMP Protocol Changes Vint Cerf

4d1 These bits have not yet been specifically allocated. Some will no doubt be for international services (e.g. tracing at gateways between networks, accounting, class of service). It was the feeling of WG 6.1 members that some of these bits (e.g. 8) might be allocated to the originating network (or destination network) for its own use.

4d1

4e TEXT LENGTH - 16 bits

4e

4e1 These bits count the number of octets in the text of the packet, not including octets in the header (which is fixed in length for any particular format).

4e1

4f DESTINATION ADDRESS - 48 bits [1]

4 f

4f1 These bits could be allocated in the following way: Destination Network Identifier - 8 bits Destination Host Identifier - 8 bits Destination IMP identifier - 16 bits Reserved - 16 bits

4f1

4g SOURCE ADDRESS - 48 bits

49

4gi These bits would be used in a fashion similar to the destination address bits.

491

5 The resulting packet is 144 bits long and adding the present 40 bit Host-to-Host header results in a total of 184 bits, which is not very pleasant. A temporary fix (until we can introduce a new NCP design) might be to squeeze out the reserved 16 bit fields in the source and destination address fields, giving 32 bits to carry the byte size and byte count information for the present Host/Host protocol. Alternatively, the length field of the packet header and one of the facilities flags (or a whole field) could be used to indicate byte size and byte count. Either idea would require some fairly substantial modification of existing NCP programs, so is probably not very palatable.

5

6 Another alternative would be to add a dummy byte after the 144th bit of header, followed by 40 bits of NCP header, giving a total length of message leader and NCP header of 192 bits, a number divisible by 12, 16, 24, 32, 48.

6

NWG/RFC# 696 VGC JBP 17-JUL-75 20:44 32962 Comments on IMP/HOST and HOST/IMP Protocol Changes

Vint Cerf

7 With respect to the proposed text length field, although bit lengths are the most flexible, it seems reasonable to admit that nearly all data transmission is done in 8 bit quantitities, and therefore that bit lengths are, in fact, an unnecessary luxury. This is a weak argument when 36 bit and 32 bit machines must interface.

7

8

8

NWG/RFC# 696 VGC JBP 17-JUL-75 20:44 32962 Comments on IMF/HUST and HUST/IMP Protocol Changes Vint Cerf

(J32962) 17-JUL-75 20:44;;; Title: Author(s): Vinton G. Cerf, Jonathan B. Postel/VGC JBP; Distribution: /JBP([INFO-ONLY]) VGC([INFO-ONLY]); Sub-Collections: NWG NIC SRI-ARC; RFC# 696; Clerk: JAKE; Origin: < NETINFO, RFC696.NLS;2, >, 17-JUL-75 20:40 JAKE; ;; ####;

4	MAR	Pins	mmand	- 5	E77 197 mm
	AL WELL	100	nmana	1 C T	P P

1

#### 2 Introduction

-

Za The Tenex file system supports a "files only" directory. This type of directory cannot be "logged in" but it can be "connected to", A login gives directory "owner" access to the job generated by the system and an address space in which the user can execute programs. A connect allows an existing job and its associated user "owner" access to a directory but creates no address space. The words "cwner", "group", and "universal" or "public" determine which field of the protection specification is to be used to check the legality of a file access request.

2a

#### 3 Problem

3a The Tenex FTP server does not allow an FTP Login to a "files only" directory. The current protocol contains the CWD (Change working Directory) command which gets part of the "connect" function but it does not grant "owner" access to the user. Therefore, there is no way a user can access a "files only" directory as the "owner" (i.e. he can supply the password). This is undesireable for private directories of this type since it is uneconomical to define a user - directory "group" for so few directories and unrestricted "public" access may be undesireable.

3a

#### 4 Solution

.9

4a There are two approachs we can take. Either we remove the distinction "files only" from the FTP login, or we create a command that does the "connect" function. The restriction placed on "files only" directories is based on how we define a user of FTP to the server. If we say that any net user who knows the password to a directory has ownership of that directory as far as FTP is concerned, then we have a solution. If we want an FTP login to be as restrictive as a user login, then we need the second alternative.

4a

# 5 Proposal

-

5a Change the protocol in one of the following ways:

5a

5b 1) Remove the restriction on "files only" directories for FTP logins or

5b

5c 2) Add an optional argument to the CWD (Change Working Directory) command to specify the password string for the directory. If the password check is successful the user is granted ownership rights to that directory. If the password is not present or the check fails, the command functions as it presently does and access is controlled by the current protection mechanism. Anonymous users should not be allowed to use this mechanism to change their access to the file system.

5c

6 Jim Lieb LIEB@SUMEX-AIM SUMEX-AIM Project Stanford Univ. Medical Center Stanford, Ca.

6

NWG/RFC# 697 CWD Command of FTP

(J32963) 14-JUL-75 18:14;;; Title: Author(s): James M. Lieb, Jonathan B. Postel/JML2 JBP; Sub-Collections: NWG NIC SRI-ARC; RFC# 697; Clerk: JAKE; Origin: < NETINFO, RFC697.NLS;2, >, 14-JUL-75 18:11 JAKE ;;; .H2=" Jim Lieb"###;

3	TEL	NET Extended ASCII Option	1
	2 1,	Command Name and code.	2
	2a	EXTEND=ASCII 17	2a
	2,	Command Meanings,	3
	3 a	IAC WILL EXTEND-ASCII	3a
		3ai The sender of this command requests permission to begin transmitting, or confirms that it may now begin transmitting extended ASCII, where additional 'control' bits are added to normal ASCII, which are treated specially by certain programs on the host computer.	3a1
	3 b	IAC WON*T EXTEND-ASCII	3b
		3b1 If the connection is already being Operated in extended ASCII mode, the sender of this command demands that the reciever begin transmitting data characters in standard NVT ASCII. If the connection is not already being operated in extended ASCII mode, The sender of this command refuses to begin transmitting extended ASCII.	361
	30	IAC DO EXTEND-ASCII	30
		3c1 The sender of this command requests that the reciever begin transmitting, or confirms that the reciever of this command is allowed to begin transmitting extended ASCII.	3c1
	3 d	IAC DON'T EXTEND-ASCII	3 d
		3d1 The sender of this command demands that the reciever of this command stop or not start transmitting data in extended ASCII mode.	3d1
	3e	TAC SB EXTASC <high (bits="" 15-8)="" bits="" order=""> <low (bits="" 7-0)="" bits="" order=""> IAC SE</low></high>	3 e
		3e1 This command transmits an extended ASCII character in the form of two 8-bit bytes. Each 8-bit byte contains 8 data bits.	3e1

4 3. Default	4	3.	Def	aul	t
--------------	---	----	-----	-----	---

4a DON'T EXTEND-ASCII

4a

4b WON'T EXTEND-ASCII

4b

4bi i.e. only use standard NVT ASCII

451

5 4. Motivation.

5

Sa several sites on the net, for example, SU=AI and MIT-AI, use keyboards which use almost all 128 characters as printable characters, and use one or more additional bits as 'control' bits as command modifiers or to separate textual input from command input to programs. Without these additional bits, several characters cannot be entered as text because they are used for control purposes, such as the greek letter 'beta' which on a TELNET connection is Control=C and is used for stopping ones job. In addition there are several commonly used programs at these sites require these additional bits to be run effectively. Hence it is necessary to provide some means of sending characters larger than 8 bits wide.

5a

6 5. Description of the option.

68

6a This option is to allow the transmission of extended ASCII.

6b Experience has shown that most of the time, 7-bit ASCII is typed, with an occassional fcontrol character used, Hence, it is expected normal NVT ASCII would be used for 7-bit ASCII and that extended ASCII be sent as an escape character sequence.

6b

6c The exact meaning of these additional bits depends on the user program. At SU=AI and at MIT=AI, the first two bits beyond the normal 7-bit ASCII are passed on to the user program and are denoted as follows.

60

6c1 Bit 8 (or 200 octal) is the CONTROL bit Bit 9 (or 400 octal) is the META bit

Tovar Mock

6d (Note that 'CONTROL' is used in a non-standard way here; that is, it usually refers to codes 0-37 in NVT ASCII. CONTROL and META are echoed by prefixing the normal character with 013 (integral symbol) for CONTROL and 014 (plus-minus) for META. If both are present, it is known as CONTROL-META and echoed as 013 014 7-bit character.)

60

7 6. Description of Stanford Extended ASCII Characters

...

7a in this section, the extended graphic character set used at SU-AI is described for reference, although this specific character set is not required as part of the extended ASCII Telnet option. Characters described as "hidden" are alternate graphic interpretations of codes normally used as format effectors, used by certain typesetting programs.

7a

7a1 Code	Graphic represented	7a1
7a2 000	null (hidden vertically centered dot)	7a2
7a3 001	downward arrow	7a3
7a4 002	alpha (all Greek letters are lowercase)	784
7a5 003	beta	7a5
7a6 004	logical and (caret)	7a6
7a7 005	logical not (dash with downward extension)	7a7
7a8 006	epsilon	7a8
7a9 007	pi	7a9
7a10 010	lambda	7a10
7a11 011	tab (hidden gamma)	7a11
7a12 012	linefeed (hidden delta)	7a12
7a13 013	vertical tab (hidden integral)	7a13
7814 014	formfeed (hidden plus-minus)	7a14
7a15 015	carriage return (hidden circled-plus)	7a15
7a16 016	infinity	7a16
7a17 017	del (partial differential)	7a17
7a18 020	proper subset (right=opening horseshoe)	7a18
7a19 021	proper superset (left-opening horseshoe)	7a19
7a20 022	intersection (down-opening horseshoe)	7a20
7a21 023	union (up-opening horseshoe)	7a21
7a22 024	universal quantifier (upside=down A)	7a22
7a23 025	existential quantifier (backwards E)	7a23
7a24 026	circled-times	7a24
7a25 027	left=right double headed arrow	7a25
7826 030	underbar	7a26
7a27 031	right pointing arrow	7a27

Tovar Mock

7a28	10 T 70 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	tilde	7a28 7a29
7a29	AND CORNEL TO AND ADDRESS OF THE PARTY OF TH	not=equal	
7a30		less=than=or=equal	7a30
7a31	035	greater=than=or=equal	7a31
7a32	036	equivalence (column of 3 horizontal bars)	7a32
7a33	037	logical or (V shape)	7a33
7a34	040-135	as in standard ASCII	7a34
7a35	136	upward pointing arrow	7a35
7a36	137	left pointing arrow	7a36
7a37	140=174	as in standard ASCII	7a37
7a38	175	altmode (prints as lozenge)	7a38
7a39	176	right brace	7a39
7a40	177	rubout (hidden circumflex)	7a40

NWG/RFC# 698 Telnet Extended ASCII Option TVR JBP 23-JUL-75 14:59 32964

Tovar Mock

(J32964) 23-JUL-75 14:59;;; Title: Author(s): Tovar Mock, Jonathan B. Postel/TVR JBP; Distribution: /JBP( (INFO-ONLY 1); Sub-Collections: NWG NIC SRI-ARC; RFC# 698; Clerk; JAKE; Origin: < NETINFO, RFC698.NLS;3, >, 23-JUL-75 14:54 JAKE;;;;#####:

1 Flying

(J32969) 14-JUL-75 12:16;;; Title: Author(s): Robert D. Archer/RDA; Sub-Collections: NIC; Clerk: RDA;

1	(Journal) Most recent first	1
	1a FGB 24-JUN-75 17:51 32822 elf messages	
	Location: (JOURNAL, JRNL27, J32822:gw) ****Note: [ ACTION ] *****	
		18
	1a1 Message:	1a1
	laia The file ELF-MSG contains some recent information about ELF releases. It can be read via the TENEX TYPE command (i.e., "ty Elf-Msg(cr)" ). It will be around for a week or so before it goes away. Regards, Frank	1010
-	2 (Author)	- 2
	2a RDA 13-JUN-75 07:56 32743 ti-terminals for NSRDC Location: (JCURNAL, JRNL27, J32743:gw) ****Note: Author Copy****	
		26
	2a1 Message:	2a1
4	2a1a I have not received a reply from your 22 May 1975 message to RDA and ???. Who else was the message sent ? Have you received a reply? please send me a message indicating status of my request. Thank you.	2a1a
	2b RDA 12-JUN-75 13:30 32739	
	rda messages Location: (JOURNAL, JRNL27, J32739:gw) *****Note: Author Copy*****	
	The state of the s	21
	2b1 Message:	261
	2bla frank iwas only going to send one message, but i keep making mistakes, like hiting or or otrl and some other letter, i will try to get to other messages on friday, all for today.	2b1a
	2c RDA 12-JUN-75 13:26 32738	
	archer7s messages Location: (JOURNAL, JRNL27, J32738:gw)	
	****Note: Author Copy*****	20

3 C

3c1

201 2c1 Message: 2c1a continuation of last message. We can discuss message 2c1a from dls on 13 june 1975. 2d RDA 12-JUN-75 13:20 32737 implementation group meeting Location: (JOURNAL, JRNL27, J32737:gw) \*\*\*\*\*Note: Author Copy\*\*\*\* 2d 2d1 2d1 Message: 2d1a acknowledge receipt of your message and plan to attend first class, fgb who is dls? \_h oh that must beduane stone. What i can't figure out is who he sent the message to about the terminals iwanted othrqer than my self, we can 2d1a discuss the 2e RDA 16-MAY-75 08:01 32529 aclnowledgement Message: received 32522 and 32507 \*\*\*\*\*Note: Author Copy\*\*\*\* 2e 3 3 (mail) 3a ILA 10-JUN-75 05:22 32716 Status of NALCON Location: (HJOURNAL, 32716, 1:W) \*\*\*\*\*Note: [ ACTION ] \* 3a 3b FGB 6-JUN-75 08:16 32688 TEST RUN Location: (JOURNAL, JRNL27, J32688:gw) 3b 3b1 3b1 Message: 3bia Ignore this message, if you will, please. 3bla 3c FGB 4=JUN=75 12:18 32661 Proposed Working Group Meeting Location: (JOURNAL, JRNL27, J32661:qw) \*\*\*\*\*Note: [ ACTION ] \*\*\*\*

3c1 Comments: Please respond to FGB & ILA. Thanks.

3c2 Message:	3c2
3c2a we have tentatively scheduled an Implementation Group meeting on July 7-8 in Monterey. This will immediately precede the NLCC meeting. Please acknowledge receipt of this message and let us know if these dates are acceptable. Thanks.	3c2a
3d FGB 4-JUN-75 12:18 32661 Proposed Working Group Meeting Location: (JOURNAL, JRNL27, J32661:gw)	
	3 d
3d1 Comments: Please respond to FGB & ILA. Thanks.	3d1
3d2 Message:	3d2
3d2a we have tentatively scheduled an Implementation Group meeting on July 7-8 in Monterey. This will immediately precede the NLCC meeting. Please acknowledge receipt of this message and let us know if these dates are acceptable. Thanks.	3d2a
Be FGB 2-JUN-75 11:54 32639 LF INFO	
ocation: (JOURNAL, JRNL26, J32639:gw)	
	Зе
3e1 Message:	3e1
<pre>3eia The file ELF-MSG contains information on the ELF directory at SRI-AI and on assembling ELF sources. Read it if you wish; it will go away at weeks end. Regards.</pre>	
Frank	3e1a
8f FGB 2-JUN-75 06:24 32637	
dessage: The file NAVIMP-GROUP contains names, addresses, etc. of NAVIMP members. Please check it and let me know if your entry is correct. Thanks. Frank	
****Note: [ ACTION ] ****	3 £
	31
2 FCD 30-HEV-7E 10:05 32624	

3g FGB 30-MAY-75 10:05 32624
On Line Specs (revisited)
Message: Concerning the on-line draft of ELF software specs,
please acknowledge receipt of this mornings message and let me

know if you use NLS to look at the document (experiences, comments, suggestions, etc.) Thanks. Frank \*\*\*\*\*Note: [ ACTION ] \*\*\*\*\*

30

3h FGB 29-MAY-75 19:18 32622 Draft ELF Software Specs Location: (HJOURNAL, 32622, 1:w) \*\*\*\*\*Note: [ ACTION ] \*\*\*\*\*

3h

3i FGB 28-MAY-75 19:39 32614
ELF Documentation
Message: I have just received some new ELF documentation from Dave
Retz. I am having it reproduced and will distribute when available
(7-10 days approx.). Regards. Frank
\*\*\*\*\*Note: [ ACTION ] \*\*\*\*\*

31

3j DLS 22-MAY-75 08:18 32578
TI-735 terminals for NSRDC
Message: Received a call at 22-MAY-75 08:04 from Bob Archer
(202-394-1909), NSRDC. He would like to MIPR money to RADC for
rental of 3-4 TI 735 terminals for 6 months. This falls under
para 4.2 of the contract. Can/will SRI do this for NSRDC? What
is the monthly rental rate and the current delivery time from TI
on these terminals? Please send the reply to idents DLS and RDA.
Thanks
Stoney
\*\*\*\*\*Note: [INFO-ONLY] \*\*\*\*\*

(J32970) 14-JUL-75 12:20;;; Title: Author(s): Robert D. Archer/RDA; Sub-Collections: NIC; Clerk: RDA; Origin: < NAVIMP, RDA, NLS;5, >, 13-JUN-75 11:24 RDA;;;;####; 1 We have new member of our ARC Applications group, starting yesterday. He is Bud Pine. Bud will be performing the role of Service System Manager, with overall responsibility for Utility Service Software and Hardware operations.

2 Bud has over fifteen years of experience in designing, implementing, and marketing computer/communications systems, including hardware and software applications. He has worked with BAUD, Inc., a consulting company specializing in data communications and online systems applications, RCA Instructional Systems Division of RCA, Western Union, and General Electric.

3 As we refine and expand our Utility Service, we will need his experience and capabilities to make it work. I am extremely pleased that Bud has joined our group (it's hard to express how pleased!). We searched for over a year for the right person.

4 As ARCers are well aware, there's lots going on-every day--at ARC. We've got our own way of doing some things, even our own language at times. Bud will need our cooperation and help as he enters our space. I'm sure he will get what he will need from us--and give more back.

Right now, Applications people are heavily involved with delivering the service we have contracted to give. In addition, we must make effective, strategic, and timely plans for expansion of the Service System including plans for the introduction of NLS=9 as it becomes available. This will place a great deal of emphasis on communications between Development and Applications people. We want to take advantage of the NSW program's system developments so that solid service based on those improvements gets to more and more users as soon as we can possibly do it. Hmm==perhaps I have expressed how pleased I am that Bud is here!

Here's Bud Pine -- and Why

(J32971) 15-JUL-75 08:44;;; Title: Author(s): James C. Norton/JCN; Distribution: /SRI-ARC([INFO-ONLY]) KWAC([INFO-ONLY]) EEP([INFO-ONLY]); Sub-Collections: NIC SRI-ARC KWAC; Clerk: JCN;

1 32971 Distribution

la J. D. Hopper, Charles H. Irby, Harvey G. Lehtman, James C. Norton, Jeffrey C. Peters, Dirk H. Van Nouhuys, Kenneth E. (Ken) Victor, Richard W. Watson, Don I. Andrews, Glenn A. Sherwood, Kathey L. Mabrey, Jeanne M. Beck, David A. Potter, Robert N. Lieberman, Terry H. Proch, Ronald P. Uhlig, Susan Gail Roetter, Michael A. Placko, Stanley (Stan) M. Taylor, Elizabeth J. Feinler, Rudy L. Ruggles, Frank G. Brignoli, Robert M. Sheppard, Richard W. Watson, Douglas C. Engelbart, James C. Norton, James H. Bair, Duane L. Stone, Inez M. Mattiuz, Connie K. McLindon, Edward E. Pollack, 1b Andy Poggio, David L. Retz, Laura J. Metzger, Karolyn J. Martin, Jan A. Cornish, Larry L. Garlick, Priscilla A. Wold, Pamela K. Allen, Delorse M. Brooks, Beverly Boli, Rita Hysmith, Log Augmentation, Joseph L. Ehardt, Raymond R. Panko, Susan Gail Roetter, Robert Louis Belleville, Rene C. Ochoa, Ann Weinberg, Joan Hamilton, Adrian C. McGinnis, Robert S. Ratner, David S. Maynard, Robert N. Lieberman, Sandy L. Johnson, James H. Bair, Jeanne M. Leavitt, Rodney A. Bondurant, Jeanne M. Beck, Marcia L. Keeney, Elizabeth K. Michael, Jonathan B. Postel, Elizabeth J. Feinler, Kirk E. Kelley, N. Dean Meyer, James E. (Jim) White, Douglas C. Engelbart, Martin E. Hardy

1	USER SERV	ICES REPORT: COURSE AT ARPA	1
	1a 1. 1 July 10t	day - RH. Two Sessions. 4 hours July 8th and 4 hours h.	1a
		Persons contacted. (Note: Uppercase used if person has a cy and enclosed in parens is the office they are from).	16
	Kathy	July 8: 7 CARPENTER (IPT), June LUDWIG (IPT), Kathy Milks (MATS), Barbara Fitzpatrick (HRRO).	151
	Libby	July 10: / Masterson (MATS), Kathy CARPENTER (IPT), June LUDWIG ), and Terry COLEMAN (TTO).	1b2
	1c 3. (	COURSE:	10
	the s Conni commu	easic Course was given in its entirety on July 8 except for section on communicating; however I did go over linking. Le McLindon did not want me to cover this since they cover unicating in their Tenex classes and they do not use eail.	101
	excep	on July 10 the Second Course was also given in its entirety of for the section on communicating but I did go over any again.	1c2
	1d 4.	ASSISTANCE:	1d
	were stric	Oue to the short time that people can spare for courses we not able to practice in class. The course was given the course form with me visiting each person later on heir office assisting them in actual use of NLS.	1d1
	1e 5. /	APPLICATION - 5 slots	1 e
		There has been a renewed interest in NLS use in several of offices at ARPA and I'm doing all I can to keep that fire 3.	1e1
	1f 6. 1	SSUES:	1f
	1f1 N	lone.	1f1
	19 7. 0	DISCUSSIONS:	19

 $\mbox{igi I}$  was pleased by the enthusiasm displayed by the people attending the classes. As I mentioned earlier there is a

geniune and renewed interest in using NLS at ARPA and it is nice to have positive attitudes in classes. It has already been proven that some of the new applications that use NLS such as MRAO's, Arpa Orders and the new VELA project will greatly aid them in their routine tasks.

(J32972) 15-JUL-75 10:13;;;; Title: Author(s): Rita Hysmith/RH;
Distribution: /JMB([INFO-ONLY]) SGR([INFO-ONLY]) SLJ([INFO-ONLY]) SLJ([INFO-ONLY]) SLJ([INFO-ONLY]) DCE([INFO-ONLY]) DCE([INFO-ONLY]) JHB([INFO-ONLY]) PKA([INFO-ONLY]) PAW2([INFO-ONLY]);
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