Packaging the Sample Sessions for use in Utility Training

1 Bev,
As I have mentioned to you, the sample sessions look very useful,
potentially, to Utility clients who are learning NLS. I would like
to integrate them into our training program as supplemental
documentation. This means that the appropriate group of sample
sessions would be handed out after a TNLS course for practice,
clarification, etc. I have added the commands, append and break, to
the Second Course, so that it will be compatible with Editing ...II.
Some of the other sessions are appropriate to this level, and others
to the third level.
What I want to do is get together and figure out a neat way to
package the sessions that go with each course so that we can release
them. Just let me know a convenient time. Jim

Packaging the Sample Sessions for use in Utility Training

(J32973) 15-JUL-75 10:43;;; Title: Author(s): James H. Bair/JHB; Distribution: /BEV([ACTION]) US([INFO-ONLY]) SGR([INFO-ONLY]) DIRT([INFO-ONLY]) JCN([INFO-ONLY]); Sub-Collections: SRI-ARC US DIRT; Clerk: JHB;

1 32973 Distribution
1a Beverly Boli, Priscilla A. Wold, Jeanne M. Beck, Pamela K. Allen,
Rita Hysmith, Sandy L. Johnson, Susan Gail Roetter, Jonathan B.
Postel, Priscilla A. Wold, Rita Hysmith, Pamela K. Allen, Delorse M.
Brooks, Elizabeth F. Finney, Beverly Boli, Lawrence A. Crain, Kirk
Sattley, Susan Gail Roetter, Robert N. Lieberman, Ann Weinberg,
Kenneth E. (Ken) Victor, Douglas C. Engelbart, James H. Bair,
Elizabeth K. Michael, Richard W. Watson, Elizabeth J. Feinler, Harvey
G. Lehtman, Kirk E. Kelley, Laura E. Gould, Jeanne M. Beck, Dirk H.
Van Nouhuys, James C. Norton, James C. Norton,

| (use) | |
|---|---|
| 1a Execute programs Load program Meyer, Usestats, | 1 |
| 1b Jump File Named r1xhz | 1 |

(J32977) 15-JUL-75 15:31;;; Title: Author(s): Raymond R. Panko/RA3Y; Distribution: /PAW2([INFO-ONLY]); Sub-Collections: SRI-ARC; Clerk: RA3Y;

Here are some quick statistics for Office-1 use during the first week of the full pie slice scheduler.

| 1 Week | k ending | 5-JUL-75 | 25.96 | 1107.16 | 2.34% | 1 |
|--------|-------------------|----------|-------|---------|-------|-----|
| 1a | SYSTEM (10) | 5-JUL-75 | 1.69 | 122,88 | 1.37% | 1a |
| 1ь | TYMSHARE (20) | 5=JUL=75 | 2.11 | 208.72 | 1.01% | 1ь |
| 10 | ARC-UTIL (30) | 5-JUL-75 | .75 | 33,74 | 2.22% | 10 |
| 1d | NSRDC (200) | 5-JUL-75 | .63 | 27.76 | 2.28% | 1d |
| 1 e | ETS (340) | 5-JUL-75 | .91 | 48.19 | 1.88% | 1e |
| 1 f | ARC-APP (360) | 5-JUL-75 | 6,00 | 175,06 | 3.43% | 1f |
| 1 g | ARC-MGT (380) | 5-JUL-75 | 1,44 | 34.94 | 4.12% | 19 |
| 1h | RADC (400) | 5-JUL-75 | 4.23 | 127.70 | 3.31% | 1h |
| 11 | BELL (500) | 5-JUL-75 | 1,46 | 64,91 | 2.26% | 11 |
| 1 j | BRL (600) | 5-JUL-75 | ,59 | 29.18 | 2,01% | 15 |
| 1k | SRI (700) | 5-JUL-75 | .87 | 26,95 | 3,21% | 1k |
| 11 | ARPA (800) | 5-JUL-75 | ,29 | 15.07 | 1,96% | 11 |
| 1 m | MIT-SEISMIC (820) | 5-JUL-75 | .92 | 27.49 | 3,33% | 1 m |
| 1n | NICGUEST (840) | 5-JUL-75 | .12 | 4.34 | 2,88% | 1n |
| 10 | ARPA-NSW (880) | 5-JUL-75 | 2,91 | 120,50 | 2,41% | 10 |
| 1p | NSA (900) | 5-JUL-75 | .96 | 35.76 | 2,67% | 1p |
| 2 ARP | A (800) | 5-JUL-75 | ,29 | 15.07 | 1,96% | 2 |
| 2 a | ARPA-PM | 5-JUL-75 | .01 | .53 | 2,62% | 2a |
| 2b | BANGERT | 5-JUL-75 | .12 | 7.60 | 1.56% | 2b |
| 20 | CARLSON | 5-JUL-75 | .12 | 3.99 | 2.98% | 2c |
| 2d | DCLEMENTS | 5-JUL-75 | ,02 | 1.08 | 1.72% | 2d |
| 2 e | DONCHIN | 5-JUL=75 | .00 | .01 | 5.56% | 2e |
| 2f | GROSS | 5-JUL-75 | ,00 | .01 | 9,09% | 2f |
| 2g | KAHN | 5-JUL-75 | .00 | .65 | .64% | 2g |
| | | | | | | |

Flash Stats

| 2h | LICKLIDER | 5-JUL-75 | .00 | .01 | 11.76% | 2h |
|-----|-------------------|----------|-----|-----|--------|-----|
| 21 | MCLINDON | 5-JUL-75 | .00 | .49 | .45% | 21 |
| 21 | RUSSELL | 5-JUL-75 | .00 | ,53 | .83% | 25 |
| 2k | *bad* VANDERBURGH | | | | | 2k |
| 21 | WALKER | 5-JUL-75 | .00 | .10 | 3.03% | 21 |
| 211 | XGP | 5-JUL-75 | .01 | .07 | 12.40% | 2 m |

(J32985) 15-JUL-75 16:05;;;; Title: Author(s): Raymond R. Panko, James C. Norton/RA3Y JCN; Distribution: /CKM([INFO-ONLY]); Sub-Collections: SRI-ARC NIC; Clerk: RA3Y;

1 Dave, Dirk Van Nouhuys mentioned that you had developed a Process Commands branch that would loop through a series of prompts for inputting data and format the data into a file. Sounds like just what I need or close to it...would you send me a sample please? Do a "show and tell"? I was going to try and use the Interrogate command to develop something like this, but that would probably take a lot of doing and if you have a headstart...I could use a little help from my friends. Thanks Glenn P.S. Did you get that Journal item I sent on Retrieve? What do you think of it?

(J32986) 15-JUL-75 16:06;;;; Title: Author(s): Glenn A. Sherwood/GAS2; Distribution: /DAP([ACTION]) JCP([INFO-ONLY]) NDM([INFO-ONLY]) RED([INFO-ONLY]) PWO([INFO-ONLY]); Sub-Collections: NIC; Clerk: GAS2;

TESTING 1 .. 2 .. 3

1 THIS IS A TEST TO SEE IF THE NEW ROUTING OF MESSAGES TO ISIB WORKS AUTOMATICALLY AS CLAIMED. IT ALSO TESTS TO SEE IF THE TEXT IS CORRECTLY FOLDED AT THE ENDS OF LINES.

ONWARD, GREG

TESTING 1 .. 2 .. 3

(J32987) 15-JUL-75 16:26;;; Title: Author(s): J. Gregory Noel/JGN; Distribution: /JGN([ACTION]) JGN([INFO-ONLY]); Sub-Collections: NIC; Clerk: JGN;

| 1 | contradictions have ast meeting. | been alleged in our description of the |
|---|----------------------------------|--|
| 2 | a review meeting will be | held at 3:00. |
| 3 | the review meeting will be | at 3:00. |
| 4 | a recursive definition wi | il imerge. |
| 5 | what a mess. | |

(J32990) 16-JUL-75 13:17;;; Title: Author(s): Lawrence A. Crain/LAC; Sub-Collections: NIC; Clerk: LAC; Origin: < CRAIN, MEMO.NLS;1, >, 16-JUL-75 12:45 LAC;;;;####;

PLATO???

1 WHAT THE DEVIL IS IT????

1

(J32991) 16-JUL=75 15:38;;; Title: Author(s): J. Gregory Noel/JGN; Distribution: /FGB([ACTION]); Sub-Collections: NIC; Clerk: JGN;

3

Call Any Vegetable, and the Chances Are Good: That Vegetable May Respond To You

- 1 I'm responding to Dick's garden item, (26128). I think the first system he suggested is unnecessary, since I would be willing to make the easier system work. Let me explain.
- 2 I worked at the Arnold Arboretum in Boston a few years ago. There we had the same situation of some people with more garden produce growing and ripening than they could handle, and other staffers with no gardens, or samil gardens, or just-getting-into-productive-shape gardens. What classically happened is that someone would bring in a box of various vegetables, and by 5:30 each night they would totally disappear.
- 3 Those of you who have very productive gardens may not realize what bottomless pits for vegetables are those of us who have not.
- 4 I am volunteering to be responsible for storing overnight any vegetables which are not taken by people each day (although my experience tells me there will hardly be any), and for keeping the area in which they are placed neat and tidy.
- 5 A fairly inconspicuous but centrally located place to put the vegetables might be in a box underneath the coffee table -- or even on the table in the new "lounge" -- they would make a great centerpiece.

JML 16-JUL-75 16:59 32993 Call Any Vegetable, and the Chances Are Good: That Vegetable May Respond To You

(J32993) 16-JUL-75 16:59;;; Title: Author(s): Jeanne M. Leavitt/JML; Distribution: /SRI-ARC([ACTION]]; Sub-Collections: SRI-ARC; Clerk: JML; Origin: < LEAVITT, VEGS.NLS;2, >, 16-JUL-75 16:57 JML;;;####;

1 32993 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,
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, Fene 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 I called Bob Propst (313-971-2105), informed him of our plans for the course, and offered a free-scholarship deal for one of his staff. He seemed reasonably interested, and said that he would think about it. I will call him back next week.
- I also contacted George Mandanis, Chairman of Systems Applications, Inc., San RAfael, Calif (415-472-4011). This is the company that Paul Rech joined after leaving ARC. George and Paul visited here several months ago; George has built up considerable enthusiasm for our AKW approach, and has a number of ideas for applications within communities that he knows. I informed him of our intentions. The money is a bit heavy for a small company, but he said that he wanted to do it; he has in mind a person named Jack Myers. He'll talk it over with Myers and get back to us later with a firm answer.

Two contacts re attending ARC's one-week course

(J32994) 16-JUL-75 17:24;;; Title: Author(s): Douglas C. Engelbart/DCE; Distribution: /JCN([INFO-ONLY]) JHB([INFO-ONLY]) RLL([INFO-ONLY]) SGR([INFO-ONLY]); Sub-Collections: SRI-ARC; Clerk: DCE;

I received a call from Shirley Martin (703) 274-8951, of the Army Materiel Command Hdqtrs, on behalf of Ron Unlig. She says that Ron wants to drop by to see me next Tuesday afternoon, 22 July 75, at 1400, accompanied by Dave Grabstein. No particular purpose was indicated. I'll receive him privately to learn what he wants, and will try to set up whatever subsequent dialogue or demonstrations he needs. Also, I know that several people at ARC have specific items they'd like to discuss with Ron; please provide me with specific indications thereto and I'll try to arrange opportunities. Regards, Doug

(J32995) 16-JUL-75 17:39;;; Title: Author(s): pouglas C. Engelbart/DCE; Distribution: /SRI-ARC([INFO-ONLY]); Sub-Collections: SRI-ARC; Clerk: DCE;

1 32995 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,

1b Andy Poggio, David L. Petz, 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

1a

3 a

1 I visited their research department in Seattle on 16 April 75, following up a suggestion by Mike Bedford of Bell Canada (32093,). Jon B. Dunnington there was the contact suggested by Bedford. I also met "Dick Nelson there:

la George R. Nelson (R for Richard, he goes by "Dick")
Section Manager, Paper Products Research & Development
Weyerhaeuser Company
3400 13th Ave S.w.
Seattle, Washington 98134
(206) 623-3913, ext. 373

- 2 Dick called me the other day and asked to visit. We set a Tuesday, 19 Aug date. I told him that I might be on vacation then, but that somebody (from Applications) would be ready to host him. He will probably show up by midmorning. I'm asking Robert Lieberman to make sure he is hosted, whether I am here or not, and also to check around in SRI to see if anyone (like in LRPS or Econ) would like to see Nelson.
- 3 His personal interest is to learn more about the trends toward office automation (e.g. a "paperless office") and to provide guidance for Weyerhaeuser's investments in mills and products. That is his prime purpose in visiting ARC; he will also be visiting XEROX PARC.
 - 3a The time constants in their business are such that they actually have to commit today on investments that bank on the paper market of the year 2000.
- 4 Regarding the hope behind my April visit there -- that they might be interested, within their long-range planning groups, in subscribing to the Utility for the dual purpose of exploring their company's potential utilization value, and for experiencing the mode of life that will affect their paper market -- Dick didn't seem to be the one who would get going on that. But it will be worth giving him a sample just in case he can carry some enthusiasm back with him.

Aug 19 ARC visit planned by Dick Nelson, Weyerhaeuser Company

(J32996) 16-JUL-75 18:04;;;; Title: Author(s): Douglas C. Engelbart/DCE; Distribution: /RLL([ACTION] Rob: see action item for you) SRI-ARC([INFO-ONLY]); Sub-Collections: SRI-ARC; Clerk: DCE;

132996 Distribution
1a Martin E. Hardy, 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,
1b Robert N. Lieberman, 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

important!

elephant meeting

1 [no content was specified!]

1

elephant meeting

(J32998) 17-JUL-75 09:14;;;; Title: Author(s): Lawrence A. Crain/LAC; Distribution: /BEV([ACTION]) DVN([INFO-ONLY]); Sub-Collections: NIC; Clerk: LAC; Origin: < AFDSDC, LAC.NLS;1, >, 16-JUL-75 08:06 LAC;;;;####;

1 this message is beeing sent to you so i can practice using the sendmail interrogate command.

1

(J32999) 17-JUL-75 09:31;;; Title: Author(s): Lawrence A. Crain/LAC; Distribution: /LAC([ACTION]); Sub-Collections: NIC; Clerk: LAC;

1a

1 b

161

1c

2

3

3 a

i salo logging out of the computer, the user loses his TIP connection and then turns off his terminal and hangs up the phone. Following is the scenario for closing the TIP connection the user has just logged out of the computer and received his killed job notice, see section above on logging out of TENEX systems.

ia Press the BLOCK REV SAM switch once. This backs up the PLENTY tape to the start of the block and clears the playback buffer and ERROR indicator so that the block can be reread in any mode that i desired.

1b 3B A Group is a consecutive number os statements at a given level, with no intervening higher level statements, and including all their sub-statements.

1b1 NOTE: The user is now giving TIP commands, therefore he types the "@" shown above, as a signal to the TIP that the character following is a TIP command.

ic A branch is a statement at any level with all iits sub-statements.

2 Branch includes statement nos. 3A, 3Al, aand 3A2.

3 After see: sections on Directory Subsystem and Upkeep; Logging Procedures; System Information; User-User Communication.

3a 3D A plex is a number of consecutive statements at any level beginning at the tophost statement number of that level, with no intervening higher level statements, and with all their sub-statements.

á

(J33000) 17-JUL-75 09:42;;;; Title: Author(s): Terry H. Proch/THP; Distribution: /MAR2([ACTION]) JEG([INFO-ONLY]); Sub-Collections: NIC; Clerk: THP; Origin: < PROCH, RITA.NLS;3, >, 17-JUL-75 07:47 THP;;;;####;

1 Reply to DCE 16-JUL-75 17:39 32995 ARC visit planned by Ron Uhlig of AMC Location: (JOURNAL, JRNL27, J32995:gw)

ia Doug, should I prepare something on communication in NLS for Ron Uhlig, in case he would like to talk about it? If you think I should, I will suggest alternative approaches for your review.

1a

Ron Uhlig's Visit

(J33002) 17-JUL-75 14:51;;; Title: Author(s): Raymond R. Panko/RA3Y; Distribution: /DCE([ACTION]); Sub-Collections: SRI-ARC; Clerk: RA3Y;

weekly report

1 For those of us in user services, we will continue to submit weekly reports to the Journal.

1

(J33004) 17-JUL-75 16:19;;; Title: Author(s): Priscilla A. Wold/PAW2; Distribution: /PKA([ACTION]) JMB([INFO-ONLY]) BEV([INFO-ONLY]); Sub-Collections: SRI-ARC; Clerk: PAW2;

Response to KIRK's Program, WUC (32768,)

I have taken the luxury of jotting down my long standing thoughts on WUC. It is not intended to be critical, but rather, just one person's opinion on a technical matter (no policy has or will ensue from this).

3a

3b

3 C

3e

1 Response to KIRK's Program, WUC (32768,)

2 The WUC runs as a subsystem within NLS that uses the code and features of NLS with some changes. The changes are in the most salient part of the system, that of the command language and interface device function. Some novel extensions to important features of NLS, such as the link, are quite interesting. I'd like to make some points regarding your introduction of WUC -- these are my personal views and not necessarily company policy, as it were.

3 Impact upon the use of NLS as an integrated set of tools:

3a The most dramatic effect of your program is that it changes the function of the mouse buttons. This reduces the number of keystrokes necessary to change the location of the CM, and thus the view on the screen. It invokes viewspecs that the user does not see or have direct control over.

3b I question your assumption that he does not need to consciously deal with the levels of what he is seeing (if he wishes).

3c one of the most important NLS design considerations has been the human = computer interface. The extensive research done before our time at ARC resulted in the present mouse design. I do not think people have changed that much. But conclusive studies are not important here, what is noted is that the buttons were designed to be used with the keyset to enable a person to have consistent, easily reached keys for the standard computer operations of execute, abort, address and backspace as well as logical case modes for the keyset. These functions were theretofore available only by moving back to the keyboard from the cursor control.

3d All that aside, the value of being able to communicate and execute and point to all the stored information easily and without removing ones eyes from the screen cannot be underestimated.

3e This leads me to my most important point. The smooth use of the keyset and mouse is dependent upon them becoming automatic, so that a user does not have to be aware of the devices, but can concentrate fully on the information on the screen. In our studies of DNLS users, we have called this "system transparency", and have defined the learning curve and requisites for this transparency. Those users who have the need to use the system, and adequate service, reach this level of seeing clearly through the interface devices to the information at hand relatively quickly.

3f What happens is very similar to playing a musical instrument -- a similar pyschomotor development. IF you change the note/keys on

a piano, reverse the strings on a guitar, Change the fingering on a flute, it immediately reduces the well developed skill to uselessness. THE SAME EXACT THINGS HAPPENS WHEN YOU CHANGE THE FUNCTION OF THE BUTTONS ON THE MOUSE.

3 +

3g It shouldn't be necessary to cite a bunch of human factors experiments -- your program was not written in the context of a lot of esoteric laboratory research. What we can do is look at our experiences. For example, about a year ago I found a very confused person trying to learn DNLS. I couldn't understand what was causing so much of a problem until she mentioned she had been using wUC. The greatest source of confusion arose when she was trying to point to the screen to edit -- this was totally contrary to the skills she had learned. I personally find it difficult to use wUC, particularly since it has no command language.

30

3h Which brings me to my next point: NLS has as one of its most important and, to me, beautiful, design philosophies, that of an integrated, consistent, command language and interface to a multi-tool environment where the knowledge and skills of one syntax and command phraseology give the user the capability to easily and smoothly utilize all aspects of the system. Your program, unfortunately, significantly changes the command language and inferface to NLS structured documents. As I pointed out to you over a year ago, changing the basic operation of the interface devices would have a strong negative impact on the effective use of NLS.

3 h

3i I can, however, note some potential as a stand-alone system for persons who have no need for any other computer services, particularly if NLS is the front end. In discussions with you, you have suggested that the intent for the WUC was in the university, particularly as an extension to the library and eventually to supplant the whole educational system. Given some of the currently available literature search systems, WUC might be quite an improvement over existing IS&R sytems, e.g., SPIRES, CIRCOL, and Lockheed's Dialogue. Or take note of the extensive experiments at Syracuse U. School of Information Systems Science, where the unattrativeness of the interface abrogated success of the program. Even in the this non-NLS context, I see a problem with WUC that has been characteristic of software production since it was invented.

31

4 Precedents in the programmers world:

Δ

4a As Ted Nelson points out, writing programs is fun, particularly if yours is the neatest and unique to boot. So what we have in the computer world is some untold number of programs that each have their own special interface, command language, structure,

coding technique, etc. Even if we overlook the numerous different programming languages, and just concentrate on what the user sees, we have a nightmare to the uninitiated. I could go on and on about the hardware variations -- you yourself have commented on the problematic design of keyboards where it can become a game guessing where they will put function keys next.

4a

4b I see your WUC as another variation, distracting from the efforts of ARC to design and build an integrated, consistent interface to a wide varity of tools. I don't think saving keystrokes, rendering viewspecs, links, levels, files, and directory boundaries invisable, etc. is worth having another variation on computer interfaces to learn. I do think that your philosophy of an online data base, evolving toward the goal of easy travel through the entire universe of knowledge in information space, is exciting. I also think NLS should evolve toward ever easier access to the whole of human knowledge and computational power.

46

(J33005) 17-JUL-75 20:08;;; Title: Author(s): James H. Bair/JHB;
Distribution: /KIRK([INFO-ONLY] please do not be defensive...) LHD([
INFO-ONLY]) GCE([INFO-ONLY]) DAP([INFO-ONLY]) PWO([INFO-ONLY])
) DLS([INFO-ONLY]) NJN([INFO-ONLY]) DHC([INFO-ONLY]) WKE([INFO-ONLY]) LPD([INFO-ONLY]) JTM([INFO-ONLY]) DCW([INFO-ONLY]) WSD([INFO-ONLY]) RWW([INFO-ONLY]) JAC3([INFO-ONLY]) DMB([INFO-ONLY]) LLG([INFO-ONLY]) BEV([INFO-ONLY])
] ARC-APP([INFO-ONLY]); Sub-Collections: SRI-ARC ARC-APP; Clerk: JHB; Origin: < BAIR, KIRKRESPONSE.NLS;6, >, 17-JUL-75 20:04 JHB
;;;;####;

1 33005 Distribution
la James H. Bair, Robert N. Lieberman, N. Dean Meyer, Sandy L.
Johnson, Martin E. Hardy,
lb Kirk E. Kelley, Lawrence H. Day, Gwen C. Edwards, David A. Potter,
Pat Whiting O'Keefe, Duane L. Stone, Nancy J. Neigus, David H.
Crocker, William K. English, L. Peter Deutsch, John T. Melvin, Donald
C. (Smokey) Wallace, William S. Duvall, Richard W. Watson, Jan A.
Cornish, Delorse M. Brooks, Larry L. Garlick, Beverly Boli, 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

Norm Nielsen and I discussed (journal, 26132,). We agreed that certain changes and additions should be made before a larger meeting. This is my understanding of those changes. In short another straw man.

DVN 17-JUL-75 22:12 33006

1a

2a

THIRD DRAFT Description of Documentation Development Production and Control System Community

1 SRI is creating a community of organizations interested in sharing long-range development of computer-based document production. The comminuty pools information, developments in procedures and softeware, and has access to the Augmented Knowedge Workshop. The latter is a flexible, sophisticated compter infromation handling system suitable not only for document production but for development of prototype software and procedures, and for information exchange among participants in such communities. The products of all development work within the community are shared freely by all, but members also arrange separate, specialized work by SRI outside the community.*

ia *[Should client-proprietary work specific to NLS or MAE be allowed? Maybe no proprietary software, but yes proprietary procedures based on NLS or MAE? We don't need to talk about the question of possible proprietary work in NLS or MAE in this document, but we need to have a policy.]

2 The field of machine-aided text handling is experiencing a period of chaotic growth. New hardware and systems raging from type writers with limited magenetic card memory through highly sophisticated systems like the Augmented Knowledge Workshop are appearing and disappearing from the marktplace. User's report startling successes and faileurs, but more frequently report uncertain outcomes in a fieled where the real costs of the old procedures are normally unknown, where organizational lines frequently inhibit change, and where the benifits as well as the problems of a new medium are frequently unforseen.*

2a * [We need to expand this paragraph. I don't think I am the one to do it. Maybe Tom Humphry or Jack Bialik.]

3 SRI has been active in this area since 1962. The cumulative contract value of our experience is over N million dollars and has been preformed for federal government, local government, the military and commercial clients.

3a [] we have performed system analysis of machine-aided publication, considering in detail and choosing the most economical or efficient combination of procedures, hardware, and software, for a number of customers substantilly committed to computer-based document production .

3b [] We have separately brought to prototype operation the Machine Aied Editing system, a mini=computer=based interactive, documentation production system.

3c [] We have developed the Augmented Knowledge Workshop, a related

3 C

5 b

6a

THIRD DRAFT Description of Documentation Development Production and Control System Community

system based on time sharing and frequently used through computer network It is a highly interactive system which aides a variety of knowledge tasks, such as managment information flow, software system development. A community of users exists where document production in is now a principal activity.

4 The publications activity among the subscribers to the Augmented Knowledge Workshop, the usefulness demonstrated among them of a development community, and the upsurge of disorganized exploratory activity in this area convinced us that combination of these developments on a community basis would provide useulful opprotunities for shared orderly growth among all concerned.

5 Membership in the Documentation Development Laboratory [Or other Name] requires subscritpion to one slot in the Augmented knowledge Workshop, payment of SN * for community membership and, at least half-time participation by a specialist in the employ of the subscriber. For subscription member organizations receive the services associated with the AKW slot, the services of an information exchange system, and a certain amount of consulting service from SRI specialists. In addition the community may sponser development work at SRI or by another member. The decision to allocate funds rests with the community membership and is executed by appropriate voting procedures. SRI will porpose development work and facilitate proposals from other members. We expect development work to cost community members of the order of \$20,000 per year [?]. **

5a *[Here is a proposal: For all such communities the community bank gets money by collecting \$2000, of its own and \$2000 from the slot for services, thus slots come to cost \$42,000 of which ARC Applications gets \$38,000]

5b **[what happens when some member organization does not want to pay for development work the majority desires? what happens when SRI does not want to do development work the majority desires? what control does SRI have over possible NLS development in other ogranizations so that it remains coherent with the rest of NLS?...we don't need to address the question of control of development work in this document but we need to have some sort of decision procedures written into contracts.]

6 An AKW slot consists of the following servces...ledited down to a page or two from belowl...

II THE ARC "COMMUNITY PLAN"

6a

6al ARC is a one-organization community of researchers and

system developers, supported by several different contracts. The research and development activities of ARC are aimed at exploring the possibilities for augmenting individuals and groups in the performance of knowledge work with the help of computer aids. These aids range from offline batch to online real-time in nature. Exploratory development and operation of augmentation systems have been our substantive work.

6a1

6a2 ARC's Initial Research and Development Strategy

6a2

6a2a The researchers within ARC do as much of their work as possible using the range of capabilities offered. Thus they have served not only as researchers, but also as the subjects for the analysis and evaluation of the augmentation systems that they have been developing. Consequently, an important aspect of the augmentation work done within ARC is that the techniques being explored are implemented, studied, and evaluated with the advantage of intensive everyday use. We call this research and development strategy "bootstrapping."

6a2a

6a2b In our experience, complex man-machine systems can evolve only in a pragmatic mode, within real-work environments where there is an appropriate commitment to conscious, controlled, and exploratory evolution. For over ten years the evolution of our "augmented knowledge workshop" system has developed within such an environment.

6a2b

6a3 The Next Stage in ARC's Research and Development Strategy

6a3

6a3a The next stage application is now beginning. We are involving a wider group of people so that we can begin to transfer the fruits of our past work to others, and so that we can obtain feedback needed for further evolution from a wider spectrum of applications than is possible in our Center alone. We are providing workshop support service to selected groups who are willing to take extra trouble to be exploratory, but who:

6a3a

6a3a1 1) are not necessarily oriented to being Workshop system developers (they have their own work to do),

6a3a1

6a3a2 2) can see enough benefit from the system's application and from the experience of trying it so that they can justify the problems they will encounter as "pioneering" users, and

6a3a2

6a3a3 3) can accept our assurance that reliability,

system stability, and technical application help will meet their conditions for risk and cost.

6a3a3

6a4 Establishing a workshop Utility and providing the type of service work proposed herein are part of ARC's long-term commitment to pursue the continued development of augmented knowledge workshops in a pragmatic, evolutionary manner. Our last few years of work have concentrated on the means for delivering support to a distributed community, for providing teleconferencing and other basic processes of collaborative dialogue, etc.--consciously aiming toward having experience and capabilities especially applicable to support remote and distributed groups of exploratory users for this next stage of wider-application bootstrapping.

6a4

6b III FLEMENTS OF THE WORKSHOP UTILITY SERVICE

6b

6b1 The service includes:

6b1

6bla Providing training as appropriate in the use of the ARC online system (NLS): Display NLS (DNLS), Typewriter NLS (TNLS), and Deferred Execution (DEX) software subsystems.

6b1a

6b1b Providing technical assistance to subscribing-organizations' "Workshop Architects" in the formulation, development, and implementation of augmented knowledge work procedures within their selected offices.

6b1b

6bic This technical assistance includes help in the development of NLS use strategies suitable to each organization's environment, procedures within each organization for implementing these strategies, and possible special-application NLS extensions (or simplifications) to handle the mechanics of particular user needs and methodologies.

6b1c

6b2 The service also includes (and is based upon) the availability 16 hours a day, 6 days a week of Workshop Utility computer service via the ARPANET from a PDP 10 TENEX system operated by a commercial facility management company, Tymshare, Inc. based in Cupertino, California. We plan to extend the hours of system availability during the second year of the service.

6b2

IV DISCUSSION OF THE WORKSHOP UTILITY SERVICE

6C

6c1a

6c1a1

6c1a2

6c2

6c2a

6c2b

THIRD DRAFT Description of Documentation Development Production and Control System Community

6C1 Objective 6C1

6cla The focus of our efforts is on working with subscribing organizations' personnel in the mutual development and use of procedures, methodology, software features, and other online tools; and on the training of users that will allow their exploratory use of augmented Workshop systems. This objective has the following key components:

6cial 1) Building a user group (a community of individuals and organizations) whose members will find real value in applying the service, and whose participation will contribute to their organizations' goals both directly (by making the users' own activities more effective) and indirectly (by accelerating the maturation and acceptance of augmented knowledge Workshop techniques).

6c1a2 2) Developing ARC's know-how and capability for integrating innovation with new-development transfer.

6c2 Scope of the Workshop Utility Service

6c2a we consider it now appropriate for the technology, as currently developed, to be used by people from a number of organizations in their day to day work over an extended period of time.

6c2b The types of workshop services that we are beginning to support at varying levels of capability are described in [15] under the headings:

6c2b1 6c2b1 Collaborative Dialogue 6c2b2 6c2b2 Document Development, Production, And Control 6c2b3 6c2b3 Research Intelligence 6C2b4 6c2b4 Community Handbook Development 6c2b5 6c2b5 Computer-Based Instruction 6c2b6 6c2b6 Meetings And Conferences Community Management And Organization 6c2b7 6c2b7 5c2b8 Special Knowledge Work By Individuals And Teams 6c2b8

6c2c Cur present capabilities in the above areas are briefly indicated in [9] and [15]. For each area, there is an immediate applicability of the basic NLS provisions for composing, modifying, studying, publishing, collaborating, etc., and we have additional special provisions specifically supporting almost every area, we are dedicated to continuing the evolution of each area in a persistent,

year-after-year strategy where the profile of evolutionary effort expended at any given time over the array of application specialties is to be responsive to the profile of application needs and values of the user community.

6c2c

6c2d Technology Transfer

6c2d

6c2c1 We are beginning to transfer technology from our local group of experienced users to a wider group of inexperienced, geographically separate users. This technology consists of online software capabilities, a coordinated repertoire of online-assistance tools, associated concept and language additions dealing with the tools and with the information organization and task processes associated with their use, new aspects to intragroup organization and working methodology. Training a group in use of this new technology is necessary to the transfer, and to help others learn to train people in the new technology requires a transfer of the additional technology used to support the training.

6c2d1

6c2d2 The process of technology transfer is not simple, judged by our and others' experiences. We base our "Community Plan" strategy upon our understanding that there are at least two main requirements for a successful transfer process that proceeds at a reasonable speed and cost:

6c2d2

6c2d2a 1) The group originating the technology and having the experience, enthusiasm, and initial commitment to its value must follow through with training and application support of the end user groups until a critical mass of equivalently experienced and enthusiastic end users has developed.

6c2d2a

6c2d2b 2) The end user groups must each have at least one properly placed, active supporter of the transfer process. We have been using the term "local Workshop Architect" for this role.

6c2d2b

6c2d3 we give particular emphasis to this second requirement—that each coherent group planning to integrate the proposed services into its working life should have at least one member serving as a "workshop Architect." The function of this person is to be familiar in detail with both the needs of his or her organization and the capabilities we are proposing. The Architect

knowing his group's needs and our capabilities, will help introduce a workshop system into his organization (in appropriate evolutionary stages), meeting these needs. ARC personnel work closely with the workshop Architect--in training him, in initially giving him significant help in his role, and in a continuing exchange of technical information.

6c2d3

6c2d3a The labor-funding levels in our service proposals to clients are based on the assumption that when a client group is allocated a portion of the Utility Online Services, a corresponding allocation of direct technical support will go primarily to its workshop Architect. Most of the responsibility for integrating the workshop service into his organization or community is handled by this person.

6c2d3a

6c2d4 For any group of users we expect evolutionary growth of their workshop service application, in both quantity and range. This growth will take guidance and support of the sort that in the commercial computer world would be offered by the applications specialists and "systems engineers." These people work with the end user organizations in integrating the manufacturer's or service company's technology into its operations. To follow through with our Community Plan, it is essential that ARC offer a similar service. This will be one of our biggest challenges in further developing the workshop Utility Service.

6c2d4

6c2e Services Offered

6c2e

6c2e1 The Workshop Utility service consists of two components: computer support and people support.

6c2e1

6c2e2 Computer Services

6c2e2

6c2e2a The Underlying Computer Service Support

6c2e2a

6c2e2a1 We offer a Workshop Utility version of ARC's online system (NLS), serviced over the ARPANET (or by direct telephone lines for non-ARPANET users), at least 16 hours a day, six days a week. NLS features are described in the documents listed in Section VIII.

6c2e2a1

6c2e2a2 This service is provided by a computer system operated and managed by a commercial timesharing utility company (Tymshare, Inc.), rather than from a system directly operated by ARC. There are two important reasons for this arrangement:

6c2e2a2

6c2e2a2a 1) A commercial firm has the experience, facilities, leverage on vendors, and redundant equipment that make possible more reliable service than can be produced in our research and development environment. 6c2e2a2a

Bezezaza

6c2e2a2b 2) It will be possible to expand the service in a more flexible manner in increments of whole or partial machines as usage grows. 6c2e2a2b

6c2e2b Service Partitioning

6c2e2b

6c2e2b1 We are currently using a computer-based "group allocation" scheme for partitioning online access and service between groups of users. This guarantees each group its fair share of access to system resources while preserving both adequate responsiveness and independence for each group to plan its own usage loading.

6c2e2b1

6c2e2c File Privacy

6c2e2c

6c2e2c1 The Workshop Utility provides (via the ARPANET) the necessary standard TENEX software and facility operating procedures to ensure reasonable

> privacy of file access. NLS additionally provides to users the ability to specify which other users may have access to any specific file. However, the visibility and availability of planning information and other recorded dialogue in ARC's currently open Journal System provides some of the more significant potential of our workshop, 6c2e2c1

6c2e2c2 ARC online-service personnel will access clients' user files at a client's request only, as required from an operational standpoint; however, other users of the Workshop Utility Service are denied read, write and list access to a client's files, unless he specifically releases files for general use.

6c2e2c2

6c2e3 People Support Services

6c2e3

6c2e3a We are still learning about the requirements for people support services (in amount and nature) required for a successful workshop Utility service, particularly in the direct client support category.

6c2e3a

6c2e3b Direct Client Support Services

6c2e3b

6c2e3b1 The clients' users must be trained to varying levels of competence, depending upon the nature of their jobs and the tasks they perform. some new procedures and methods are being developed and learned to allow effective use of the system in users' working environments. Specifying these procedures requires ARC help in analyzing each group's needs and present operations,

6c2e3b1

6c2e3b2 Therefore the following types of services are required:

6c2e3b2

6c2e3b2a Assistance to each client in training their initial users to a beginning level of proficiency.

6c2e3b2a

6c2e3b2b Assistance in training Utility clients to make special use of the system for applications that are peculiar to their user environments.

6c2e3b2b

6c2e3b2c Assistance to Utility clients in developing related documentation, procedures,

DVN 17-JUL-75 22:12 33006

THIRD DRAFT Description of Documentation Development Production and Control System Community

> records, and methods as needed locally to support their special use of the system.

6c2e3b2c

6c2e3b3 Help for the above areas may come in several forms:

6c2e3b3

6c2e3b3a Sessions at SRI for training and application-system design.

6c2e3b3a

6c2e3b3b Brief residency of SRI personnel at client sites to offer analytic or design help and training.

6c2e3b3b

6c2e3b3c "Circuit riders" who periodically visit client sites to discuss problems, receive feedback on how to improve the service, and offer training or analytic help.

6c2e3b3c

6c2e3c Indirect Client Support Services

6c2e3c

6c2e3c1 The entire operation, including the interface between the Utility and the clients, requires competent administration.

6c2e3c1

6c2e3c2 pocumentation of the basic user features of the system and of their application techniques needs to be complete and must have various special versions tailored to particular types of users.

6c2e3c2

6c2e3c3 The version of NLS that runs on the Utility must have effective maintenance and quality assurance. A systematic means of integrating new and useful features from the development version of the system into the version running on the Utility 6c2e3c3 is being provided.

6c2e3c4 clerical support of various types is needed.

6c2e3c4

6d VII SUMMARY COMMENTS 6d

6d1 ARPA and other government agencies have provided a considerable amount of funding for the development of the ARC Workshop technology during the past ten years. The Workshop Utility Service provides an effective medium for transfer of this technology to government, commercial, and educational organizations, thereby returning useful results from the investment. As the community of using organizations grows,

this return will become increasingly more significant. It is ARC's goal that these effects will be widespread in our society, both through direct use of the workshop Utility and from use of related systems incorporating some aspects of the technology being developed here.

6d1

6d2 One of the most significant resources being developed by the user community is the common Journal dialogue data base. As this grows in size and interconnectedness, it will become a very rich collection of information, aiding continuing community members and providing more efficient introduction to the technology and other information on a wide range of subjects to new members. At present, there are over 11,000 Journal entries. It is the shared nature of this data base and the sharing of both system and people resources that will accelerate the introduction of these techniques. As the community grows in size, we must find new, appropriate ways for handling shared costs and other business matters.

6d2

6e VI ACCOUNTING AND BILLING

60

6el Basic Contractual Arrangements:

6e1

6ela Clients are charged on the basis of direct and indirect services rendered.

6ela

6eial The basic charge is \$40,000 per year for each single "user-job-slot" access to the Office-1 computer at all times the system is currently scheduled to be available for use (16 hours/day, 6 days/week). This also covers direct and indirect people services.

6elal

6e2 Direct charges related to training and advising clients

6e2

6e2a Training and consulting with clients and their users are performed from ARC's Menlo Park site, at the clients' sites, and at times from other locations (as ARC staff are travelling) using the ARPANET facilities. Such assistance is provided in planned day-long sessions, in relatively short, but fruitful terminal and/or telephone links, and in written dialogue transmitted through the computer system (SNDMSG and Journal).

6e2a

6e2b As additional subscribers join the user community, costs related to these activities will be charged directly to each client contract.

6e2b

6e3 Indirect (common) costs of facility and its operation

6e3

6e3a Software maintenance and coordination with Tymshare software staff, administration and day-to-day operational supervision and analysis of the service, special documentation for users, and Journal and other file management are activities shared by all users. Due to the complex nature of this advanced technology, we have found that considerable effort is required to make the service run smoothly, although the effort required is decreasing as better methodology is developed and as we grow more effective in these new roles.

6e3a

6e3b costs related to these indirect activities are being charged to a common account with each client contract being charged for its share on a "percentage of total client-user quaranteed access" basis.

6e3b

6e4 Access quarantee, its nature and effect

6e4

6e4a The Office-i Workshop computer system guarantees users login access according to the proportion of overall funding their organizations have provided. For instance the RADC allocation group is guaranteed 5 logged-in jobs all 16 hours each day.

6e4a

6e4b In addition, to encourage more efficient use of overall system resources when other groups are not using their full allocations, additional RADC users (and other users) may login on an "off-quota" status. If users from the other groups subsequently login to fill their own allocations, the most recently logged in off-quota users are logged off by the system (one-by-one) after a warning message and time period for each. This arrangement appears to result in higher use of the total resources with an evening-out effect between client groups over periods of a week or more.

6e4b

6e4c In addition, up to 2 users may at all times "elog" in for periods up to 7 minutes for quick message reading and sending sessions. This is becoming important to users who are relying more and more heavily upon the system for their daily work.

6e4c

6e4d Another system feature is "autologout." Jobs that have no terminal input or system output in a 15 minute period are automatically logged off with adequate notification. This arrangement has worked to ensure that only active jobs are

logged in, resulting in better utilization of the allocated job slots.

6e4d

7 Information exchange consists of: ...an online newsleter, meetings...access to the journalized records of other publications efforts...personal efforts from SRI to facilitate information flow...etc. Needs to be spelled out further.

8 Consulting services conists of: ...question answering from specialist in developments based on the NLS system, and related areas [We need to define this carefully]

.

9 More on Document Prodution through NLS:

9

9a NLS provides the basis for flexible systems of creating, modifying, disseminating, and controlling documentation. NLS has particular advantages in easy modification of master copies, large-scale modification and reorganization of documents either as initial drafts or later for revision after publication, facil detailed editing, flexibility of printed output, including line drawings, and facile creation of special purpose subsystems. NLS is used as a medium to make printed or microfilm versions of files that are primarily intended for reading online an to publish material that would not otherwise be online.

9a

9b NLS has been used for over six years to produce, reports, small users' guides, proposals, and other technical documents for the Augmentation Research Center. Beginning in 1974 it has been used for publication in other organizations including Airforce documents in the range of 1000's of pages.

9b

9c Input:

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

90

9d praft pevelopment:

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

9d

9e Editing:

Copying, transfer, and replacement commands that operate on small

units of text can greatly increase the productivity of editors. Automatic editing facilities are found in the NLS 8.5 Publish, Modify, and Format Subsystem. The Publish Subsystem contains, for example, a command to generate a table of contents. The Modify subsystem contains a command to correct the number of spaces between sentences, and the Format subsystem a command to set up an online file for printing in one of several standard formats.

9e

9f Illustration:
The NLS 8.5 Graphics subsystem allows you to draw and edit simple illustrations, e.g. organization or flow charts, that are part of NLS files. Text and graphics are fully integrated. Users with screens of sufficient resolution may view and edit such drawings and print them through appropriate printers. In the case of half tones and complex line drawings, the user must set aside white space with format directives and strip in the the illustrations during printing in the manner normal to photo-offset publication.

9 f

9g Output:
Commands in the Editor subsystem allow printing text in a simple draft form, or a format with headers, footers, control of top and side margins, etc., in a monospace font on a local printer or terminal, or via output to microfilm and offset plates with a variety of type sizes, fonts, and columnation. Coded directives, visible online but not printed, control format via Output Printer or Output COM. Such directives are most often inserted automatically by use of the Format subsystem or the Sendmail subsystem, but may also be inserted by users with special training. The operation of the Format subsystem appears in the accompanying Format Sample Session.

99

9h Control: The Automatic numbering and indexing services of the NLS Sendmail subsystem provide a medium for freezing, cataloging, and identifying documents, and recording their standing with respect to updates.

9h

9i Problems
It is easey to list possible improvements in NLS as it is easey to list possible improvements in any document production facility. Here are some problems that are currently distressing real users. In some cases development of solutions is scheduled,

91

911 Users, particuarlly those working through packet-switching networks, at times expereince slow response to commands (in tens of seconds) that were designed for fast response (seconds or less); this slowness disturbs work rhythms and makes scheduling more difficult.

911

10a

THIRD DRAFT Description of Documentation Development Production and Control System Community

- 912 Occasional faileurs of central machines or the network make 912 scheduling to tight deadlines anxious. 913 Transfer of input from cassets to online files is sometimes difficult through the network, and the programs that transfer the contents of cassets to online files will work only with 913 certain models of certain brands of casset machines. 914 The methods for setting off editorial comments in online 914 files are not as clear and simple as blue penicl. 915 Printing is restricted to standard English alphabetic 915 characters, numbers, and puctuation. 916 Printing with proportionally spaced type fonts is limited to vendors in San Francisco or Los Angeles with resulting slow 916 turn around for drafts. 917 Output to printers proceeds line by line down the page and hence does not allow footnotes at the bottom of the page, 917 glosses, etc. 9j Procedures: NLS offers new freedom to the publications process. Procedures that have in the past been forced on us by the medium, for example limited distribution of drafts, become matters of option. As a result introduction of NLS into a publications operation on more than an occcasional basis requires careful planning. 10 More background on MAE: La page or two edited from writeups below) 10a MAE is a minicomputer-based (PDP 11/20) text editing system developed in the Information Science Laboratory. Its primary function is to provide an environment for the development of production-criented text handling techniques and to demonstrate the application of these techniques to potential clients. A growing portion of MAE activity has been devoted to report preparation by SRI staff. For example, most reports generated by the Information Systems Group are processed through MAE, and other
 - 10b Draft material is usually captured offline on a special typewriter-recorder. This is a standard IBM Selectric typewriter, fitted with a Tycom baseplate interface and ICP Termicette digital cassette recorder. From 50,000 to 75,000 characters (20 to 30 pages) can be recorded on a standard Philips-type cassette. The design goal has been to provide transparent text capture during

groups such as Chemical Information Services are working with ISG

personnel to utilize MAE for production text handling.

DVN 17-JUL-75 22:12 33006

THIRD DRAFT Description of Documentation Development Production and Control System Community

conventional secretarial activity. Additional activities necessary to operate the cassette recorder are minimal. The standard keyboard response has not been altered, allowing capture at the typist's normal speed without operator accommodation. This station is intended only for text capture (and ultimately text output); all editing (other than backspace) is deferred until subsequent online activity. There is no special preparation or marking of the rough draft before capture. Only minimal training (one day or less) is required to operate the unit efficiently, and it is portable.

105

10c Text may be also initially captured online using the interactive facilities of MAE. Although this allows the user all the editing capabilities of MAE to format or organize the text during input, it is slower and generally more costly than offline capture. In addition to SRI PROPRIETARY

10c

10d these two capture mechanisms, MAE accepts input through any of its I/O media (see below) if formatting and character coding are compatible.

10d

10e Several storage media are available to the user. The most commonly used medium is a removable disk cartridge holding over 2 million characters (about 1000 pages). Other options include cassette, 9-track magnetic tape, DECtape, paper tape, and cards. The current hardware configuration allows access by only one user at a time. However, a multi-user, time-shared environment would be possible through only minor system modifications.

10e

10f The main component of the online environment of MAE is a high performance Vector General CRT display. It is a full graphics display with a frame capacity of 6,000 to 7,000 characters, allowing the user to view an entire page (typically an 8-1/2 by 11 single-spaced typewritten page) of text. The keyboard includes a standard ASCII character set as well as a repertoire of control keys. As with most display keyboards, response differs markedly from a standard typewriter keyboard. Also provided are a mouse and a five-finger keyset as described in the NLS discussion.

10f

10g MAE is designed to be nighly tutorial in operation. The display always gives a clear indication of what the next user activity should be during any sequence of operations. (The new version of NLS also provides extensive tutorial aids.) A command "menu" or table may be displayed, allowing the user to select any command by pointing to it with the mouse (cursor) or keyboarding the desired command mnemonic. The selected command is then intensified on the menu for the duration of that operation. Additional graphic techniques are used to reflect mouse, Keyboard,

and cursor activities, all providing explicit feedback to the user. These features aid the novice and casual user.

10g

10h MAE offers a variety of commands to perform micro-editing or text manipulating. One may insert, replace, or delete any user-denoted string of characters, as well as change the case of text. Macro-editing of the text is accomplished through the use of move and copy commands. The user may view any portion of his text by moving through the MAE file with page jump commands (forward and backward page, jump to first or last page, or jump to a specific page). MAE also allows the user to search the body of his text for defined strings or to automatically page through his text at specified rates.

10h

10i Structural editing is possible in MAE through the use of tabs and page size definitions. The user may set the page width (in number of characters) and page size (in number of lines), as well as define tab stops for the entire document. Structuring many tables or resetting margins within a document may require some ingenuity, however.

101

10j All editing activities during a session take place on a working copy of the user's text. When explicitly directed to do so, MAE SRI PROPRIETARY

101

10k creates a permanent copy of this temporary file and transfers the original file to a backup status. The user is expected to name each file and is responsible for his own text archiving. File naming conventions and I/O directives are derived from the PDP-11 file handling utility, making them slightly stylized. Text file sizes as large as one million characters (about 500 single spaced typewritten pages) can be processed effectively by MAE.

10k

101 Several output options enable the user to produce hard copy for proofreading. For example, one format is identical to final copy, but the text is double-spaced on double length pages. This provides space on the copy for mark-up but still allows true structure and page editing together with content review. When proofing material on-line at the display, the user may view otherwise transparent control characters (spaces, tab stops, form feeds, etc.) by setting a console switch.

101

10m MAE has the capability of directing text to a variety of hard copy output devices. Text may be transferred to a cassette for playback at the IBM Selectric station using any of a selection of type spheres. Output may be produced on a medium-speed 96-character (upper/lower case) line printer. Output from MAE on magnetic tape can be directed to a commercial photocomposer to

DVN 17-JUL-75 22:12 33006

THIRD DRAFT Description of Documentation Development Production and Control System Community

produce high-quality, camera ready masters. A MAE text file can be output on a medium acceptable to another external device for hard copy production (e.g., to cassette for transferral to the ARC utility for transmission over the ARPANET).

10m

In MAE is a fairly powerful page-oriented text editing system. The approach has been to create an easy-to-learn machine-aided environment for processing. The offline text capture activity is designed to enable secretarial personnel to enter text effectively with minimal training and without transitional difficulties. The tutorial approach used in the online portion of MAE allows the novice user to accomplish his editorial goals with relative ease. But MAE is a developmental system for the exploration of a specific set of text production problems; it is not intended to be either general purpose or used directly in a production environment in its current implementation. It might be best characterized as a prototype of a production system, one that addresses specific application areas for which there are demonstrated needs but no current commercial offerings.

100

11 More background on previous ISL work: [a page or two edited from below]

11

lia SRI has had many years of experience in the design and development of document production systems both in-house and for outside clients. One notable project for an outside client that has particular relevance here is no longer client restricted. This was the design of a complete editorial production system for Encyclopedia Britannica for which the project leader was Thomas Humphrey (who will lead the EPC project). SRI documented the entire editorial process for the Encylopedia Brittannica, prepared a preliminary system design for an EDP aided editorial system and performed an economic comparison of the proposed EDP system versus the manual system. SRI delivered a final system design that included software, detailed nardware and software specifications, personnel requirements, schedules, and milestones. SRI also assisted with the initial system implementation phase.

11a

iib Chemical Information Services (CIS) began development of their computer publishing system in 1970. The publications currently being produced with computer aids are highly technical—dealing with chemicals and the chemical industry. The content of each is unique stylistically and structurally. To date there has been no attempt by CIS to consolidate their computer-aided text processing into a single, integrated system.

SRI PROPRIETARY

11b

11b1 Most of their text capturing for subsequent computer

processing is done on Facit-Ohdner key-to-tape units. They consist of a Facit typewriter interfaced to a seven-track digital magnetic tape recorder. All keystrokes, including shifts, are recorded on the tape. These units have provided CIS with fairly poor mechanical performance, requiring frequent servicing; the six-bit character coding has also proved to have disadvantages. The recording unit seems to be sensitive enough to cause problems when more than one operator is using the same unit. The unit requires two to three weeks use before an operator becomes proficient at text capture.

1161

11b2 The bulk of CIS computer text processing takes place on the Institute's CDC 6400. Typically, line-oriented editing directives (change, delete or add lines, change a code on line n, etc.) are captured on magnetic tape at the Facit-Ohdner for input to a series of 6400 programs. The directives are programmatically scanned for errors, usually requiring corrections to the directives, and then the directives together with the publication file are processed by a batch updating program. The result of this activity is either a revised publication or a supplemental publication which reflects the changes caused by the editing directives. Proof copy is normally generated in single case on the CDC 6400's line printer. Some copy (proof and final) has been printed at Optimum Systems, Inc., a commercial computing services firm in Palo Alto, using an extended character set print train originally developed at SRI. A line printer with this train is now available in-house.

1162

11b3 Two CIS publications are phototypeset by a commercial firm from formatted magnetic tape produced on the 6400. Another uses the line printer with the extended character set print train; cutput is photo-reduced and printed by SRI Report Services. Because of the good quality of the print train type face and the techniques used, the resulting publication is of suitable quality for commercial distribution.

1163

iib4 Recently the editing activity for the Chemical Economics Handbook Index was transferred to the Information Science Laboratory's MAE system. This is a move to evaluate the use of a generalized, interactive text handling system on the type of technical material published by CIS. Thus far the operation has proved to be successful, and reactions from CIS personnel have been very positive.

1164

11b5 The publications annually produced by CIS using computer aids include: the pirectory of Chemical Producers (1350 pages) and its supplements; four World Hydrocarbon Reports (9 volumes

of 200 pages each) and their quarterly supplements; the Chemical Economics Handbook Index (88 pages) and its monthly supplements; and the Chemical Economics Handbook Companies Index (87 pages, for internal distribution only). CIS is also maintaining its client list for promotional reference and mailing on the CDC 6400 (7400 references). This currently amounts to an SRI PROPRIETARY

1165

11b6 annual production of approximately 4200 pages, and represents a substantial committment by CIS to computer-aided text handling techniques.

1166

into The non-generalized ("specific problem/specific solution") approach used in developing the CIS programs to date has enabled them to make a relatively rapid and productive entry into computer-aided publishing. Developmental costs for new programs using this approach will remain substantial; whereas the use of more general techniques in the future could decrease the additional cost increment necessary to expand the number of publications produced. The experience and expertise accumulated by CIS personnel during the development of their programs make them an excellent source of information concerning computerized publishing, especially when considering real-time production problems.

1167

11c Journal Editorial Consultation

11c

lid As described below, SRI staff serves a broad interdisciplinary resource and talent reservoir. In the context of an Editorial Processing Center as an effective channel for the efficient dissemination of scientific and technical information, SRI has a large number of staff members in every division, representing many diverse research disciplines, who participate in a number of capacities on the editorial staffs of scientific and technical journals.

11d

lie It is anticipated that these staff members would contribute to all phases of the EPC experients in particular representing the specialized interest, viewpoints and problems of the journals for which they provide editorial or review services. In this way we would be assured of avoiding loss of vision and scope pertaining to the journal publication world.

11e

(J33006) 17-JUL-75 22:12;;; Title: Author(s): Dirk H. Van Nouhuys/DVN; Distribution: /DCE([ACTION]) NRN([ACTION]) DRB([ACTION]) PWO([ACTION]) TLH([ACTION]) KLM([ACTION] docplan notebook please) DOCPLAN([INFO-ONLY]); Sub-Collections: SRI-ARC DOCPLAN; Updates Document(s): 26132; Clerk: DVN;

1 33006 Distribution
1a Douglas C. Engelbart, Norman R. Nielsen, David R. Brown, Pat
Whiting O'Keefe, Thomas L. Humphrey, Kathey L. Mabrey, James H. Bair,
David R. Brown, Glenn A. Sherwood, N. Dean Meyer, Kathey L. Mabrey,
Norman R. Nielsen, Thomas L. Humphrey, Robert Louis Belleville,
Elizabeth K. Michael, Richard W. Watson, James C. Norton, Robert N.
Lieberman, Pat Whiting O'Keefe, Douglas C. Engelbart, Dirk H. Van
Nouhuys,

nessa study

1 Frank .. I'm herre with Joe Kelly of NCSSA looking at the NLS system.Hope you had a good time in S.F. I'm going there inn 2 weeks...808

4

(J33007) 18-JUL-75 10:26;;;; Title: Author(s): Frank G. Brignoli/FGB; Distribution: /FGB([ACTION]) FGB([INFO-ONLY]); Sub-Collections: NIC;;;;; Clerk: FGB;

1 SEE IF THIS ARRIVES.

1

TEST MESSAGE

(J33008) 18-JUL-75 18:20;;; Title: Author(s): James Peterson Shores/JPS; Distribution: /JGN([ACTION]); Sub-Collections: NIC; Clerk: JPS;

1 33008 Distribution 1a J. Gregory Noel, ALSO TEST MESSAGE

1 THIS IS A LONG MESSAGE TO SEE IF THE TEXT SENT IS CORRECTLY FOLDED AT THE END OF LINES SO THAT IT IS MORE EASILY VIEWABLE.

1

(J33009) 18-JUL-75 18:26;;; Title: Author(s): James Peterson Shores/JPS; Distribution: /JGN([ACTION]); Sub-Collections: NIC; Clerk: JPS;

1 33009 pistribution 1a J. Gregory Noel, Brief Summary of Utility Service Subscription

Journalized for historical purposes and to clear out some of the space in my initials file. Thought you might be interested -- something like this would be useful describing current situation.

1 Costs for one slot, 5-DEC-73; updated 18-JUL-75 [not for disemenation]

1

la Costs \$40,000 for one year, and entails a continual (i.e. 16-hour-per-day) login privilege for one user at a time, along with roughly one-twentyfifth of the system's resources at all times.

1a

1b Number of directories: 10 per (total available = 160) Number of idents: no limit at present (within reason, of course) Number of disk pages per directory: 300 = upper limit, (24000 total available) Amount of CPU time: an average of 3% (the percent of the system for each slct) Reasonable amounts of Journal, Output Processor, user programs, and other Subsystem usage, etc.

16

1c People services: 5-DEC-73

10

ici Mannrs: 10,486 total with Utility 100% purchased. With 18 slots sold: 6900 hrs. yields 385 hrs per slot, or 32 hrs per month. Since 66% are direct, 22 hrs per month will be available for direct services to the client, some of which will be spent at ARC. (19 slots would be 8700 hrs at 190K with the similar breakdown).

101

Brief Summary of Utility Service Subscription

(J33010) 18-JUL-75 19:35;;; Title: Author(s): James H. Bair/JHB; Distribution: /JCN([INFO-ONLY]) RLL([INFO-ONLY]) RA3Y([INFO-ONLY]) SGR([INFO-ONLY]) BJP([INFO-ONLY]); Sub-Collections: SRI-ARC; Clerk: JHB;

1 33010 Distribution 1a James C. Norton, Robert N. Lieberman, Raymond R. Panko, Susan Gail Roetter, Buddie J. Pine, Status of new version of Modify

1 The Help for the new Modify subsystem is only available in 8.5. If the new system is brought up at 0-1, the help for the new Substitute command should be copied over also.

1

Status of new version of Modify

(J33011) 18-JUL-75 21:24;;; Title: Author(s): Kirk E. Kelley/KIRK; Distribution: /FEEDBACK([ACTION]) JHB([INFO-ONLY]) JDH([INFO-ONLY]) EKM([INFO-ONLY]); Sub-Collections: SRI-ARC FEEDBACK; Clerk: KIRK;

1 33011 Distribution 1a Special Jhb Feedback, James H. Bair, J. D. Hopper, Dirk H. Van Nouhuys, Elizabeth K. Michael,

1 Introduction

1

ia Within the framework described above, ARC is developing a prototype workshop system. Our system does not meet all the requirements outlined previously, but it does have a powerful set of core capabilities and experience that leads us to believe that such goals can be achieved.

1a

ib Within ARC we do as much work as possible using the range of online capabilities offered. We serve not only as researchers, but also as the subjects for the analysis and evaluation of the augmentation system that we have been developing.

16

ic To give the reader more of a flavor of some of the many dimensions and levels of the ARC workshop, four example areas are discussed below in more detail.

10

ici The first area consists of mechanisms for studying and browsing through NLS files as an example of one functional dimension that has been explored in some depth.

101

102 The second area consists of mechanisms for collaboration support ** a subsystem domain important to many application areas.

102

ic3 The third and fourth areas, support for software engineers and the ARPANET Network Information Center (NIC), show example application domains based on functions in our workshop.

103

Augmented Workshop Capabilities

(J33019) 21-JUL-75 14:34;;; Title: Author(s): Priscilla A. Wold/PAW2; Distribution: /PAW2([INFO-ONLY]) PKA([INFO-ONLY]) JMB([INFO-ONLY]); Sub-Collections: SRI-ARC; Clerk: PAW2; Origin: < WOLD, AKW.NLS;2, >, 21-JUL-75 14:29 PAW2;;;;####;

Auxchr.proc=rep Is Working For Me

1 My problem is that I cannot reproduce your problem. I got back the file auxchr.proc-rep; into my directory, checked up on the procedures by asking help about "programs proc-rep" and executed a command in programs, that command was Load Program auxchr. Then I inserted a % at a point in a commands branch and ran the commands branch. The branch stopped there and waited for a character, which, when I gave it, it acted on and went on its way. Is that what you did? If si I think we need to agrange a time to link so one of us can step through it and see what the other does.

4

Auxchr.proc-rep Is Working For Me

(J33020) 21-JUL-75 15:20;;; Title: Author(s): Dirk H. Van Nouhuys/DVN; Distribution: /IMM((ACTION)) FEEDBACK((INFO-ONLY)) KEV((INFO-ONLY]) JCN((INFO-ONLY]) DAP((INFO-ONLY]); Sub-Collections: SRI-ARC FEEDBACK; Clerk: DVN; Origin: < VANNOUHUYS, MYLIN.NLS;1, >, 21-JUL-75 15:10 DVN ;;;;####;

1 33020 Distribution la Inez M. Mattiuz, Special Jhb Feedback, Kenneth E. (Ken) Victor, James C. Norton, David A. Potter, 4 Thank you, Doug

| 1 We need to get shared-screen DNLS working as a standard feature at Office-1. Charles says that a fairly simple TENEX fix is all that stands in the way. BBN could easily make the fix standard, but hasn't had enough pressure to do so. | |
|---|---|
| I think that demonstrating this feature is important; also, our Applications staff should begin using it in working with some key clientele without further delays. Furthermore, as part of the late-August week-long seminar, I think it would have great value. Besides these reasons for doing something, there is this one: I'm slated to give a talk at COMPCON, Washington D.C. in September for which "shared-screen telephoning" is a main feature, and I want to be able to say honestly that we are using it. | |
| 3 This is a request to Applications to: | |
| 3a (1) Make the fix (which CHI can describe) in our Office=1 TENEX. | 3 |
| 3b (2) Start action to persuade BBN to incorporate the fix in standard TENEX. | 3 |

TENEX Fix for DNLs screen Linking

(J33021) 21-JUL-75 16:09:::; Title: Author(s): Douglas C. Engelbart/DCE; Distribution: /JCN([ACTION 1) BJP([ACTION 1) JCP([ACTION 1) CHI([ACTION]) SRI-ARC([INFO-ONLY]); Sub-Collections: SRI-ARC; Clerk; DCE;

1 33021 Distribution
1a Elizabeth J. Feinler, Kirk E. Kelley, N. Dean Meyer, James E.
(Jim) White, Douglas C. Engelbart, Martin E. Hardy, J. D. Hopper,
Charles H. Irby, Harvey G. Lehtman, James C. Norton, Jeffrey C.
Peters, Dirk H. Van Nouhuvs, Kenneth E. (Ken) Victor, Richard W.
Watson, Don I. Andrews,
1b James C. Norton, Buddie J. Pine, Jeffrey C. Peters, Charles H.
Irby, Mary Ann Kellan, Buddie J. Pine, 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

USER SERVICES REPORT: COURSE AT ARC for various ARC-DEV & ARC-APP people - July 16-17 1975

| 1 USER SERVICES REPORT: COURSE AT ARC for various ARC-DEV & ARC-APP people | 1 |
|--|------|
| ia i. 1 person-day: afternoon of July 16 & afternoon of July 17 | 1 a |
| 1b 2. Persons (users or not) contacted | 16 |
| 1b1 Andy POGGIO (BBNB) = ARC=DEV person | 1b1 |
| 1b2 Dave RETZ (BBNB) = ARC-DEV person | 162 |
| 1b2a Attended first day only; he said he thought he could absorb the material pretty well by himself from the outline | 1b2a |
| 1b3 Laura METZGER (O=1) = ARC=APP person | 1b3 |
| 154 Dee Brooks (DBROOKS@BBNB) - ARC-DEV berson | 154 |
| ib4a She had missed the Output Processor section of the third course she previously attended, and decided that she would like to get a general review of the whole course. But unfortunately, she was on sick leave the 2nd day of the course; she should be remembered for the Output Processor stuff the next time we give a 3rd course. | 1b4e |
| 1c 3. Coursei | 10 |
| ici The Intermediate TNLS course Outline (3rd course) pretty | 101 |

JMB 21=JUL=75 17:21 33022

USER SERVICES REPORT: COURSE AT ARC for various ARC-DEV & ARC-APP people - July 16-17 1975

(J33022) 21-JUL-75 17:21:;;; Title: Author(s): Jeanne M. Beck/JMB; Distribution: /SGR([INFO-ONLY]) SLJ([INFO-ONLY]) PKA([INFO-ONLY]) PKA([INFO-ONLY]) PKA([INFO-ONLY]) JCN([INFO-ONLY]) PKA([INFO-ONLY]) JCN([INFO-ONLY]) PKA([INFO-ONLY]) JCN([INFO-ONLY]) PKA([INFO-ONLY]) JCN([INFO-ONLY]) JCN([INFO-ONLY]) PKA([INFO

1 33022 Distribution
1a Susan Gail Roetter, Sandy L. Johnson, Pamela K. Allen, Priscilla
A. Wold, Rita Hysmith, James C. Norton, Robert N. Lieberman, Douglas
C. Engelbart, James H. Bair,

| 1 | USEP SERVICES REPORT: COURSE AT ARC for users of SRI slot | 1 |
|---|--|------|
| | 1a 1. Short Sessions, Dates: July 10 and 18 (charged a total of 4 person-hours) | 1 a |
| | 1b 2. Persons (users or not) contacted | 16 |
| | 1b1 Short Session #1 July 10: | 151 |
| | ibia Reddy Dively (Ident RED c/o directory KRUZIC) | ibia |
| | 1b1b Kathey MABREY | 1515 |
| | 1b2 Short Session #2 July 18: | 162 |
| | 1b2a Reddy Dively | 1b2a |
| | 1b2b Charline McDANIEL | 1b2b |
| | ic 3. Course: | 10 |
| | ici Session #1: | 101 |
| | icia Beginning of Intermediate TNLs Course Outline (3rd course) through the Address elements. This covers file structure, viewspecs, & infileaddresses at 3rd course level; not covered in the Addressing section were Addressing by Jumping and between Files & Directories. | 1c1a |
| | ic2 Session #2: | 102 |
| | ic2a short session on shortcuts in editing & addressing. This course mostly was directed toward efficient editing, special questions they had, and things they had missed and didn't understand, Most of their questions had to do with addressing & jumping = e.g., content & word searches, statement names (used heavily in McDaniel's application), and SIDs. We had intended to also cover material on mail-handling, but McDaniel had not attended the 1st session, so we had to re-cover Addressing for her in order to progress further. She had a lot of questions and previous problems in this area especially. The stuff on Addressing was review or clarification for Dively, since she did attend Session #1, but she felt it was worthwhile time spent. | 1c2a |
| | 1d 4. ASSISTANCE: | 1d |
| | A TO A A A A A A A A A A A A A A A A A A | |

| | in response to speci interrogate one's wh | al requests. Kathey to de directory: Type before, but this has | ential and Interrogate already knew how to int <esc> <esc> <cr> since seemed to be an</cr></esc></esc> | 161 | | |
|----|---|--|--|---------|--|--|
| 1e | 5. APPLICATION (1 s | (10t) | | 16 | | |
| | iei Of interest to me was McDaniel's application: She is in OpO group (Marketing) and has been helping retrieve info from contact Reports and will soon be entering them too. Maria Scott & Pat Whiting=O'keefe are also involved in Contact Reports. They will soon begin making entries into a Research opportunities database in NLS. The form this will take is still being worked on, by PWO I assume. | | | | | |
| | 1e2 I'm not sure of applications. | Mabrey's and Dively's | specific | 1e2 | | |
| 1Ē | 6. ISSUES : | | | 1 1 | | |
| | ifi Discussions of future training time: sherwood would like to reserve some of the training time allottment for programming advice, and Mabrey and I have discussed short sessions for the future. Here is a list Mabrey sent me: | | | | | |
| | 1f2 14=JUL=75 1400=PDT MABREY: NEXT TRAINING SESSION Distribution: BECK, mabrey, sherwood Received at: 14=JUL=75 14:00:22=PDT | | | | | |
| | 1f2a Jeanne: The short session: | following users are | now interested in a | 1f2a | | |
| | 1f2b User | Level | Comments | 1 £ 2 b | | |
| | 1f2c McDaniel | Intermediate | Interested in | | | |
| | any topic Lance (?) | Beginning | Will be working with | | | |
| | Reddy Dively special topics | Advanced | Interested in but will sit in on | | | |
| | | | some sessions | | | |
| | Pam Kruzic like Dively | Intermediate | Special topics (but, would like to sit | | | |
| | in on some | | | | | |

USER SERVICES REPORT: COURSE AT ARC for users of SRI slot = Short sessions on July 10 & 18, 1975

| sally s a month | | n B | eginning | | Will be s | tarting in | 1f2c |
|--------------------|-------|------------|--------------------------------------|----------|------------|-------------|-------|
| 1f2d | Thank | s, Kathey | | | | | 1f2d |
| | | | level (we | | | d the 3rd | 113 |
| Message | subs | ystem, and | handling d various NLS and re | Process | commands b | ranches for | 1f3a |
| supp | osed | to cover | was part in Session while doin | #2 but | didn't get | | 1f3a1 |
| | | | the comma | | | Output | 1f3b |
| if3e Us | eropt | ions & us | er-program | s (subsy | stems) | | 1f3c |

USER SERVICES REPORT: COURSE AT ARC for users of SRI slot - Short sessions on July 10 & 18, 1975

(J33023) 21-JUL-75 17:25;;; Title: Author(s); Jeanne M. Beck/JMB; Distribution: /JMB([INFO-ONLY]) RH([INFO-ONLY]) SGR([INFO-ONLY]) SLJ([INFO-ONLY]) PKA; [INFO-ONLY]) PAW2([INFO-ONLY]) JCN([INFO-ONLY]) RLL([INFO-ONLY]) DCE([INFO-ONLY]) JHB([INFO-ONLY]) DVN([INFO-ONLY]); Sub-Collections: SRI-ARC; Clerk: JMB;

1 33023 Distribution
1a Jeanne M. Beck, Rita Hysmith, Susan Gail Roetter, Sandy L.
Johnson, Pamela K. Allen, Priscilla A. Wold, James C. Norton, Robert
N. Lieberman, Douglas C. Engelbart, James H. Bair, Dirk H. Van
Nouhuys,

This is a questionnair to arrange the dates for the fall meeting of KWAC.

5a

5b

50

5 d

5e

5f

1 It appears to be about time to begin thinking about convening another metting of KWAC. This will make the fourth such metting of this group and perhaps the first one away from SRI. I have offered the facilities here at MIT Lincoln Laboratory in Cambridge as the site of this metting. In the year of the Bicentenntial, what better place to have a meeting.

2 If we are to meet here in Cambridge we must have a good contingent from SRI, since it is their system we are concerned with. Without this representation the meeting may not be very successful. The problem of system access should not be serious, as far as equipment is concerned. We have 1 DNLS display terminal and at least 6 other terminals. Our access to Office-1 is by way of an ELF system, which will be devoted to us during the meeting.

3 This note therefore is an attempt to sound out the KWAC community about the idea of having the next meetin here in Boston/Cambridge, The dates we talked about at the last meeting were for the week of Sept. 14-20 or the week of Sept 7-13. We also considered have a five day meeting this time since we felt the four day meeting last Feb. could have actually gone five days. Also considered was a plan to have a free day in the middle of the week for activities not related to KWAC, such as sight seeing etc. We could arrange a trip to Network Control if the group would like this sort of activity.

4 Could you take a few minutes and answer the questions in the following branch and return them to me (RMS2). I will coordinate the answers and let you know in 2 weeks what the dates for this meeting will be, please try to return your answers within a week,

5 KWAC IV 1975

5a Will you be able to attend?

5h Would you like to have the meeting in Cambridge?

5c no you prefer a 4 or 5 day meeting?

5d What is you choice of dates?

5e Would you like me to arrange your hotel/motel room?

5f Would you like a list of hotels and prices in the Boston=MIT area?

6 Once a date has been agreed upon, we can begin work on setting up the agenda for the meeting. Hope to here from you soon.

(J33024) 22=JUL=75 10:35;;; Title: Author(s): Robert M. Sheppard/RMS2; Distribution: /KWAC([ACTION]); Sub=Collections: NIC KWAC; Clerk: RMS2; Origin: < SHEPPARD, KWAC, NLS;2, >, 22=JUL=75 10:22 RMS2;;;;####;

com report

1 on 7/21 sent glossary.;1 doc.;1 op=guide.;1 sendi.;1 on tape #112 mta0. 5:30pm on 7/22 sent (jhk2)belldatabase.com;1 and (jhk2)public=domain.com;1 on tape #0001 mta0 these are to be kp5 (masters). to be mailed directly to bell canada. (the first set mentioned above are to be proofs and are being sent to sri)

com report

(J33025) 22=JUL=75 10:36;;; Title: Author(s): Special Jhb Feedback/FEED; Distribution: /DMB([ACTION] dpcs notebook please) &DPCS([INFO=ONLY]); Sub=Collections: SRI-ARC DPCS; Clerk: FEED;

| 1 thi | s letter is to give you a list of wait too long to respond, the menu | possible lunches available, e may change, | |
|-------|--|---|-----|
| 1a | appetizers | | 14 |
| | ial oysters on the half shell | | 1a: |
| | 1a2 antipasto | | 1a: |
| 16 | salads | | 1) |
| | ibi Italian | | 1b |
| | 1b2 tossed green | | 167 |
| 10 | entrees | | 10 |
| | ici peanutbutter and jelly | | 10 |
| | ic2 prime ribs ((adam's) | | 10 |
| | 1c3 cheese with lots of mayo | | 10 |
| 1 d | choice of coffee tea or me | | 10 |

(J33026) 22-JUL-75 13:49::: Title: Author(s): Lawrence A. Crain/LAC: Distribution: /LAC([ACTION]); Sub-Collections: NIC; Clerk: LAC: Origin: < AFDSDC, LETTER, NLS::, >, 22-JUL-75 13:29 LAC:::::####:

lunch

| 1 this letter is to give you a list of possible lunches available. dont wait too long to respond, the menue may change. | |
|---|-----|
| 1a appetizers | 14 |
| 181 oysters on the half shell | 1a: |
| 1a2 antipasto | 1a: |
| 1b salads | 11 |
| ibi Italian | 1b |
| 1b2 tossed green | 1b |
| 1c entrees | 1 |
| 1c1 peanutbutter and jelly | 10 |
| 1c2 prime ribs ((adam's) | 10 |
| 1c3 cheese With lots of mayo | 10 |
| 1d choice of coffee tea or me | 1 |

lunch

(J33027) 22=JUL=75 14:00;;;; Title: Author(s): Lawrence A. Crain/LAC; Distribution: /LAC([ACTION 1] ; Sub-Collections: NIC; Clerk: LAC; Origin: < AFDSDC, LETTER.NLS;1, >, 22-JUL=75 13:29 LAC;;;;####;

| | 2 _2 | | |
|---|--|---|-------|
| - | 1 Distribution: JMB,RH,SGR,SLJ, SRI=ARC) | PKA, PAW2, JCN, RLL, DCE, JHB, DvN, KIRK, POOH, BEV (Sometimes | 1 |
| 2 | 2 USER SERVICES | REPORT: COURSE AT (site) for (client) | 2 |
| | 2a 1. [date | & # of person=davs) | 2a |
| | 2b 2. Person | ons (users or not) contacted (use uppercase if they story) | 2 b |
| | 2c 3. COURS | Ei | 20 |
| | NLS cover | ef description of course outline used and the areas of ed, eq. "Journal interrogate, substitute for editing". far you were able to get in the time you were there, tions if any. | 2c1 |
| | 2d 4, ASSIS | STANCE: | 2 d |
| | assistand briefly d | formal course was not given, or other kinds of ce were offered in addition to a formal course, then describe here. (eg. answering specific questions or a user thorugh an area she is having difficulty with.) | 2d1 |
| | 2e 5. APPLI | CATION (Inote number of slots here for reference) | 2 e |
| | evolving new devel | ally describe the application the particular site is if it hasn't been described before, or if there are opments, (ed. document production and remote stion) | 2e1 |
| | 2f 6, ISSUE | s: | 2 £ |
| | ysefullne | ems, obstacles, etc. that are important to the ss of NLS in the site environment, Note any action e, but coordinate with action person separately, | 2 £ 1 |
| | 2g 7, DISCU | ssions: | 29 |
| | (eq. pers | s of interest brought out in conversations with users. connel transfers, changes in financial condition, new for users, etc.) | 291 |

Form for Course and/or Trip Reports

(J33028) 22=JUL=75 14:20;;; Title: Author(s): Jeanne M. Beck/JMB; Distribution: /PAW2([INFO=DNLY]) PKA([INFO=DNLY]); Sub-Collections: SRI-ARC; Clerk: JMB;

KWAC IV Meeting

| 1 My answers to the KWAC IV questionaire. | 1 |
|--|-----|
| ia Will you be able to attend? | 1a |
| 1a1 yes | iai |
| 1b Would you like to have the meeting in Cambridge? | 15 |
| ibi yes (I may be living there by then!!) | 151 |
| ic Do you prefer a 4 or 5 day meeting? | 10 |
| ici 5 | 101 |
| 1d What is you choice of dates? | 1d |
| idi week of the 14th | idi |
| ie Would you like me to arrange your hotel/motel room? | 1e |
| iel not now | iei |
| if Would you like a list of hotels and prices in the Boston=MIT area? | 1£ |
| 1f1 yes | 1f1 |
| 2 I hope to have some new developments to share with fellow KWACers. We are building a financial manatement subsystem (with Dean's help) and a formating subsystem to handle the more common forms of coorespondance issuing from our offices. | 2 |

KWAC IV Meeting

(J33032) 23-JUL-75 06:06:;;; Title: Author(s): Duane L. Stone/DLS; Distribution: /RMS2([INFO=ONLY]) JLM([INFO=ONLY]); Sub-Collections: RADC; Clerk: DLS;

1 33032 Distribution 1a Robert M. Sheppard, John L. McNamara, Answers to your questions also Bob, please apply them for Mike Bedford as he is interested in attending..

1 1. I will be able to attend
2. Would be great to have it in Cambridge, never been there..
3. 5 day meeting providing we get a day off in the middle, otherwise four days. I find there is too much time wasted on listening to ARC stuff..
4. Sept 7-13 preferable
5. Would appreciate if you could arrange for a hotel room for me

5. Would appreciate if you could arrange for a hotel room for me somewhere near MIT, not knowledgeable of Boston at all, would I still need to rent a car? Also if possible a hotel with restauraunt facilities.

6. Would still like a list of the hotels in the MIT area..

(J33034) 23-JUL-75 10:25;;; Title: Author(s): Inez M. Mattiuz/IMM; Distribution: /RMS2([INFO-ONLY]) MIKE([INFO-ONLY]); Sub-Collections: BELL-CANADA; Clerk: IMM;

1 33034 Distribution 1a Robert M. Sheppard, Michael T. Bedford, 1 12-JUN-75 2022-PDT FEEDBACK(FEED) at OFFICE-1: *further comments* (also sic) Distribution: , KENNEDY, FEED(FEEDBACK) Received at: 12-JUN-75 20:22:56

ia my dear edwardo.'..i had the troian armies of the night camping in my directory for several nights resulting in myriads of missent, misshappend, and malformed messages going out,...how terrible for my reputation....what will the girls say...ah well. maybe it was my biorhythms...or the moon in an improper sign.....i think the message said something about the fact that you help in the bug-fix by telling us what happened to you...that is, that stoney got your forwarded message three times...and so into limbo land once again the nymphet passes...sandraw

2 12-JUN-75 1510-PDT STONE: Formats for Dates in the OP Distribution: FEEDBACK, MEYER, VANNOUHUYS, Stone, Kennedy, Carrier Received at: 12-JUN-75 15:10:28-PDT

2a Is there any way to change the format of the date created by the 27 JUL 75 directive. I know that the content analyzer understands several date/time formats. I scanned the OP Users Guide, but couldn't find any...Looking for a .DTyPE=n; similar to the GNTYPE=n; for numbers.

3 12-JUN-75 1145-PDT STONE(DLS) at OFFICE-1: GFE Items for SRI Distribution Distribution: , KENNEDY, STONE at Received at: 12-JUN-75 11:45:23

3ai Is this in keeping with your knowledge of what has been agreed to? If so it should be officially sent to RADC. Thanks Bill To: RADC/ISIM

3a2 From: Dr. Licklider

3a3 Subject: GFE to Support NSW Development at SRI

3a4 This letter is to confirm the intent of ARPA/IPTO to provide the following items GFE to SRI in support of their NSW development work during the period 1 July 1975 to April 17 (or end of nine month extension to current contract) 1976:

3a4e 1. The equivalent of 50% of a PDP=10 computer with 512K of core, 3 IBM 3330 type disk drives minimum, and 60,000

38

2a

3a1

893

3a2

3a3

384

pages running the Tenex operating system. Until an appropriately configured machine can be made available, 70% of a machine with 256K of core will be provided. These services will be available at least 20 hours per day, 7 days per week. The group allocation or equivalent scheme will be used to guarantee access.

3a4a

3a4b 2. Terminal access to the ARPANET through a local TIP, probably the Tymshare TIP.

3a4b

3a4c 3. ARPANET access for two host computers (PDP=11's) via the SRI IMP.

3a4c

3a4d 4. Source code listings for VM ELF, during development as requested by SRI and as delivered to the government by Speech Communications Research Laboratory upon completion of contract N1473C0221.

3a4d

4 1-JUN-75 0829-PDT KRUTZ: s28 Phone Call Distribution: KENNEDY, mcnamara, tomaini, krutz Received at: 1-JUN-75 08:29:57

160

4a Thank you for the information about the call. No problem with the amount....except you did not say if the troubleshooting was successful or Not. I have not had any problems since that time so I assume the problem has been corrected. Thanks...K.

4a

5 29=MAY=75 0941=PDT KENNEDY: cc of mess I sent to JLM fjt rdk Distribution: KENNEDY, stone Received at: 29=MAY=75 09:41:25

5

5a In short, the call was for diagnosing and troubleshooting a major problem which interfered with our use of Office=1.

5a

5b For several months we have been plagued with double logins to Office-1. Using the GRIPE capability of the RSEXEC, I sent several messages to the Network Control Center(NCC) at BB&N.

5b

So The double logins had bad effects in that two of our five slots were taken by one user, messages were sent and received in duplicate, people were unable to recover the Partial copy files in some cases, since the computer acted as though someone elso had done the work rather than the person himself.

5 c

5d The condition worsened to the point where almost every day I had complaints from people who were locked out of their own files and couldn't recover work that might have taken them hours to complete. I did manage to work out a procedure which, most of the time, recovered their files but the basic problem remained.

5 d

Se Over a period of months we tried to diagnose and to solve the

problem. The people at the NCC tried repeatedly to replicate the double login condition. They logged in to Office-1 using their TIP and logged in to Office-1 using the RADC TIP, but they were unsuccessful.

5e

5f Since they were unable to get double logins, the NCC asked me to call the next time we got one. On the day of the call I got a double login and immediately called the NCC. For the next hour and a half we did various things in the TENEX and the RSEXEC, while BB&N observed and took data. I did protest repeatedly at the length of the call but I always found myself either talking into a phone with no one on the other end or I was told just another minute or two and we'll have it.

5 f

5g In retrospect there were probably other ways in which this could have been done, but at the time it seemed the right thing to do.

50

5h Prepared at the request of J> L> McNamara

5h

51 FYI

51

6 22-MAY-75 0945-PDT HOPPER: 32571 Distribution: KENNEDY, FEEDBACK, Stone Received at: 22-MAY-75 09:45:23

Ga I believe it. Two general things to remember: Update File Old is somewhat dangerous. Use it with care. Don't do it in times of high load average or when the system is at all flakey. A system crash in the middle will almost certainly blitz the file. If someone else is reading the file while you're making modifications, UFO won't work. Second, any time you get an error condition in NLS, be moderately suspicious of NLS from then on. In any large system, recovering from error conditions is the least well debugged part of the system. Unless the error you get is one you're familiar with and know it always recovers, better go out and call NLS again, check the file with a verify, and do anyy other incantations that are appropriate.

68

6b (e.g. go out, reset, delete any suspect fournal or calculator work files and partial copies, expunge, call NLS again) The more unusual the error condition, the more parahold you should be. If it involves UFO == need I say more?

6b

7 26-APR-75 2134-PST KRUTZ: My File Distribution: KENNEDY, krutz Received at: 26-APR-75 21:34:44

7

7a Ed. Thanks for getting my file repaired. I believe that I have had some of my problems when I was not double logged in. Every thing worked fine today...thanks...Bob

7 a

10a

| | 8 25-APR-75 1416-PDT FEEDBACK: FeedResponse Distribution: KENNEDY, NORTON, STONE, FEEDBACK received at: 25-APR-75 14:16:26 | 8 |
|---|---|------|
| | 8a In reply to your message of 25-APR-75 0939-PDT KENNEDY Subject: double logons | 8 a |
| | 8b Ed: Jim Norton discussed this problem this morning with Duane and the solution to double login problems appears to be under study by the NCC keep us informed of any new data you are able to collect with respect to this matter. Sandy Johnson | 86 |
| | 9 25-APR-75 1128-EDT HISCOX at BBN-TENEX; double logins Distribution; KENNEDY AT OFFICE-1, hiscox at bbn Received at: 25-APR-75 08:28:43 | 9 |
| , | 9a right, we were bagged with several problems, one of which masked this problem, now, i hope to give you a big enough slice of attention to solve it all, when this happens, can you do a netstat to find out which tip ports have the logins? forgive me, but i may be repeating questions you asked before to get back into the picture, does this happen with dialup ports, hardwired ports, or both? does it happen with random ports or particular ports? while i'm waiting for your answers, i'll have not calling the dialup ports to try to get the problem to happen from here, if necessary, i can come out to rome, ernie | 94 |
| | 10 14-APR-75 0702-PDT BERGSTROM: Training for Demo Programs Distribution: KENNEDY, bergstrom Received at: 14-APR-75 07:02:27 | 10 |
| | 10a EdI finally got around to reading the material you generated on the potential training for demo programs (structured programming, etc.)thank you for a good job on thiswe may want to pursue the matter further with people like SAMTEC and PAVE PAWSalso, we may want to set something up for RADC | 104 |
| | personneladain, thanks for the fine jobDFB | 4.00 |

Messages - First half - 75

(J33035) 23-JUL=75 10:33;;; Title: Author(s): Edmund J. Kennedy/EJK; Sub=Collections: RADC; Clerk: EJK;

| Wee | k of July 7 = 11: | 1 |
|-----|--|-----|
| 18 | USER SERVICES WEEKLY REPORT from JMB | 18 |
| | iel Finished revising the Primer for JHB. | iai |
| | ia2 Studied the new editions of Courses I & III to get back into the swing of giving courses. | 1a2 |
| | 1a3 Observed Priscilla Wold give the First & Second courses to Holg, Reville, and Poggio, on Tuesday and Wednesday. Each afternoon she and I spent an hour discussing my observations and reviewing guestions she had. | 1a3 |
| | 1a4 On Thursday, I spent two hours giving some of the third course to SRI slot users = Reddy Divery & Kathy Mabrey. We will try to continue next week. Course report to follow final session of course. | 1a4 |
| 16 | USER SERVICES WEEKLY REPORT from SGR: on travelGunter | 15 |
| 10 | USER SERVICES WEEKLY REPORT from RH | 10 |
| | ici Week of July 7 = 11. I gave the basic and second courses here at ARPA this week. Both went well and I'm hopeful for further interest in courses here at ARPA. I ended up going out to NSRDC again to pick up a sick LP to ship back to Martin which isn't bad since it is a pretty drive out there. Discussed and made plans with Ann for her trip out here in two weeks and am planning on being out in CA in a week. Since the class was strictly lecture I am making the rounds to visit everyone to go over what we learned using the terminals. This arrangement has worked out best since most people can't give much time to formal classes. I got into more Content Analysers this week again. This time with Phil Lynch. We were writing and experimenting with different patterns to find the most efficient way to accomplish his task. | 1c1 |
| 1d | USER SERVICES WEEKLY REPORT from PKA | 1 d |
| | idi On Monday sat in on the third course that susan was finishing up. Tuesday sat in on Priscilla's class of the Basic Course. Wednesday was much the same with P.'s second course. Worked on the April and May feedback, both dialogue and statistics. Also spent some much needed time getting my course materials organized. | 161 |
| 1e | USER SERVICES WEEKLY REPORT from PAW2 | 10 |
| | | |

1e1 USER SERVICES WEEKLY REPORT from PAW2

iela 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 for the first time to a class. The class went reasonably well, I think, they were a guick group and alot of fun. The class consisted of Joe Reville, an operator from Office=1, Andy Poggic, a new ARC programmer, and Choie Holg from ISI. Pam and Jean both observed during the course and after Jean and I discussed the course, she giving me some good advise and methods for improving. Wednesday we went through the Second Course, I had a little trouble when I got to the section on Links/Addresses but with some help from Jean I think things were cleared up. Jean was helpful, and now and then interjected when I needed to be put back on the right track. I felt pretty good about the class and I think those involved left with a reasonably good understanding of the material we covered in both courses. Thurday I finished my revisions on the Junefinal report now being reviewed by Doug and soon to be sent off to ARPA. Worked on organizing my notes from Jean's and my discussions from the classes for future reference. Friday I began rough draft work on

viewgraphs for the Basic Course. Worked with David Retz, a

new programmer, on the first half of the Second Course,

2 USER SERVICES WEEKLY REPORT for Week of July 14 = 18:

2a from JMB

2at Worked on the one-page description of GRPSTS for JHB; a draft was completed for review.

2a2 Heard Ann Weinberg & Jim Norton tell us what was going on at Gunter and what their plans are.

2a3 Helped Priscilla work on copy for the viewgraphs.

284 Wedn & Thurs afternoons were spent giving the third course to Andy Poggio, Dave Retz, Laura Metzger, and Dee Brooks (Dave & Dee only attended first day). Course report to follow soon.

1e1

1e1a

2 2a

2a1

46

2a2

2a3

5.75

2a4

2a5 Friday afternoon I gave a short session out of the third course to two SRI-slot users. Course report to follow soon. 2a5 2b from SGR: on vacation 25 2c from RH 20 201 I spent more time this week training Kathy Carpenter. she's picking it up quickly initially however her retention is somewhat limited but with time she should prove to be a good user. I visited around to many of the Offices: assisted Bill Bangert with different ways of printing with Xlist, finished up a Boiler Plate for Ginny Gross, handed out more Mrao's to Kathy Milks and Libby Masterson and we will start doing them there in MATS when I get back (they didn't want to try them while I was cone, but maybe they will surprise me...), gave a brief demo to a new person from STO, a Capt. Karam who took a lot of documentation with him, ... wanted to try everything. I saw Elizabeth Michael earlier in week and we briefly discussed Gunter. I also got ready for my trip which never materialized and I printed out and read thruough the Vela file. 201 2d from PKA 2 d

2di Throughout the week worked on may and June feedback. Put answers to follow questions, moved all %n questions to separate branch, and generally fixed it up to be journalized. Completed the statistics for May feedback. Tuesday afternoon attended a meeting in which Ann Weinberg and Jin Norton spoke about their experiences at Gunter. All of Wednesday and part of Thursday were spent giving the Basic and Second courses to Bud Pine, a new person in ARC. Most of Friday was spent on the statistics for June feedback.

2e from PAW2 2e

281

2e1

2ei Monday was spent designing new and revising old viewgraphs for the Basic course. Spoke briefly with Jim Norton and Ann weinberg about their trip to Gunter and the projected training involved there. Tuesday and wednesday continued work on viewgraphs. Sat in on presentation of the Gunter trip. Discussed DEX very briefly and concluded that before any of us could begin to learn about it, the bugs would have to be ironed out. Did however, read some documentation on DEX. Thursday and Friday continued work on the viewgraphs. Discussed the statistics report of Office-1 usage with Ra3y Panco. He showed me his procedure for inserting new statistics each week.

(J33036) 23-JuL-75 11:10;;;: Title: Author(s): Jeanne M. Beck, susan Gail Roetter, Pita Hysmith, Pamela K. Allen, Priscilla A. Wold/JMB SGR RH PKA PAW2; Distribution: /JCN([INFO-ONLY]]); Sub-Collections: SRI-ARC; Clerk: RH;

Questions to HEM about the system

these are her impressions before starting to work from the home.

| 1 Demographic data; | 1 |
|---|-------|
| ia job description = % distribution of time | 10 |
| iai 50% editing | 1a1 |
| ia2 30% inserting | 1 a 2 |
| 1a3 20% printing / operating the output processor | 1a3 |
| ib home description / work space = probably on card table/living room | 11 |
| ic family size = 2 children = 7 & 8 | 10 |
| id other circumstances = only 1 telephone line | 1 d |
| 2 Means of communication w/ office | 2 |
| 2a telephone = but tied up to terminal | 28 |
| 2b portable terminal / link & snd mssge. | 26 |
| 2c messenger | 20 |
| 2d plans to come in twice/month (4 times while gone) | 2 d |
| 3 Questions: | 3 |
| 3a Current perception about working from home prior to leaving the office: | 3 a |
| 3a1 Do you think you'll have more or less supervision? The same amount - doesn't feel much supervision now. | 341 |
| 3a2 Do you perceive increase or decrease in flexibility? Increased | 3a2 |
| 3a3 Do you perceive increase or decrease in number of interruptions/day? probably less interruptions | 3 a 3 |
| 3a3a definately less changes wise re: inputting of text. At office, people come up and want to make changes in the text as she's inputting. | 3a3a |
| 3a3b Less interruptions by phone since she has only one phone line which when working will be tied to the terminal | 3a3b |

| 3a4 Do you perceive increase or decrease in work efficiency? probably more efficiency | 3a4 |
|---|------|
| 3a5 Do you look forward to not coming to the CBD each day? Yes. | 3a5 |
| 3a6 Will there be time / money savings? Money savings = none = she currently carpools. Time savings = 1/2 hr. each way in commute time. | 3a6 |
| 3a7 Do you think you'll feel isolated? If so, in what ways i.e., socially, or from ideas?, or from lack of feedback/training? No = has own social life & family. | 3a7 |
| 3a8 Do you feel more responsibility working from home? Yes = in turns of taking greater care in accounting for your time. | 348 |
| 3a9 Do you have plans for self supervision/self discipline? Not really = difficult to make plans since she doesn't know what her work load will be. | 389 |
| 3ai0 How do you perceive family relationships changing? More time to enjoy family life = No significant changes. | 3a10 |
| 3ail Would you like to work from home on a full time basis? part time? (say 2 out of 5 days/wk?). Yes = but seasons affect feelings = in winter would like coming to work on a part time basis = also children are at home in summer, which is an added incertive to stay home in summer. | 3a11 |

(J33037) 23-JUL-75 12:01;;;: Title: Author(s): Gwen C. Edwards/GCE; Distribution: /LHD([INFO-ONLY]): Sub-Collections: NIC; Clerk: LN; Origin: < NARDI, HUGETTE.NLS:1, >, 4-JUL-75 08:29 LN;;;:####;

| | 1990 Market Penetration Stats | 1 |
|-----|---|------|
| 1a | Business Services | 1a |
| | 1a1 Two-way Communic: (1) quality audio 25%; (2) Conf TV 20%; (3) CMI 20%; (4) S(R) 6%; (5) P(R) 5%. | 181 |
| | 1a2 Electronic Mail: (1) limited use to & from govt's, utilities 25%; (2) first class mail/telegr. 20%. | 1a2 |
| | ia3 Info. Retrieval: (1) dedicated news, info. etc, not in-building 15+%. | 1a3 |
| | 1a4 Financial: (1) remote banking - EFT 40%. | 1a4 |
| | 1e5 Security/Metering: (1) security, fire etc. 35%, (2) metering utilities 20%. | 1a5 |
| | 1a6 Library - educ: (1) 20%. | 1a6 |
| | 1a7 Shopping: (1) prdct. info. 30%; (2) remote shopping 25%. | 1a7 |
| | ias Travel: (1) schedule info. 30%; (2) accessible electronic renew on larger scale 25%. | 1a8 |
| | 1a9 Polling: N/A | 1a9 |
| | 1a10 Medical: (1) info. services 15%; (2) remote diagnosis aids 5%. | 1a10 |
| 1 b | Residential Services | 1 b |
| | 1b1 Entertainment: (1) pay TV 40%; (2) on demand pay TV 15%; (3) o/d recreat, courses 15%. | 161 |
| | 1b2 Shopping: (1) proct. info. 20%: (2) remote shopping 20%. | 162 |
| | 1b3 Library/Educ.: (1) Library 10%; (2) educational 10%. | 163 |
| | 1b4 Medical: (1) info's services 5%; (2) remote diag. aids 5%. | 1b4 |
| | 1b5 Sec/Metering: (1) security 25%; 2) metering 20%. | 155 |
| | 1b6 Travel: (1) info. 15%; (2) remote booking 5%. | 1b6 |
| | 1b7 Info. Retrieval: (1) dedic news info. etc. 5%. | 167 |
| | 1b8 Polling: N/A | 158 |

| 1b9 Financial: remote banking EFT = 10% | 159 |
|---|-------|
| 1b10 Two Way Communic.: | 1510 |
| 1b10a Comp. mediated <5% | 1b10a |
| 1b10b Interactive prop. <5% | 15105 |
| 1b10c audio <5% | 1b10c |
| 1b10d Conf. TV <5% | 1510d |

| 2 | | Yr. of Commerical Introduction Stats. | 2 |
|---|----|---|-----|
| | 2a | Business Services | 2a |
| | | 2a1 Two Way Communication: (1) Conf. TV 3 yrs.; (2) audio conf. 4 yrs.; (3) CMI 5 yrs.; (4) S(R)=10 yrs.; (5) P(R) 10=15 yrs. | 2a1 |
| | | 2a2 Electronic Mail: (1) limited versions 0=5 yrs. (2) first class mail 10 yrs. | 2a2 |
| | | 2a3 Info. Retrevial: (1) dedic. non d/a 5=10 yrs.; (2) dedic d/a 5=10 yrs. | 2a3 |
| | | 2a4 Financial: (i) 5 yrs. | 2a4 |
| | | 2a5 Security/Metering: (1) security 4 yrs.: (2): (2) remote shopping 7 yrs. | 2a5 |
| | | 2a6 Travel: (1) 5 yrs'. | 2a6 |
| | | 2a7 Polling: (1) - | 2a7 |
| | | 288 Medical: (1) info.info. services 5=10 yrs.; (2) remote diag. 10=15 yrs. | 2a8 |
| | | 2a9 | 249 |
| | 26 | Residential Services | 26 |
| | | 2b1 Entertainment: (1) pay Ty 2=5 yrs; (2) o/d Pay Ty 5=8 yrs.; (3) o/d rec. courses 5=10 yrs. | 251 |
| | | 2b2 Shopping: (i) prdct info. 0=5 yrs.; (2) remote shopping 7 yrs. | 262 |
| | | 263 Library/Educ.: (1) Library 7=10 yrs.: (2) educ. 10=15 yrs. | 2b3 |
| | | 2b4 Medical: (1) info' 5=10 yrs.; (2) remote diag, aids 10=15 yrs. | 254 |
| | | 2b5 Sec/Metering: (1) security 0=5 yrs.: (2) metering 6 yrs. | 2b5 |
| | | 2b6 Travel: (1) info. 10 vrs.: (2) remote booking 10=15 yrs. | 266 |
| | | 2b7 Onfo, Retrieval; (1) dedic, news, info etc. 10 = 15 yrs. | 267 |
| | | 200 Political (1) N/3 | 268 |

| 2b9 Financial: (1) remote banking EFT = 10 yrs. | 259 |
|---|-------|
| 2b10 Two Way Communic.: | 2610 |
| 2b10a CMI 15 -2 20 vrs. | 2510a |
| 2b10b Interactive graph 20 = 25 yrs. | 26106 |
| 2b10c Audico 15 = 20 yrs. | 26100 |
| 2bind Conf. TV = 25 Vrs. | 2b10d |

Market Penetration Stats.

(J33038) 23-JUL-75 12:09;;; Title: Author(s): Mike Katsoulis/MK6; Distribution: /LHD([ACTION]) LN([INFO-ONLY]); Sub-Collections: NIC; Clerk: LN; Origin: < NARDI, MARKET.NLS;1, >, 14-JUL-75 11:53 LN;;;;####;

| 1 this letter is to give you a list of possible lunches available. dont wait too long to respond, the menue may change. | 1 |
|---|-----|
| ia appetizers | 1 a |
| ial oysters on the half shell | 1a1 |
| 1a2 antipasto | 1a2 |
| 1b salads | 1b |
| ibi Italian (sexy) | 151 |
| 1b2 tossed green | 152 |
| ic entrees | 10 |
| ici peanutbutter and jelly | 101 |
| 1c2 prime ribs (adam's) | 1c2 |
| 1c3 cheese with lots of mayo | 103 |
| id choice of coffee tea or me | 1d |

lunch

(J33039) 23-JUL-75 13:26:::: Title: Author(s): Lawrence A. Crain/LAC: Distribution: /AAB([ACTION]) LAC([INFO-ONLY]); Sub-Collections: NIC; Clerk: LAC; Origin: < AFDSDC, LETTER.NLS:1, >, 22-JUL-75 13:29 LAC;;;:####;

1 33039 Distribution 1a Anthony A.L. Baggiano, Lawrence A. Crain,

| 1 this letter is to give you a list of possible lunches available. dont wait too long to respond, the menue may change. | 1 |
|---|-----|
| 1a appetizers | 10 |
| iai oysters on the half shell | iai |
| 1a2 antipasto | 1a2 |
| 1b selads | 16 |
| ibi Italian (sexy) | 161 |
| 1b2 tossed green | 162 |
| 1c entrees | 10 |
| ici peanutbutter and jelly | 101 |
| 1c2 prime ribs (adam's) | 102 |
| 1c3 cheese With lots of mayo | 103 |
| 1d choice of coffee tea or me | 16 |

(J33040) 23=JUL=75 13:35:;;; Title: Author(s): Lawrence A. Crain/LAC; Distribution: /AAB([ACTION]) LAC([INFO=ONLY]); Sub-collections: NIC; Clerk: LAC; Origin: < AFDSDC, LETTER.NLS;1, >, 22=JUL=75 13:29 LAC;;;;####;

1 33040 Distribution 1a Anthony A.L. Baggiano, Lawrence A. Crain, 1 Tom Humphrey and I met with Stu Blake today to discuss our continuing interest in a possible project with NSF for an editorial processing center.

2 We reviewed Tom Humphrey's new cost estimate for the project proposed in ISU 74-261R. The previous estimate was \$409,238. The revised estimate is \$380,319. Blake expressed concern that our revised estimate was on an "absolute minimum" basis. He recommended a further review of the cost estimate to possibly increase the estimated costs of some items to a more comfortable level. We plan to do this.

3 At our meeting on July 3, our consensus was that SRI cost charing in the amount of \$35,000 would be reasonable considering the benefits SRI would gain from doing the project. The \$35,000 would be used to purchase capital equipment that would be useful to SRI after the project.

4 Blake stated that \$35,000 would be acceptable to him. However, the reasonableness in terms of cost-benefit would have to be judged by ORO.

5 We will review the cost estimate and probably increase it to a more comfortable amount. After that we will request approval by you and ORO, make sure it's ok with Blake, and then discuss it with the technical people at NSF.

6 Blake mentioned that he would like to see the new building designed for word processing. Since Urban and Social Systems Division will probably be a major occupant, Harvey Dixon is being asked to prepare recommendations for a word-processing system to be used in the new building. I strongly recommend that ISE be involved in the design study.

(J33041) 23=JUL=75 14;48;;; Title: Author(s): David R. Brown/DRB; Distribution: /DOCPLAN([INFO-ONLY]) ; Sub-collections: NIC DOCPLAN; Clerk: KLM; Origin: < MABREY, NSFEPC.NLS;1, >, 23-JUL=75 14:16 KLM;;;;####;

1 33041 Distribution
1a James H. Bair, David R'. Brown, Glenn A. Sherwood, N. Dean Meyer,
Kathey L. Mabrey, Norman R. Nielsen, Thomas L. Humphrey, Robert Louis
Belleville, Elizabeth K. Michael, Richard W. Watson, James C. Norton,
Robert N. Lieberman, pat Whiting O'Keefe, Douglas C. Engelbart, Dirk
H. Van Nouhuys,

Peter Goodeve and Ted Crossman of UCB to visit ARC 30 Jul 75

- 1 They are from the Industrial Engineering Department at UC Berkeley -- in its Human Engineering and Organizational Sciences Group. Ted Crossman is a professor and peter Goodeve (642-5251) is his graduate student, peter aims to do a phD thesis on the human factors of computer-aided text editing. Crossman apparently has a strong and growing interest in the "Organizational sciences" side of things. They will arrive at about 1400, Wed 30 Jul and stay the rest of the afternoon.
- 2 There is some possibility that their interests and the research capabilities that they could reasonably develop in their Group could overlap very significantly with our AKW area generally, and particularly in the DDPCs area.
- 3 I'll probably delegate a host to take over after an initial short meeting with me. I'd want to be involved in any final consideration of further interaction and potential cooperation. I assume that the DDPCS crew (DVN TLH pwo) would be highly interested, as would a number of ARCers. I assume that we could arrange for any generally interested people to meet the visitors and hear their stories == perhaps at an open meeting.
- 4 I'd appreciate hearing of special interests that this has among you so that I can set up a best agenda framework.

Peter Goodeve and Ted Crossman of UCB to visit ARC 30 Jul 75

(J33042) 23-JUL-75 17:21;;; Title: Author(s): Douglas C. Engelbart/DCE; Distribution: /SRI-ARC([INFO-ONLY]) DPCS([INFO-ONLY]); Sub-Collections: SRI-ARC DPCS: Clerk: DCE:

33042 Distribution la Douglas C. Engelbart, Martin E. Hardy, J. D. Hopper, Charles H. Irbv, Harvey G. Lehtman, James C. Norton, Jeffrey C. Peters, Dirk H. Van Nouhuys, Kenneth E. (Ken) Victor, Richard W. Watson, Don I. Andrews, Delorse M, Brooks, Elizabeth F. Finney, Beverly Boli, Joseph L. Ehardt, James H. Bair, Robert N. Lieberman, Pat Whiting O'Keefe, James H. Bair, Robert Louis Belleville, Ann Weinberg, Thomas L. Humphrey, Jeanne M. Leavitt, Kirk E. Kelley, Duane L. Stone, Elizabeth J. Feinler, N. Dean Meyer, Dirk H. Van Nouhuys, Douglas C. Engelbart, James C. Norton, Richard W. Watson, Charles H. Irby, ib Mary Ann Kellan, Buddie J. Pine, 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, Pobert 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

Questions on JHK and HGL Cassette Restrictions 26163

| 1 : | 1. | Isn't | -W 1 | ised | by | termin | nets to | rewind | the | cassette? | How a | bout |
|-----|----|-------|------|-------|------|--------|---------|----------|-----|-----------|-------|------|
| *P | 85 | an al | tern | ate t | :0 - | Z for | telene | t escape | e ? | | | |

2

2 2. What is the command for changing TIP input buffers?

Questions on JHK and HGL Cassette Restrictions 26163

(j33043) 23-jUL=75 18:16;;; Title: Author(s): Kirk E. Kelley/KIRK; Distribution: /SRI-ARC([INFO-ONLY]); Sub-Collections: SRI-ARC; Clerk: KIRK;

1 33043 Distribution

la Douglas C. Engelbart, Martin E. Hardy, 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,

ib Mary Ann Kellan, Buddie J. Pine, 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