Communique from the Cedar 9 -- 2 Feb.

Greetings!!   1

We had a nice meeting in the SRI cafeteria (which turns out not
to be such a bad place).   2

There was a "Report from PODCom". There was surprise at the
revelation that the PODCom members would NOT serve as a
communication device FROM Doug to the PODs.   3

We discussed the hour of our meeting. It looks like it will
remain the same -- 1:00 PM Wednesdays.   4

Jeff Peters will be our second PODCom member.   5

We're unhappy about the PODnes of PODCom. We would rather have
it a place/mechanism where issues/gripes/suggestions were brought
to Doug's attention and then something got (started to be) done
about them.   6

We discussed news and gossip from/about the other PODs.   7

We discussed PSO and PSST.   8

    There seems to be an unresolved question as to whether Dan
    Cohn had a clear (understood by him) mandate to organize PSO.   8a

    Jeanne North (with support from others) expressed a strong
    desire that PSO have a loose structure -- not a verticle
    hierarchy thing, but well known and well followed rules and
    procedures and scheduling are cool. This would make PSO a lot
    more like the other "groups" at ARC.   8b

    It was suggested that PSO be left alone to work out their own
    procedures, etc.   8c

    PSO would like the stigma of second class citizenship removed.
    There is a clerical job to do (just like there are other jobs
    to do) and they're the specialists at it and will get it done.   8d

        The name PSO was objected to.   8d1

    It should be true that whatever structure/procedures there
    are, nobody (Jim and Doug) should circumvent them.   8e

It should be known that Linda Lane now has the responsibility of
keeping track of the terminals taken home (but she hasn't much
control over them). People should cooperate with her.   9

Communique from the Cedar 9 -- 2 Feb.

We would like a policy change. PSO people CAN use the displays
when they are available (they're free and response isn't too
bad). In fact they should be encouraged to use them (like in the
mornings).   1o

Communique from the Cedar 9 -- 2 Feb.

(J8773) 2-FEB-72 22:49; Title: Author(s): Bruce L. Parsley/BLP;
Distribution: Paul Rech, Michael D. Kudlick, Donald R. Cone, Don Limuti,
William R. Ferguson, Priscilla Lister, Robert L. Dendy, Linda L. Lane,
Marilyn F. Auerbach, Walter L. Bass, Mary S. Church, William S. Duvall,
Douglas C. Engelbart, Beauregard A. Hardeman, Martin E. Hardy, J. D.
Hopper, Charles H. Irby, Mil E. Jernigan, Harvey G. Lehtman, John T.
Melvin, Jeanne B. North, James C. Norton, Cindy Page, Bruce L. Parsley,
William H. Paxton, Jeffrey C. Peters, Jake Ratliff, Barbara E. Row, Ed
K. Van De Riet, Dirk H. van Nouhuys, Kenneth E. Victor, Don C. Wallace,
Richard W. Watson, Don I. Andrews/SRI-ARC; Sub-Collections: SRI-ARC;
Clerk: BLP;
Origin: <PARSLEY>CEDAR2FEB.NLS;2, 2-FEB-72 22:47 BLP ;

New ARC Journal Indices Note to ARC (to 28 JCN 72)

We now have an up-to-date (as of 28 JAN 72) set of ARC JOURNAL
INDICES.
by number: (8713,)
by author: (8714,)
by titleword: (8715,)

We are working on a procedure for making weekly (maybe daily?)
update indices - for quick reference to new items either on or
off-line. One such is in (8696,). The catalog production update
system WLB is completing will allow us to keep current.
We also plan to add the author's name to the titleword index soon
as has been suggested by several people. Any other ideas for
improvement of the format, index set, or the process are welcome.   1

(J8774)   3-FEB-72 5:49;   Title: Author(s): James C. Norton/JCN;
Distribution: Paul Rech, Michael D. Kudlick, Donald R. Cone, Don Limuti,
William R. Ferguson, Priscilla Lister, Robert L. Dendy, Linda L. Lane,
Marilyn F. Auerbach, Walter L. Bass, Mary S. Church, William S. Duvall,
Douglas C. Engelbart, Beauregard A. Hardeman, Martin E. Hardy, J. D.
Hopper, Charles H. Irby, Mil E. Jernigan, Harvey G. Lehtman, John T.
Melvin, Jeanne B. North, James C. Norton, Cindy Page, Bruce L. Parsley,
William H. Paxton, Jeffrey C. Peters, Jake Ratliff, Barbara E. Row, Ed
K. Van De Riet, Dirk H. van Nouhuys, Kenneth E. Victor, Don C. Wallace,
Richard W. Watson, Don I. Andrews/SRI-ARC; Sub-Collections: SRI-ARC;
Clerk: JCN;

the following code supercedes the code in my previous memo
regarding flushing of ddt   1

   ;FLUSH DDT AND SYMBOL TABLE AND MAKE PAGES AVAILABLE FOR
SWAPPING   1a

                                                               1b

```
        EXTERN MAKPGA                                               1b1


DDTFSH:         PUSH P,2                ;SAVE REGISTERS             1c
                                                                    1d
    PUSH P,1                                                        1d1

    SETZM DBUGSW                                                    1d2

    SETZM DCHKSW                                                    1d3

    SETZM SWPSTP                                                    1d4

    MOVE 1,[HALT 100]                                              1d5

    MOVEM 1,100                                                     1d6

    MOVE 2,SWPCOR           ;ALREADY FLUSHED ?                     1d7

    CAMN 2,MONCOR                                                   1d8

    JRST DDTFSR            ;YES                                     1d9

    SUB 2,MONCOR                                                    1d10

    MOVNS 2                                                         1d11

    HRLZ 2,2                                                        1d12

    HRR 2,MONCOR                                                    1d13

    HRRZM 2,SWPCOR                                                  1d14

    HRRZ 1,2                                                        1d15

    CALL MAKPGA           ;FREE THE PAGE                           1d16

    AOBJN 2,.-2           ;LOOP TILL ALL FREE                      1d17
```

```
DDTFSR:      POP P,1                  ;RESTORE REGISTERS              1e
      POP P,2                                                         1e1
      RET                  ;RETURN                                    1e2
```

update regarding ddt flushing

(J8775)   3-FEB-72 9:26;   Title: Author(s): Kenneth E. Victor/KEV;
Distribution: Bob Van Tyul, Jeanne B. North, Robert L. Dendy, John T.
Melvin, Kenneth E. Victor, John W. McConnell, Peggy M. Karp, Dan L.
Murphy, Rod M. Fredrickson, Peter H. Lipman, Don C. Wallace, Carl M.
Ellison, Ted R. Strollo/TUG; Sub-Collections: SRI-ARC TUG; Clerk: KEV;
Origin: <VICTOR>NEWDDT.NLS;2, 3-FEB-72 9:08 KEV ;

clean tables

it would be nice if when people are finished using displays they
would remove their junk from the adjoining worktable. thus when
a new user comes to the station he can have a work area

1

clean tables

(J8776)   3-FEB-72 10:17;   Title: Author(s): Kenneth E. Victor/KEV;
Distribution: Paul Rech, Michael D. Kudlick, Donald R. Cone, Don Limuti,
William R. Ferguson, Priscilla Lister, Robert L. Dendy, Linda L. Lane,
Marilyn F. Auerbach, Walter L. Bass, Mary S. Church, William S. Duvall,
Douglas C. Engelbart, Beauregard A. Hardeman, Martin E. Hardy, J. D.
Hopper, Charles H. Irby, Mil E. Jernigan, Harvey G. Lehtman, John T.
Melvin, Jeanne B. North, James C. Norton, Cindy Page, Bruce L. Parsley,
William H. Paxton, Jeffrey C. Peters, Jake Ratliff, Barbara E. Row, Ed
K. Van De Riet, Dirk H. van Nouhuys, Kenneth E. Victor, Don C. Wallace,
Richard W. Watson, Don I. Andrews/SRI-ARC; Sub-Collections: SRI-ARC;
Clerk: KEV;

The Output Processor Rides Again!!!!
A new Output Processor will be brought up Monday noon.
Please let me (BLP) know of any problems.   1

(J8777) 3-FEB-72 10:41; Title: Author(s): Bruce L. Parsley/BLP;
Distribution: Paul Rech, Michael D. Kudlick, Donald R. Cone, Don Limuti,
William R. Ferguson, Priscilla Lister, Robert L. Dendy, Linda L. Lane,
Marilyn F. Auerbach, Walter L. Bass, Mary S. Church, William S. Duvall,
Douglas C. Engelbart, Beauregard A. Hardeman, Martin E. Hardy, J. D.
Hopper, Charles H. Irby, Mil E. Jernigan, Harvey G. Lehtman, John T.
Melvin, Jeanne B. North, James C. Norton, Cindy Page, Bruce L. Parsley,
William H. Paxton, Jeffrey C. Peters, Jake Ratliff, Barbara E. Row, Ed
K. Van De Riet, Dirk H. van Nouhuys, Kenneth E. Victor, Don C. Wallace,
Richard W. Watson, Don I. Andrews/SRI-ARC; Sub-Collections: SRI-ARC;
Clerk: BLP;

Some Questions for ARC

Like just about everyone else at ARC these days I'm trying to get
my head straight on what ARC is doing, where its going etc..   1

One of the problems which has bothered me since coming to ARC has
been trying to understand what we mean by an augmentation system,
and what are the products of our work.   2

    I have heard the following expressed as one goal, that we are
    trying to evolve principles and practices of augmentation
    system design. This cannot be a very major goal because
    nowhere have the principles and practices developed over the
    last eight or so years been clearly summarized, generalized,
    and expressed.   2a

        The ARC reports are generally agreed by all I have
        discussed them with, except for the 1962 report which
        started the work, uniformly poor and of limited use to
        others who would set out to do work in this area. Plans
        for the "Handbook" may alter the above, and maybe starting
        with our next report we can improve the reports.   2a1

Another goal often mentioned is to create a working prototype of
an augmentation system.   3

    This definition does't help much as it essentially says that
    an augmentation system is what we have which may not be an
    augmentation system at all as far as others might judge and
    certainly doesn't help understand what an augmentation system
    is or ought to be.   3a

Another cut at defining what we mean by augmentation systems is
to say it's a system with features of NIC, DSS, PDCS, PBMS, SEAS,
Handbook, RINS.   4

    This is certainly a start, but we must remember that just
    about everyone else in the computer and information business
    could claim they are working on augmentation systems, many of
    which integrate computers, methods, procedures to solve
    problems that are as or more pressing and complex in business,
    government, etc. than anything we are doing.   4a

        There are, for example, computer based management record
        systems which help people keep track of tasks and resources
        for projects orders of magnitude larger than ours;   4a1

        there are computer based editing, composing, publishing
        systems in use by groups like TIME-LIFE or TV networks,

etc. much more sophisticated than anything we have even
begun to think about;   4a2

there are in common use information storage and retrieval,
and generalized data management systems much more developed
with integrated microfilm capabilities, query capabilities
much more sophisticated than anything we have;   4a3

there are lots of people developing compiler-compilers,
thinking about and implementing modular programming
systems, using source language debugging, higher level
system programming languages, incremental compilation;   4a4

there are very sophisticated systems for entering and
routing text messages over computer networks, and certainly
lots of simple online message systems;   4a5

there are dozens of text editors, many with strong
adherents, most much cheaper to use, maybe even more cost
effective for much work than ours;   4a6

there are lots of information centers of various types,
many surviving with satisfied paying customers.   4a7

The point of the above is the question, what's our real
contribution, why should the galaxy ,as WLB likes to say, keep
feeding us energy units?   5

Besides having invented the mouse and keyset, and having
demonstrated the power of tree structured text files for
editing and viewing, what else have we done or are we doing
really unique or better than others and what can we keep doing
better than others?   5a

It certainly isn't our present approach to the design of
integrated computer systems, procedures, methods, etc. as a
look at our problems in producing a set of catalog indices
from a mere 1000 citations or a directory from a couple
hundred entries when the rest of the world is able to handle
input and output of 10↑6 entry files with equal ease.   5b

There are tens of thousands of people building computer and
computer-people systems and there are only about 30 of us.   6

If we disappeared would it make any difference? If so, by how
much and why?   6a

I do not have any good answers to the above questions. I think

2

Some Questions for ARC

there probably are answers which, if we could write them down
clearly, would be very valuable. My own view is that while we're
presently strong in limited areas like editing and viewing our
strength and present leadership is in our concept of an
integrated set of capabilities properly user interfaced.   7

   To have said this is still not to have said much, what could
   we write worth the millions poured into this project to guide
   others, have we really worked on the right things, is a
   general purpose system really useful, what are the problems of
   effectively using such a system, why is it that most of us use
   only a small percent of NLS's present capabilities , how do we
   do a better job of integrating the energy and talent of those
   other tens of thousands into our work more effectively than to
   date.   7a

The above type of question would seem candidates for POD
discussion and need some kind of answer over the next few months.
Any thoughts anyone has which could help me get a clear picture
of the above would be appreciated.   8

                                                                            9

Some Questions for ARC

(J8778) 3-FEB-72 10:58; Title: Author(s): Richard W. Watson/RWW;
Distribution: Paul Rech, Michael D. Kudlick, Donald R. Cone, Don Limuti,
William R. Ferguson, Priscilla Lister, Robert L. Dendy, Linda L. Lane,
Marilyn F. Auerbach, Walter L. Bass, Mary S. Church, William S. Duvall,
Douglas C. Engelbart, Beauregard A. Hardeman, Martin E. Hardy, J. D.
Hopper, Charles H. Irby, Mil E. Jernigan, Harvey G. Lehtman, John T.
Melvin, Jeanne B. North, James C. Norton, Cindy Page, Bruce L. Parsley,
William H. Paxton, Jeffrey C. Peters, Jake Ratliff, Barbara E. Row, Ed
K. Van De Riet, Dirk H. van Nouhuys, Kenneth E. Victor, Don C. Wallace,
Richard W. Watson, Don I. Andrews/SRI-ARC; Sub-Collections: SRI-ARC
SRI-ARC; Clerk: RWW;

ttymods

(J8779) 3-FEB-72 10:58;   Title: Author(s): Kenneth E. Victor/KEV;
Distribution: Bob Van Tyul, Jeanne B. North, Robert L. Dendy, John T.
Melvin, Kenneth E. Victor, John W. McConnell, Peggy M. Karp, Dan L.
Murphy, Rod M. Fredrickson, Peter H. Lipman, Don C. Wallace, Carl M.
Ellison, Ted R. Strollo/TUG; Sub-Collections: SRI-ARC TUG; Clerk: KEV;
Origin: <VICTOR>TTYMODS.NLS;1, 3-FEB-72 10:55 KEV ;

ttymods

with all the modifications we hae made to the teletype driver to
handle our displays (and imlacs) for nls we have found it
necessary to remove parity bits sooner than they are currently
being removed for non-binary lines   1

    to do this insert the following code after the conditional
    assembly statements at TTNET1 in TTYSRV: 1a

        MOVS 3,TTFLGS(2)   1a1

        TLNE 3,3B29   ;IN BINARY MODE ?   1a2

        ANDI 1,177   ;NO, REMOVE PARITY BIT   1a3

a test of the journal

Testing. testing. One, three, four, seven, hup. Hello to the East
coast. Steve, getting used to having upper case on a tty is
painful. At least this thing has a backspace key, so that I
don't have to always hit control-D. Well, I think that should be
en adequate waste of your time for now. Talk to you later.
Hello to Peggy.   1

a test of the journal

(J8780)   3-FEB-72 11:43;   Title: Author(s): David H Crocker/DHC;
Distribution: Steve D. Crocker/SDC2(please respond); Sub-Collections:
NIC; Clerk: DHC;

Response to ARC IMLAC order

This is the first time the journal has actually worked for me,
ie, I actually received a reply to a journal entry.---things ar
looking up.   1

Reference (8756,) the file (stone,imlac) is an old one and
relatively obsolete now. The one I attempted to send was
(stone,imspec) which was destroyed in my directory and in the
journal. Its not worth reconstructing now. The following
options in (stone,imlac) are not really needed: 2

   CAB-1   since we are no longer going to use modems   2a

   CAB-2   since the cable delivered with the system allows tne
   keyboard to be moved a significant distance away from the CRT.   2b

   IEI-1   since the GMI-1 option includes the interface to the
   PDS-1D, the mouse and the keyset.   2c

   SII-1   since this is now delivered as part of the basic
   PDS-1D unit.   2d

   HCY-1   since it does not provide a full size copy of the
   image on the screen--also it can br added later if we change
   our minds.   2e

The CON-1 option is still required on one of the units.   3

Do not expect a new RFQ from Paul D. Just respond to the
existing one with Execuport 310's, the new IMLAC configuration
and the Temicette recorders (even though you're not quite certain
about them at this time).   Paul will simply send your quote
over to me and ask if the exceptions you have taken to the
original RFQ are acceptable. I will say yes and the process of
signing a contract will keep rolling. I'm not sure why the RFQ
you have now is marked "DRAFT" however I will check with
Paul----I presume it was done to speed up the procurement cycle
not because changes were expected.   4

In the contractual agreement that you sign with IMLAC, make sure
that they are held responsible for terminating the hardwired
connection between the IMLAC and the TIP--ie, we want them to
guareentee that the connection as well as the IMLAC itself works
properly after the installation has been completed.   5

Response to ARC IMLAC order

(J8781)   3-FEB-72 11:48;   Title: Author(s): Duane L. Stone/DLS;
Distribution: James C. Norton/JCN; Sub-Collections: NIC; Clerk: DLS;
Origin: <STONE>RESP.NLS;1, 3-FEB-72 11:40 DLS ;

Network Malfunctions

Complaints about Network Behavior   1

  DMCG   1a

    Uses link 1   1a1

  LL67   1b

    Improper imlementation of "reverse break" which includes
    sending data marks (x'80') without the INS. Should not use
    data mark or INS, but if insist on reverse break should
    use code x'81'.   1b1

    Insists that user send server a null character before
    conversation will begin.   1b2

  BBN   1c

    The signon sequence at BBN was changed on 2Feb72 such that
    the "free" network user,password dosent work.   1c1

Network Malfunctions

(J8783)   3-FEB-72 13:31;   Title: Author(s): Jonathan B Postel/JBP;
Distribution: Jeanne B. North, Bruce A. Dolan, Alex A. McKenzie, John T.
Melvin, Robert M. Metcalfe, Robert E. Kahn, Richard B. Kalin, Jonathan B
Postel, Peggy M. Karp, James E. White, Steve D. Crocker/NF;
Sub-Collections: NIC NF; Clerk: JBP;
Origin: <UCLA-NMC>NEWS.NLS;2, 3-FEB-72 13:29 JBP ;

Remote Job Entry Protocol Meeting

RJE Protocol Meeting   1

   This is to inform you of a small meeting to be held at UCLA on
   25Feb72 to discuss Remote Job Entry Protocols for the ARPA
   Network. Only those who whish to contribute to the
   specification of the protocols should attend. Please contact
   Jon Postel (JBP) at Ucla if you plan to attend. If you know
   of someone who should be invited please contact Jon about that
   too. (phone 213 8252368).   1a

Remote Job Entry Protocol Meeting

(J8784)   3-FEB-72 13:50;   Title: Author(s): Jonathan B Postel/JBP;
Distribution: Jeanne B. North, Bruce A. Dolan, Alex A. McKenzie, John T.
Melvin, Robert M. Metcalfe, Robert E. Kahn, Richard B. Kalin, Jonathan B
Postel, Peggy M. Karp, James E. White, Steve D. Crocker, Robert T.
Braden/NF RTB; Sub-Collections: NIC NF; Clerk: JBP;

Another View of What Superwatch is Saying

Don, A quick note to record in the journal my reaction expressed
to you on the phone to your item (8761,) on what Superwatch is
seeing.   1

It seems a little early for the pessimism expressed there about
what we can achieve with further system tuning (tenex and nls).
We have just gotten to the point with your excellent superwatch
program of really being able to see in some detail what's going
on and to be able to answer the hard questions of explaining what
we see.   2

According to the superwatch numbers given we are spending up to
25% of our time in scheduler type functions and another 20-25% in
functions attributable to memory management tasks or problems.
Thus we are only getting about half the machine for user
programs. Further I assume part of that user time is taken by
tasks of a system like nature such as OPIM(up to 7%?).   3

The user time is also taken up by tasks such as recreae display
etc again of a system like nature. Thus real user computing is
probably quite low.   4

The upshot of the above is my feeling that we are at a place
where there probably aren't any single big places to gain in
Tenex, but that we can make enough improvements to pick up
another 20% for the user. Analysis of NLS should also allow us
to streamline a few places without sacrificing NLS's flexible
structure needed for its ongoing evolution by teams of people.   5

I agree tha we need to realize that we're never going to support
a hunred users on our present sytem and thus should be studying
other mechanisms for expansion besides tuning, but it still seems
we are just now ready for some further good tuning efforts which
you and MDK will be making along with other studies durng the
next few months.   6

Another View of What Superwatch is Saying

(J8785)   3-FEB-72 14:07;   Title: Author(s): Richard W. Watson/RWW;
Distribution: Walter L. Bass, William S. Duvall, Mary S. Church, J. D.
Hopper, Charles H. Irby, Harvey G. Lehtman, John T. Melvin, Bruce L.
Parsley, William H. Paxton, Michael D. Kudlick, James C. Norton, Douglas
C. Engelbart, Ed K. Van De Riet, Don C. Wallace, Kenneth E. Victor/NPG
MDK JCN DCE EKV DCW KEV; Sub-Collections: SRI-ARC NPG; Clerk: RWW;

REDWOOD POD - 2   3 FEB '72   Meeting Notes

REDWOOD POD - 2 BURGESS PARK   3 FEB '72   All peas in attendance,
plus the main stem!   1

1. Discussion of 1 vs 2 who for PODCOM rep - Selected Bill
Duvall, with Marilyn Auerbach (previously selected) - there
seemed to be concensus that reps should be reconsidered at 4 to 6
week periods.   2

2. DCE requested that POD's take over indoctrination of new
people into ARC.   3

3. Review of PODCOM-1 Minutes   4

    a. Long discussion of work hours and problem of auditor
    concern. The question of individuals voluntarily recording
    their weekly work periods for a 4 to 6 week period, and the
    ramifications of doing so were pursued. DCE agreed to
    determine the value of such a record to SRI management.   4a

    b. Continued discussion of PSO supervision and of the name
    PSO; its membership and functions.   4b

4. Mike Kudlick asked if the NLS 5 link rings could be stored
and retrieved to provide reconstruction of prior thinking and
sequence of actions. He agreed to write up a Baseline New Task.   5

5. Discussion of DCE interruptions, primarily via telephone;
suggestion that telephone interception (and visitor and other
interruptions) be provided if agreeable to him.   6

6. Next meeting, Thursday, 10 February, 3-5 plus p.m.   7

    Don Cone, Sect'y pro tem MFA's finger   7a

REDWOOD POD - 2 3 FEB '72 Meeting Notes

(J8786) 3-FEB-72 14:51; Title: Author(s): Donald R. Cone/DRC;
Distribution: Don I. Andrews, Marilyn F. Auerbach, Donald R. Cone,
Robert L. Dendy, William S. Duvall, Charles H. Irby, Michael D. Kudlick,
Barbara E. Row, Douglas C. Engelbart/RED DCE; Keywords: redwood pod;
Sub-Collections: SRI-ARC RED; Clerk: BER;
Origin: <ROW>REDWOODPOD.NLS;1, 3-FEB-72 14:49 BER ;

Identfile Problems (BBN-NET)

Dear Joel: 1

Mimi had to recreate the entry for BBN-Net last night. She also
fixed the bug which deleted it.   2

You can change delivery to hardcopy for the members of your group
any time now.   3

Thanks for letting us know about the problem.   4

Barbara Row   5

Identfile Problems (BBN-NET)

(J8788) 4-FEB-72 7:38; Title: Author(s): Barbara E. Row/BER;
Distribution: Joel B. Levin, Mary S. Church/JBL MSC; Sub-Collections:
NIC; Clerk: BER;
Origin: <ROW>LEVIN.NLS;1, 4-FEB-72 7:35 BER ;

STRMT ERROR

The error number for the STRXI error return from the STRMT jsys
(set terminal type) is now 600754.   1

STRMT ERROR

(J8789)   4-FEB-72 9:26;   Title: Author(s): Kenneth E. Victor/KEV;
Distribution: Diane S. Kaye, Paul Rech, Michael D. Kudlick, Donald R.
Cone, Don Limuti, William R. Ferguson, Priscilla Lister, Robert L.
Dendy, Linda L. Lane, Marilyn F. Auerbach, Walter L. Bass, Mary S.
Church, William S. Duvall, Douglas C. Engelbart, Beauregard A. Hardeman,
Martin E. Hardy, J. D. Hopper, Charles H. Irby, Mil E. Jernigan, Harvey
G. Lehtman, John T. Melvin, Jeanne B. North, James C. Norton, Cindy
Page, Bruce L. Parsley, William H. Paxton, Jeffrey C. Peters, Jake
Ratliff, Barbara E. Row, Ed K. Van De Riet, Dirk H. van Nouhuys, Kenneth
E. Victor, Don C. Wallace, Richard W. Watson, Don I. Andrews/SRI-ARC;
Sub-Collections: SRI-ARC; Clerk: PL;

Account numbers and other things

Dick, are we still supposed to use account 3?
Also, I connected to nic yesterday and found myself already
logged
in as somebody else.   Charley.   1

Account numbers and other things

(J8790)   4-FEB-72 12:23;   Title: Author(s): Chuck S. Kline/CSK;
Distribution: Richard W. Watson/RWW; Sub-Collections: NIC; Clerk: CSK;

Please don't permit the printer program to persist in pimping on
particular people

Ken -- Would you consider changing the PRINTER program so that it
assigns priority to jobs on the basis of longevity in the queue,
shortness of length, or some other basis that does not pimp on
individuals with idents near the end of the alphabet?   Thanks --
WLB   1

Please don't permit the printer program to persist in pimping on
particular people

(J8791)   4-FEB-72 15:07; Title: Author(s): Walter L. Bass/WLB;
Distribution: Kenneth E. Victor/KEV; Sub-Collections: SRI-ARC; Clerk:
WLB;

Printer Etiquette

Some people -- I'm not pointing the accusing finger at anyone in
particular as we are all guilty occasionally -- have the nasty
habit of initiating the printing of long (i.e., 50, 100, or more
pages) documents on the line printer without checking to see how
the job is going. This leaves other people to clear up paper
jams, reload paper into the printer, and cool their heels while
waiting for short proof copies which they have a right to expect
short turn around time on. It seems that if a big print job is
not important enough to an individual for him to babysit the
printer while waiting for it, it certainly isn't important enough
to the poor sap who gets the baby dumped in his lap, and the job
should be deferred until a non-busy time of the day -- or at
least other people should be warned that the printer is going to
be unavailable for a indeterminate length of time. Thanks -- a
poor sap   1

Printer Etiquette

(J8792)   4-FEB-72 15:21;   Title: Author(s): Walter L. Bass/WLB;
Distribution: Diane S. Kaye, Paul Rech, Michael D. Kudlick, Donald R.
Cone, Don Limuti, William R. Ferguson, Priscilla Lister, Robert L.
Dendy, Linda L. Lane, Marilyn F. Auerbach, Walter L. Bass, Mary S.
Church, William S. Duvall, Douglas C. Engelbart, Beauregard A. Hardeman,
Martin E. Hardy, J. D. Hopper, Charles H. Irby, Mil E. Jernigan, Harvey
G. Lehtman, John T. Melvin, Jeanne B. North, James C. Norton, Cindy
Page, Bruce L. Parsley, William H. Paxton, Jeffrey C. Peters, Jake
Ratliff, Barbara E. Row, Ed K. Van De Riet, Dirk H. van Nouhuys, Kenneth
E. Victor, Don C. Wallace, Richard W. Watson, Don I. Andrews/SRI-ARC;
Sub-Collections: SRI-ARC; Clerk: WLB;

Notes on CIRAD visit

CIRAD visit notes   1

Dr. Overton of CIRAD visited DCE, CHI, and MSC on 3-FEB to
discuss the possibility of our working with them in
fulfillment of their contract to study computer aids to
software maintenance. This was a follow-on to earlier visits
and communiques.   1a

Dr. Overton explained that although their contract has been
accepted verbally they had not received the written
approval yet and consequently were not yet really working
on the development of the approach and experiments they
wished to use.   1a1

They intend to study four interrelated areas -- see NIC
8622   1a2

sensory interaction,   1a2a

grouping,   1a2b

path analysis,   1a2c

and a metrics of maintainability.   1a2d

Furter discussion indicated that our system would not be
particularly amenable to the grouping and path analysis
experiments, but would be good for some sensory
interaction experiments or observations. They want to
send a person for two days to learn more about our
system, techniques, and methodology so that they can
determine the feasability of their proposed experiments.
This will also give us some insight into how much we
might gain from this interaction and how much of our
energy we would have to spend. We cannot afford much.   1a2e

There are three main reasons for CIRAD's interest in
working with us.   1a2f

Political and economical: their sponsor, Dr.
Goodenough, would like them to work with us if
possible. There may be other political reasons or
justifications also between Goodenough and Doug also,
says Overton.   1a2f1

They see our system and approach as the wave of the
future and want to participate.   1a2f2

Dr. Overton has spent a good deal of time working on
text editors and wants to find out what ours is like.   1a2f3

We agreed to have their person, Mrs. Larkin Viegel, come up
Monday and Tuesday and will be hosted by Diane Kaye. They
prefer to observe new people. Diane will profit from the
experience of trying to explain the system to and
discussing the problems in learning the system with
sommeone else. Most likely it would require too much of
their and our energy to actually see this thing through.
we will decide after Mrs. Veigel's stay here.   1a3

Notes on CIRAD visit

(J8793) 4-FEB-72 16:08; Title: Author(s): Charles H. Irby/CHI;
Distribution: Diane S. Kaye, Paul Rech, Michael D. Kudlick, Donald R.
Cone, Don Limuti, William R. Ferguson, Priscilla Lister, Robert L.
Dendy, Linda L. Lane, Marilyn F. Auerbach, Walter L. Bass, Mary S.
Church, William S. Duvall, Douglas C. Engelbart, Beauregard A. Hardeman,
Martin E. Hardy, J. D. Hopper, Charles H. Irby, Mil E. Jernigan, Harvey
G. Lehtman, John T. Melvin, Jeanne B. North, James C. Norton, Cindy
Page, Bruce L. Parsley, William H. Paxton, Jeffrey C. Peters, Jake
Ratliff, Barbara E. Row, Ed K. Van De Riet, Dirk H. van Nouhuys, Kenneth
E. Victor, Don C. Wallace, Richard W. Watson, Don I. Andrews/SRI-ARC;
Sub-Collections: SRI-ARC; Clerk: CHI;

RJE Protocol Meeting   1

   This is to inform you of a small meeting to be held at UCLA on
   25Feb72 to discuss Remote Job Entry Protocols for the ARPA
   Network. Only those who whish to contribute to the
   specification of the protocols should attend. Please contact
   Jon Postel (JBP) at Ucla if you plan to attend. If you know
   of someone who should be invited please contact Jon about that
   too. (phone 213 8252368).   1a

RJE Meeting

(J8795) 4-FEB-72 16:57; Title: Author(s): Jonathan B Postel/JBP;
Distribution: Charles Holland/CH; Sub-Collections: NIC; Clerk: JBP;

Acknowledgement of Identfile stuff

Dear Barbara,
    I have successfully made the changes in the BBN-NET Ident files
and those of our users. Would you please make sure that they and
user MFK are appropriately verified. Thanx much for your help.
    Joel   1

Acknowledgement of Identfile stuff

(J8796)   6-FEB-72 13:49; Title: Author(s): Joel B. Levin/JBL;
Distribution: Barbara E. Row/BER; Sub-Collections: NIC; Clerk: JBL;

EXEC BLURB   1

EXEC 1.32.03 (BBN Version 1.32, ARC Version 3) contains a
number of new features and changes.   1a

   Access restriction mechanism   1a1

      A load limiting restriction has been implemented in the
EXEC based on the Response Index, which is a measure of
system load computed by the SCHEDULER   1a1a

      The algorithm prohibits LOGIN on a loaded system,
subject to certain additional conditions (see following)   1a1b

      The algorithm is: 1a1c

         if the Response Index is within the acceptable range,
then proceed with LOGIN   1a1c1

         if the Response Index is not within the acceptable
range, then   1a1c2

            if the user trying to log in is a local
(non-network) user, then disallow login   1a1c2a

            if the user trying to log in is a network user
then   1a1c2b

               if the number of current network users is less
than the maximum permitted at the current
Response Index, then proceed with login   1a1c2b1

               if the number of current network users is
greater than or equal to the maximum permitted
at the current Response Index, then disallow
login   1a1c2b2

      IMPORTANT NOTE --- only LOGIN is prohibited.   1a1d

      It is assumed that the rejected user will try again
later   1a1e

      The Response Index limits determining the go or no-go
are Operator settable and based on samples taken by the
system   1a1f

   New Commands   1a2

INDEX   la2a

   prints the current Response Index on the controlling
   terminal   la2a1

   does not require login   la2a2

LOGSTAT   la2b

   prints the current Response Index and system
   accessibility (status of LOGIN command) on the
   controlling terminal   la2b1

   does not require login   la2b2

DISCUSE   la2c

   this is now an EXEC command, replacing
   <SUBSYS>DISCUSE.SAV   la2c1

   does not require login   la2c2

NETSTATUS   la2d

   an EXEC subsystem call which runs <SUBSYS>NETSTAT.SAV   la2d1

      this subsys is in the process of being upgraded
      considerably, to include dynamic probing of
      network sites to determine their status   la2d1a

      the (upgraded) subsys will become an exec command
      sometime in the future   la2d1b

   available for network users   la2d2

   does not require LOGIN   la2d3

Changed Commands   la3

  SYSTAT   la3a

   includes response index   la3a1

  LINK   la3b

   LOGIN no longer required   la3b1

  TYPE   la3c

now available for network users   1a3c1

  SAVE and SSAVE   1a3d

    prompt text changed to clarify core and page limits 1a3d1

Internal Changes   1a4

  Assembled into the EXEC are the system dependent
  parameters   1a4a

    net tty lines begin at 45   1a4a1

    max num net users when loaded is 4   1a4a2

  CNDX2 fix for CONNECT   1a4b

    improper compare in CONNECT code   1a4b1

  AUTOLOGOUT fix   1a4c

    duration change to 1 minute and 1 minute for time
    since initial ↑C and no activity respectively   1a4c1

  EXEC subsys commands   1a4d

    removed PUSHs and POPs at .NLS and .NETSTAT   1a4d1

Exec 1.32.03

(J8798) 6-FEB-72 23:27; Title: Author(s): John T. Melvin/JTM;
Distribution: Diane S. Kaye, Paul Rech, Michael D. Kudlick, Donald R.
Cone, Don Limuti, William R. Ferguson, Priscilla Lister, Robert L.
Dendy, Linda L. Lane, Marilyn F. Auerbach, Walter L. Bass, Mary S.
Church, William S. Duvall, Douglas C. Engelbart, Beauregard A. Hardeman,
Martin E. Hardy, J. D. Hopper, Charles H. Irby, Mil E. Jernigan, Harvey
G. Lehtman, John T. Melvin, Jeanne B. North, James C. Norton, Cindy
Page, Bruce L. Parsley, William H. Paxton, Jeffrey C. Peters, Jake
Ratliff, Barbara E. Row, Ed K. Van De Riet, Dirk H. van Nouhuys, Kenneth
E. Victor, Don C. Wallace, Richard W. Watson, Don I. Andrews/SRI-ARC;
Sub-Collections: SRI-ARC; Clerk: JTM;

Program for determining proper startup of Journal Background
Process

A Program has been written which allows an operator to determine
the proper value of LIBFLG for starting the Background Jounal
process.   1

To run the program, simply do a
@RUN <JOURNAL>JSTART.SAV;O

                                                                       2

It will type out one of these messages: 3

   LIBFLG = 1   3a

   LIBFLG = 2   3b

Which reflects the proper value of libflg.   4

Note that the operator should still make sure that background is
not already running before starting it up.   5

Program for determining proper startup of Journal Background
Process

(J8799) 7-FEB-72 9:52; Title: Author(s): William S. Duvall/WSD;
Distribution: William R. Ferguson, J. D. Hopper, Richard W. Watson,
James C. Norton, Don C. Wallace, Kenneth E. Victor/WRF JDH RWW JCN DCW
KEV; Sub-Collections: SRI-ARC; Clerk: WSD;

Some Comments on New EXEC

John,....The new exec has some nice stuff in it.   1

I have two questions: 2

    (a) Is is possible for a local user to log in as, for example,
SYSTEM even if the load average is too high.   2a

        I feel that this may be a necessity for 'Patching Up'
functions (e.g. when the Journal or OPIM are down, it may
be necessary to log in to fix them).   2a1

    (b) On Autologout, does it log you out even if you are typing
stuff??.   2b

        If it does, the value of inking without being logged it
(which is high) is reduced.   2b1

Some Comments on New EXEC

(J8800)   7-FEB-72 10:06;   Title: Author(s): William S. Duvall/WSD;
Distribution: John T. Melvin, Don C. Wallace, Kenneth E. Victor, Don I.
Andrews, Walter L. Bass, William S. Duvall, Mary S. Church, J. D.
Hopper, Charles H. Irby, Harvey G. Lehtman, John T. Melvin, Bruce L.
Parsley, William H. Paxton/JTM DCW KEV NPG; Sub-Collections: SRI-ARC
NPG; Clerk: WSD;

EMC Meeting Notes -- 31-JAN

EMC meeting notes for 31-jan   1

  disc limitation by directory   1a

    A disc limitation per directory was put into effect on
    Wednesday, 2-FEB-72. KEV and DCW will field complaints and
    requests for more space.   1a1

  scheduling   1b

    The need to put into effect the scheduling suggested in
    (Journal, 8513,) is getting very great. CHI will re-send
    and post the proposed schedule and say that, unless there
    is good reason to the contrary, it will be put into effect
    on Wednesday, 9-FEB.   1b1

    RWW suggested the need for a "quicky" terminal, which would
    be used for short sessions, say no longer than fifteen
    minutes.   1b2

      That is, one is bumpable after fifteen minutes at the
      console, and one should not use the quicky console for
      long sessions unless no other terminal is available.   1b2a

  auto logout   1c

    The EMC felt it was reasonable for the auto-logout job to
    leave dedicated terminals alone. These terminals will tend
    to screw up the accounting picture, so until some
    reasonable way of getting an acurate picture of use of
    these terminals comes along, they will be removed from the
    accounting of connect time.   1c1

      The only lines affected by this seems to be Andrews' and
      Duvall's dedicated lines. Are there any others?   1c1a

    EKV will look into auto-hangup for our dial in lines.   1c2

  hardcopy removal   1d

    All ARC people will no longer receive hardcopy Journal
    delivery unless they negotiate to get it back.   1d1

  Frequency and duration of EMC meetings   1e

    Thursday meetings will be limited to 1 hour for discussion
    of trivia, with the rest of the meeting spent on major
    issues and planning.   1e1

Ralph Prather -- early morning operator   1f

   He started Wednesday morning, 2-FEB. The tenex guys will
   train him. He is a sophomore studying computer science.   1f1

beepers   1g

   Tone and/or voice receivers cost $300 (purchase price). We
   can have the last channel in SRI's transmitter down stairs
   if we want. EKV will order one and reserve the transmitter
   channel. If they are very useful we can get more
   receivers.   1g1

privacy issue in emc meeting notes   1h

   RWW feels that emc should be allowed to discuss things in
   private, as any group should. We will in the future review
   our meeting notes so that potentially sensative things can
   be filtered out. We felt that personnel issues should be
   discussed only if the person involved wants them discussed.
   There was some feeling that EMC meetings should not be open
   to visitors, that things should be made clear in accurate
   notes. This issue does not seem settled yet and may be a
   non-issue.   1h1

space   1i

   ARC is borrowing offices for Mike Kudlick and Paul Rech.   1i1

   If we wish we can have the one Mike Kudlick has.   1i2

MSC, BLP documentation   1j

   It was felt that, since they are leaving, Bruce and Mimi
   should be approached to see if they are documenting things
   that only they know about in the system. CHI said he would
   talk to them.   1j1

EMC Meeting Notes -- 31-JAN

(J8801) 7-FEB-72 10:23; Title: Author(s): Charles H. Irby/CHI;
Distribution: Diane S. Kaye, Paul Rech, Michael D. Kudlick, Donald R.
Cone, Don Limuti, William R. Ferguson, Priscilla Lister, Robert L.
Dendy, Linda L. Lane, Marilyn F. Auerbach, Walter L. Bass, Mary S.
Church, William S. Duvall, Douglas C. Engelbart, Beauregard A. Hardeman,
Martin E. Hardy, J. D. Hopper, Charles H. Irby, Mil E. Jernigan, Harvey
G. Lehtman, John T. Melvin, Jeanne B. North, James C. Norton, Cindy
Page, Bruce L. Parsley, William H. Paxton, Jeffrey C. Peters, Jake
Ratliff, Barbara E. Row, Ed K. Van De Riet, Dirk H. van Nouhuys, Kenneth
E. Victor, Don C. Wallace, Richard W. Watson, Don I. Andrews/SRI-ARC;
Sub-Collections: SRI-ARC; Clerk: CHI;
Origin: <IRBY>EMC-MINUTES.NLS;18, 7-FEB-72 8:56 CHI ;

Weeding files -- to Connie Rosewall at UCSB and other Station
Agents

Connie has asked about weeding the files of old RFC's and other
outdated material. If your Site Liaison agrees, it's a good idea
to get rid of all papers shown in the Current Catalog to be
obsolete. Some of thse show up in the Number Index as (obsoleted
by xxxx). Others whih only announce meetings you are free to
purge as you wish.   1

Weeding files -- to Connie Rosewall at UCSB and other Station
Agents

(J8902)   7-FEB-72 10:42;   Title: Author(s): Jeanne B. North/JBN;
Distribution: Gennie Cederholm, Dorothy A. Reynolds, Charles Holland,
Jeanne B. North, Pam J. Klotz, Charles Holland, Nancy R. Teater, Marcia
D. Trager, Barbara Barnett, Glen Grazier, Ernest H. Forman, Cindy Page,
Rilla J. Reynolds, Stan Golding, Steve G. Chipman, John P. Barden,
Martha A. Ginsberg, Bradley A. Reussow, Frances Y. Knight, Shirley W.
Watkins, Marcelle D. Petell, Linda M. Connelly, Janet W. Troxel, Carol
J. Wilkinson, Imogen C. Beattie, Connie D. Rosewall, Linda M. Webster,
Anita L. Coley, Carol J. Mostrom, Richard W. Watson, Jeanne B.
North/NSAG RWW NICSTA; Sub-Collections: SRI-ARC NSAG NICSTA; Clerk: PL;

funny extra partial copies

Just out of curiosity, what evils will occur if I were to remove
from our directory the partial copies prefixed by '(JOURNAL)'
that are haunting us?   1

funny extra partial copies

(J8903)   7-FEB-72 11:34;   Title: Author(s): Joel B. Levin/JBL;
Distribution: John T. Melvin/JTM; Sub-Collections: NIC; Clerk: JBL;

Reply to WSD about EXEC 1.32.03

Duvall Reply   1

  Bill,   1a

    When the system is loaded, only LOGIN is prohibited, so if
you have to, attach to one of the background jobs or advise
some line   1a1

      Coming Soon: a way around the restriction based on some
criteria (like who you are or whether or not you know
the command), and another way based on line numbers e.g.
should at least always be able to get in on operator's
console and a few others   1a1a

      I'm certainly ready for any and all suggestions   1a1b

    Autologout   1a2

      the algorithm is (or should be--ill check it if i get
time or if you can verify for sure that its not working
properly)   1a2a

        autologout occurs in top-level EXEC when job is not
logged in and: 1a2a1

          1)EXEC returns to command input and at least X_1
seconds have elapsed since was started for this
user, or   1a2a1a

          2) X_2 seconds have elapsed since startup of this
user and there has been no teletype activity of
any kind for X_3 seconds   1a2a1b

        current settings are: $X_1=120$ $X_2=60$ $X_3=60$ (all
decimal)   1a2a2

Reply to WSD about EXEC 1.32.03

(J8904) 7-FEB-72 13:39; Title: Author(s): John T. Melvin/JTM;
Distribution: Diane S. Kaye, Paul Rech, Michael D. Kudlick, Donald R.
Cone, Don Limuti, William R. Ferguson, Priscilla Lister, Robert L.
Dendy, Linda L. Lane, Marilyn F. Auerbach, Walter L. Bass, Mary S.
Church, William S. Duvall, Douglas C. Engelbart, Beauregard A. Hardeman,
Martin E. Hardy, J. D. Hopper, Charles H. Irby, Mil E. Jernigan, Harvey
G. Lehtman, John T. Melvin, Jeanne B. North, James C. Norton, Cindy
Page, Bruce L. Parsley, William H. Paxton, Jeffrey C. Peters, Jake
Ratliff, Barbara E. Row, Ed K. Van De Riet, Dirk H. van Nouhuys, Kenneth
E. Victor, Don C. Wallace, Richard W. Watson, Don I. Andrews/SRI-ARC;
Sub-Collections: SRI-ARC; Clerk: JTM;

Stanford Research Institute
333 Ravenswood Ave.
Menlo Park, California 94025

To:
    Access Copy

8906

This is a memo to explain how we propose to keep our answering
service up to date, and provide more meaningful, relevant
information for users.   1

   We will try to supply the following information to the
   answering service:

                                                                        1a

      1. During the day, begining at 8:00am (Pacific Time), we
      will tell the service whether we are up or down for both
      NET and local users.
        If we will be down for more than 10-15 minutes, we will
      change the message at the service.   1a1

      2. At 5:00pm each workday, we will leave a projected
      schedule for that evening (until 8:00am the next day). We
      will also tell them who is the system programmer on call
      for that evening. If any user calls the service, and
      indicates that the system is down when it should be up, the
      service will notify the progrmmer on call. He will attempt
      to solve the problem, and update the message at the
      answering service.   1a2

      3. Finally, on Friday afternoon, a projected schedule for
      the weekend will be left with the service. Again, the name
      and telephone number of those people on call will be left
      with the service, and as during off-hours during the week,
      the service will notify these people if any problems arise.
      However, the information concerning weekends will probably
      not be quite as up to date as the information during the
      week, simply because the system is not continuously
      monitored.

      NOTE: Sometimes during the evening or on weekends our
      programmers will not be available to correct the problem
      immediately. If you have more trouble, please wait until
      5:00am on Mon-Fri, at which time the NET should be up.   1a3

(J8906)   7-FEB-72 14:25;   Title: Author(s): William R. Ferguson/WRF;
Distribution: Karl C. Kelley, Schuyler Stevenson, Charles Holland,
Jeanne B. North, Charles Holland, George N. Petregal, Steve D. Crocker,
Thomas F. Lawrence, John W. McConnell, John F. Heafner, Robert E. Long,
Ari O. J. Ollikainen, James E. White, A. Wayne Hathaway, Dan L. Murphy,
Patrick W. Foulk, Richard A. Winter, Harold R. Van Zoeren, Alex A.
McKenzie, Robert L. Sundberg, Joel M. Winett, Abhay K. Bhushan, Peggy M.
Karp, Thomas N. Pyke, Abe S. Landsberg, B. Michael Wilber, James A.
Moorer, Edward A. Feigenbaum, Robert T. Braden, James M. Pepin, Barry D.
Wessler, John T. Melvin, Gennie Cederholm, Dorothy A. Reynolds, Charles
Holland, Jeanne B. North, Pam J. Klotz, Charles Holland, Nancy R.
Teater, Marcia D. Trager, Barbara Barnett, Glen Grazier, Ernest H.
Forman, Cindy Page, Rilla J. Reynolds, Stan Golding, Steve G. Chipman,
John P. Barden, Martha A. Ginsberg, Bradley A. Reussow, Frances Y.
Knight, Shirley W. Watkins, Marcelle D. Petell, Linda M. Connelly, Janet
W. Troxel, Carol J. Wilkinson, Imogen C. Beattie, Connie D. Rosewall,
Linda M. Webster, Anita L. Coley, Carol J. Mostrom/NLG NSAG;
Sub-Collections: SRI-ARC NLG NSAG; Clerk: LLL;
Origin: <LANE>NIC-LETTER.NLS;8, 7-FEB-72 14:20 LLL ;

NTCNT Jsys -- How to count network tty users

(J8907) 7-FEB-72 15:12;   Title: Author(s): John T. Melvin/JTM;
Distribution: Don I. Andrews, Walter L. Bass, William S. Duvall, Mary S.
Church, J. D. Hopper, Charles H. Irby, Harvey G. Lehtman, John T.
Melvin, Bruce L. Parsley, William H. Paxton, Kenneth E. Victor, Don C.
Wallace, Robert L. Dendy, William R. Ferguson/NPG KEV DCW RLD WRF;
Wub-Collections: SRI-ARC NPG; Clerk: JTM;

reply to wlb about printer progam pimping certain people

it would be possible (at the cost of increased overhead in the
printer job) to print items in the order in which they are
created in the <printer> directory. i consider this a reasonable
request and unless i hear otherwise within a few days (for
exeample, this thursday 2/20) will see to implementing such a
scheme.

1

reply to wlb about printer progam pimping certain people

(J8908)   7-FEB-72 16:35;   Title: Author(s): Kenneth E. Victor/KEV;
Distribution: Diane S. Kaye, Paul Rech, Michael D. Kudlick, Donald R.
Cone, Don Limuti, William R. Ferguson, Priscilla Lister, Robert L.
Dendy, Linda L. Lane, Marilyn F. Auerbach, Walter L. Bass, Mary S.
Church, William S. Duvall, Douglas C. Engelbart, Beauregard A. Hardeman,
Martin E. Hardy, J. D. Hopper, Charles H. Irby, Mil E. Jernigan, Harvey
G. Lehtman, John T. Melvin, Jeanne B. North, James C. Norton, Cindy
Page, Bruce L. Parsley, William H. Paxton, Jeffrey C. Peters, Jake
Ratliff, Barbara E. Row, Ed K. Van De Riet, Dirk H. van Nouhuys, Kenneth
E. Victor, Don C. Wallace, Richard W. Watson, Don I. Andrews/SRI-ARC;
Sub-Collections: SRI-ARC; Clerk: KEV;

reply to a poor babysitting sap

the printer should not require babysitting, there are hardware
devices available to make it stack properly and We should have
one   1

reply to a poor babysitting sap

(J8909)   7-FEB-72 16:52;   Title: Author(s): Kenneth E. Victor/KEV;
Distribution: Diane S. Kaye, Paul Rech, Michael D. Kudlick, Donald R.
Cone, Don Limuti, William R. Ferguson, Priscilla Lister, Robert L.
Dendy, Linda L. Lane, Marilyn F. Auerbach, Walter L. Bass, Mary S.
Church, William S. Duvall, Douglas C. Engelbart, Beauregard A. Hardeman,
Martin E. Hardy, J. D. Hopper, Charles H. Irby, Mil E. Jernigan, Harvey
G. Lehtman, John T. Melvin, Jeanne B. North, James C. Norton, Cindy
Page, Bruce L. Parsley, William H. Paxton, Jeffrey C. Peters, Jake
Ratliff, Barbara E. Row, Ed K. Van De Riet, Dirk H. van Nouhuys, Kenneth
E. Victor, Don C. Wallace, Richard W. Watson, Don I. Andrews/SRI-ARC;
Sub-Collections: SRI-ARC; Clerk: KEV;

Re Lineprinter and Spooling

BBN apparently has a nice printer program, etc. in the new system
(1.29) that is apparently based on a space-time criterion for
line printer spooling, etc. I suggest we check this out before
doing anything here.   1

Re Lineprinter and Spooling

(J8910)   7-FEB-72 18:21;   Title: Author(s): John T. Melvin/JTM;
Distribution: Diane S. Kaye, Paul Rech, Michael D. Kudlick, Donald R.
Cone, Don Limuti, William R. Ferguson, Priscilla Lister, Robert L.
Dendy, Linda L. Lane, Marilyn F. Auerbach, Walter L. Bass, Mary S.
Church, William S. Duvall, Douglas C. Engelbart, Beauregard A. Hardeman,
Martin E. Hardy, J. D. Hopper, Charles H. Irby, Mil E. Jernigan, Harvey
G. Lehtman, John T. Melvin, Jeanne B. North, James C. Norton, Cindy
Page, Bruce L. Parsley, William H. Paxton, Jeffrey C. Peters, Jake
Ratliff, Barbara E. Row, Ed K. Van De Riet, Dirk H. van Nouhuys, Kenneth
E. Victor, Don C. Wallace, Richard W. Watson, Don I. Andrews/SRI-ARC;
Sub-Collections: SRI-ARC; Clerk: JTM;

Message to JBL about Journal Created work files

Joel, go ahead and delete the files..they are created by the
journal as a temporary work area (to hold your message while it
is being manipulated, etc.) and it is a bug for the program to
not delete the file (it gets expunged at night by the operator).
The new journal machinery should not do it. pax   1

.

Message to JBL about Journal Created work files

(J8911)   7-FEB-72 18:25;   Title: Author(s): John T. Melvin/JTM;
Distribution: Joel B. Levin/JBL; Sub-Collections: SRI-ARC; Clerk: JTM;

Comment on changes to identfile

I have been un-clogging the distribution file.   1

One of the things which causes it to get clogged up is when a
user is slated for online delivery, and the user name in the user
field is not a tenex user name, or alternatively there is no
initial file for him under the indicated users directory.   2

I have gone through the identfile chasing such entries down.   3

I have deleted online delivery for for the following people
because the name in the user field is not a valid TENEX user
name: 4

    RFH <DART>   4a

    CDS <CCCTF>   4b

    AJB <SUNY>   4c

    JCL <EDUCOM>   4d

    JMP <USC>   4e

    BMW <SRI-AI>   4f

    ASL <SDC>   4g

    JMW <LINC>   4h

    RLS <HARV>   4i

    RAW <CCA>   4j

    PWF <CASE>   4k

    AWH <AMES-CD>   4l

    REL <SDC>   4m

    RJR <SRI-AI>   4n

I have created initial files for the following users: 5

    EHF   5a

    EAF   5b

    JAM   5c

Comment on changes to identfile

AKB	5d
HRVZ	5e
RMS	5f
LGR	5g
WRC	5h
FEH	5i

In the future, please do not specify online delivery for persons
who do no have initial files for eitner of the above reasons.   6

Many thanks...Bill   7

Comment on changes to identfile

(J8912)   7-FEB-72 22:47;   Title: Author(s): William S. Duvall/WSD;
Distribution: Marilyn F. Auerbach, Mary S. Church, J. D. Hopper, John T.
Melvin, Jeanne B. North, James C. Norton, Richard W. Watson, Barbara E.
Row, Dirk H. van Nouhuys/MFA MSC JDH JTM JBN JCN RWW BER DVN;
Sub-Collections: SRI-ARC; Clerk: WSD;

Online delivery deleted	1
TEC \<HARV\>	1a
CJM \<LINC\>	1b
LMW \<USC\>	1c
JWT \<SDC\>	1d
MAG \<CCA\>	1e
JPB \<CASE\>	1f
Initial Files created	2
ODR	2a
ICB	2b
CJW	2c
MDP	2d
SWW	2e
FYK	2f
SGC	2g
MDT	2h
NRT	2i

More identfile Corrections

(J8913)   8-FEB-72 1:44;   Title: Author(s): William S. Duvall/WSD;
Distribution: Marilyn F. Auerbach, Jeanne B. North, James C. Norton,
Richard W. Watson/MFA JBN JCN RWW; Sub-Collections: SRI-ARC; Clerk: WSD;

TO: Palo Alto Answering Service
FEB-8-72

FROM: Jeanne North
        ARPA Network Information Center
        Stanford Research Institute   1

 This is a memo to indicate some slightly new procedures we will
be following in the future.   2

1. During a work day (8:00am - 5:00pm). - we will tell you at
8:00am whether we are up or down for local and NETwork users, and
this information should be conveyed to any users who call. If a
user calls, and indicates he is having problems, you should try
to call either Bill Ferguson (326-6200 X-4234 or 4773) or
Smokey Wallace (326-6200 X-4580). One of us will attempt to
solve the problems.

                                                                        3

2. During off-hours through the week (5:00pm - 8:00am) - we will
leave a projected schedule for that evening with you at 5:00pm.
This information should be conveyed to any users who call. In
addition, we will leave the name of the system programmer on call
for that evening. He should be notified if any problems occur.
The following programmers may be on call: 4

    A. Smokey Wallace - 327-8375   4a
    B. Ken Victor - 964-9870   4b
    C. Bill Ferguson - 325-4292   4c
    D. Ed van de Riet - 968-0660

                                                                        4d

3. During the week-end (5:00pm Fri. - 8:00am Mon.) - The same
procedure will be followed as during work-day off-hours, i.e. a
projected schedule for the week-end will be left with you on
Friday afternoon. If any problems arise, the programmer(s) on
call should be informed.   5

Jeanne B. North
Augmentation Research Center
Stanford Research Institute
Menlo Park, California 94025

                To:
                    NIC Copy

(J8914) 8-FEB-72 9:00; Title: Author(s): Jeanne B. North/JBN;
Distribution: Jeanne B. North, William R. Ferguson, Ed K. Van De
Riet/NICSTA WRF EKV; Sub-Collections: SRI-ARC NICSTA; Clerk: LLL;
Origin: <LANE>ANSWER-SER.NLS;14, 8-FEB-72 8:56 LLL ;

Reply to 8747 on Old Versions of NLS Files

Mimi -- I'm in favor of retaining only the highest version number
of an NLS file following an update/output file but feel a need
for some additional backup capability to compensate for the loss
involved (and to provide better backup than we have now). My
suggestion: change the EXEC so that the automatic expunge occurs
after the evening dump rather than when each user logs out (if
the dumper does not presently dump deleted files, then that
should be changed also). By following this procedure a user
would be guaranteed a fairly-easily-retrievable record of each
day's total work which would give him much more assurance that he
is not going to lose work which (by accident) appears only in a
version of a file which never got dumped.   1

Reply to 8747 on Old Versions of NLS Files

(J8915) 8-FEB-72 9:31; Title: Author(s): Walter L. Bass/WLB;
Distribution: Diane S. Kaye, Paul Rech, Michael D. Kudlick, Donald R.
Cone, Don Limuti, William R. Ferguson, Priscilla Lister, Robert L.
Dendy, Linda L. Lane, Marilyn F. Auerbach, Walter L. Bass, Mary S.
Church, William S. Duvall, Douglas C. Engelbart, Beauregard A. Hardeman,
Martin E. Hardy, J. D. Hopper, Charles H. Irby, Mil E. Jernigan, Harvey
G. Lehtman, John T. Melvin, Jeanne B. North, James C. Norton, Cindy
Page, Bruce L. Parsley, William H. Paxton, Jeffrey C. Peters, Jake
Ratliff, Barbara E. Row, Ed K. Van De Riet, Dirk H. van Nouhuys, Kenneth
E. Victor, Don C. Wallace, Richard W. Watson, Don I. Andrews/SRI-ARC;
Sub-Collections: SRI-ARC; Clerk: WLB;

Alternative algorithm for printer queueing

Ken...   1

    I don't think that operating the printer queue on a FIFO basis
is quite what we want.   1a

        Visualise, for example, th situation where a long file and
numerous shourt files are created at approximately the same
time.   1a1

        It seems reasonable that the short jobs should be printed
first.   1a2

    As an alternative, I would suggest an algorithm which uses the
estimated printing time to calculate the acceptable time
before printing is initiated.   1b

    i.e. a long printing job can wait for shorter jobs to print
before commencing, but th longer it has waited, the higher
proirity it has to run instead of th shorter jobs.   1c

    If thi needs more explanation, please contact me.   1d

Alternative algorithm for printer queueing

(J8917) 8-FEB-72 11:30; Title: Author(s): William S. Duvall/WSD;
Distribution: Diane S. Kaye, Paul Rech, Michael D. Kudlick, Donald R.
Cone, Don Limuti, William R. Ferguson, Priscilla Lister, Robert L.
Dendy, Linda L. Lane, Marilyn F. Auerbach, Walter L. Bass, Mary S.
Church, William S. Duvall, Douglas C. Engelbart, Beauregard A. Hardeman,
Martin E. Hardy, J. D. Hopper, Charles H. Irby, Mil E. Jernigan, Harvey
G. Lehtman, John T. Melvin, Jeanne B. North, James C. Norton, Cindy
Page, Bruce L. Parsley, William H. Paxton, Jeffrey C. Peters, Jake
Ratliff, Barbara E. Row, Ed K. Van De Riet, Dirk H. van Nouhuys, Kenneth
E. Victor, Don C. Wallace, Richard W. Watson, Don I. Andrews/SRI-ARC;
Sub-Collections: SRI-ARC; Clerk: WSD;

Visitor Log Louie Pouzin 8-2-72

Visitor from France Louie Pouzin - 8 Feb 72
Seen RWW JTM
Mr. Pouzin is implementing a French network called
CYCLADES, sponsered by the Delegation a l'Informatique with the
objective to allow wide access to a variety of data banks and to
provide Administrative and Public utilities with computer tools.
He is touring the US talking to ARPA and various sites to learn
our experience and expects in about 3 years to have some
connection between ARPANET and CYCLADES.
He would like to send a few of his people to the US at French
expense to work a various sites for about 6 months to learn what
they are doing and contribute if possible; I told him we wre
interested in such arrangements if mutual benifit could justify
training and other costs and that he should contact us later for
more specific dixcussions.   1

Visitor Log Louie Pouzin 8-2-72

(J8918)   8-FEB-72 11:44; Title: Author(s): Richard W. Watson/RWW;
Distribution: Douglas C. Engelbart, James C. Norton/DCE JCN;
Sub-Collections: SRI-ARC; Clerk: RWW;

Complaint

RFC #300 "Network mailing list" does not contain telephone
numbers as was requested and agreed at the time of issue of the
previous issue of the mailing list. The phone numbers are really
important !!   1

Complaint

(J8919)   8-FEB-72 12:35;   Title: Author(s): Jonathan B Postel/JBP;
Distribution: Jeanne B. North, Richard W. Watson/JBN RWW;
Sub-Collections: NIC; Clerk: JBP;

Further Comments About Only Keeping One Version of NLS Files
Around

Expunges are not done automatically at logouut time (we took that
out ages ago).

Deleted files are not dumped.

KEV   1

Further Comments About Only Keeping One Version of NLS Files
Around

(J8922)   8-FEB-72 13:27;   Title: Author(s): Kenneth E. Victor/KEV;
Distribution: Diane S. Kaye, Paul Rech, Michael D. Kudlick, Donald R.
Cone, Don Limuti, William R. Ferguson, Priscilla Lister, Robert L.
Dendy, Linda L. Lane, Marilyn F. Auerbach, Walter L. Bass, Mary S.
Church, William S. Duvall, Douglas C. Engelbart, Beauregard A. Hardeman,
Martin E. Hardy, J. D. Hopper, Charles H. Irby, Mil E. Jernigan, Harvey
G. Lehtman, John T. Melvin, Jeanne B. North, James C. Norton, Cindy
Page, Bruce L. Parsley, William H. Paxton, Jeffrey C. Peters, Jake
Ratliff, Barbara E. Row, Ed K. Van De Riet, Dirk H. van Nouhuys, Kenneth
E. Victor, Don C. Wallace, Richard W. Watson, Don I. Andrews/SRI-ARC;
Sub-Collections: SRI-ARC; Clerk: BER;

Message to Michener

Jim - I have finally read the big graphics protocol document, and
I can't say that I have any major objections. I may be somewhat
snowed, but it looks fine to me. There are a number of minor
typographical errors, but they are really minor and unambiguous.
I think we might even consider cleaning it up for submission to
the Communications of the ACM. Is the document on-line so that I
could help in any such effort?   1

Message to Michener

(J8923)   8-FEB-72 13:47;   Title: Author(s): Ira W. Cotton/IWC;
Distribution: James C. Michener/JCM; Sub-Collections: NIC; Clerk: IWC;

New Identification System Program: LMEMLIST

When the next version of NLS is brought up, a new program
LMEMLIST will be available which will logically expand the
membership list of a group or affiliate -- i.e., it will find the
idents of all individuals who should be reached through that
group/affiliate. Expand/no expand conventions are correctly
handled and looping due to "circular" memberships is prevented.
LMEMLIST returns strings containing lists of persons, unexpanded
groups, expanded groups (whose individual members will be found
in the persons list), and bad idents (not recognized by the ID
system. Further documentation and calling conventions are
described at (NLS, idlibe, lmemlist).   1

New Identification System Program: LMEMLIST

(J8924)   8-FEB-72 15:46;   Title: Author(s): Walter L. Bass/WLB;
Distribution: Richard W. Watson, James C. Norton, Diane S. Kaye, Don I.
Andrews, Walter L. Bass, William S. Duvall, Mary S. Church, J. D.
Hopper, Charles H. Irby, Harvey G. Lehtman, John T. Melvin, Bruce L.
Parsley, William H. Paxton/RWW JCN NPG; Sub-Collections: SRI-ARC NPG;
Clerk: WLB;

Proposal for Research No. ISU 71-94 (revision 2) - Part Two
Business Proposal
Proposal for Research No. ISU-71-94 (revision 2)
In response to Proposal Request F30602-72-Q-0257

NETWORK INFORMATION CENTER AND AUGMENTATION SYSTEM DEVELOPMENT
PART TWO--BUSINESS PROPOSAL   1

I   ESTIMATED TIME AND CHARGES   2

    It is proposed that the research work outlined herein be
    performed during a period of 21 months, starting 8 May 1972.   2a

    We are proposing an estimated level of 56,288 hours of
    engineering/programmer and technician effort (not including
    project supervision and clerical effort) rather than the
    51,800 hours level shown in the Proposal Request as we feel
    this level is more appropriate for the work proposed.   2b

    Pursuant to the provisions of ASPR 16-206.2, attached is a
    cost estimate and support schedule in lieu of the DD Form
    633-4. Also enclosed is a signed form complete except as to
    the "Detail Description of Cost Elements."   2c

II GOVERNMENT-FURNISHED EQUIPMENT   3

    The performance of the proposed work will involve the use of
    government-furnished equipment covered by Air Force (RADC)
    Contract No. F30602-70-C-0219.   3a

    In addition, the Data Products line printer (Serial No. 318)
    presently on-site at ARC and now the property of the
    Government will be utilized.   3b

III REPORTS   4

    The Institute will submit management reports (Item A002) on a
    quarterly basis as under the present contract. Due to the
    anticipated high level of interaction between ARC and RADC
    technical personnel, particularly through use of the ARC
    online system, we propose that the quarterly management
    reports be submitted in lieu of the monthly R&D status reports
    (Item A001) outlined in the Proposal Request.   4a

    Contract Funds Status reports (Item A003) will be submitted
    on a quarterly basis as under the present contract.   4b

    A Final Technical Report (Item A004) will be submitted 30
    days after completion of the proposed work.   4c

&SRI-ARC JCN 11-FEB-72 18:23   8925
Proposal for Research No. ISU 71-94 (revision 2) - Part Two
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In response to Proposal Request F30602-72-Q-0257

During the period of the proposed work, we expect to be developing a "Handbook," that will be a comprehensive description and history of work in the Center, suitably structured for study and revision with ARC's computer aids. It is anticipated that individual projects, including the proposed work, will be covered in the Handbook as "chapters" or special views and reports will be produced in hard copy directly from the Handbook (with suitable editing to produce useful hardcopy formats). Depending on the progress of Handbook development, reports on this contract may be in this form.   4c1

Computer program documentation (A005) will be provided in a form consistent with special ongoing program documentation techniques that are an integral part of the Center's augmentation system. The use of subroutine linking, line and level clipping, imbedded comments and other features will permit these programs to be clearly documented as the system evolves. Provision of flow charts of the types suggested in the Proposal Request is not proposed.   4d

IV   CONTRACT FORM   5

It is requested that any contract resulting from this proposal be awarded on a cost-plus-fixed-fee basis.   5a

V   ACCEPTANCE PERIOD   6

This proposal will remain in effect until 7 May 1972. If consideration of the proposal requires a longer period, the Institute will be glad to consider a request for an extension of time.   6a

Proposal for Research No. ISU 71-94 (revision 2) - Part Two
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Cost Estimate 21 MONTHS:

&SRI-ARC JCN 11-FEB-72 18:23 8925
Proposal for Research No. ISU 71-94 (revision 2) - Part Two Business
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Proposal for Research No. ISU-71-94 (revision 2)
In response to Proposal Request F30602-72-Q-0257

COST ESTIMATE

(for the twenty-one month period starting 5/8/72)

Personnel Costs

```
        Proj Supv     1,973 hrs.
        Senior Prof  10,367 hrs.
        Prof         37,040 hrs.
        Technical     8,881 hrs
        Clerical     13,349 hrs.
            Total Direct Labor              522,025
            Payroll Burden @ 28% *          146,167
            Total Labor and Burden          668,192
            Overhead @ 105% *               701,602
            Total Personnel Costs         1,369,794

Direct Costs
    Travel                                  14,036
      36 trips East @ 310 =        11,160
      72 Days Subsistence @ 31 =    2,201
        Auto Rental (45 days @ 15)    675
    Facility  *                            766,303
    Consultants                             36,000
    Report costs                             2,007
    Total Direct Costs                     818,346

Total Estimated Cost                     2,188,140
Fixed Fee                                  120,350

Total Estimated Cost Plus Fixed Fee $    2,308,490
```

* See following Schedules

Proposal for Research No. ISU 71-94 (revision 2) - Part Two Business
Proposal
Proposal for Research No. ISU-71-94 (revision 2)
In response to Proposal Request F30602-72-Q-0257

Cost Schedules: 21 MONTHS:

Proposal for Research No. ISU 71-94 (revision 2) - Part Two Business
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SCHEDULE A

DIRECT LABOR

Direct labor charges are based on the actual salaries for
the staff members contemplated for the project work plus a
judgemental factor applied to base salary for merit increases
during the contract period of performance. Frequency of salary
reviews and level of merit increases are in accordance with the
Institute's Salary and Wage Payment Policy as published in
Topic No. 505 of the SRI Administration Manual and as approved
by the Defense Contract Administration Services Region.

SCHEDULE B

OVERHEAD AND PAYROLL BURDEN

By letter agreement of 21 May 1971 with the Tri-Service
Overhead Negotiations Committee, the Institute negotiated the
following rates as acceptable for current bidding and billing
purposes:

	1972 Billing/Bidding Rates
On-Site Overhead	105%
Off-Site Overhead	75%

The Payroll Burden rate of 28% is acceptable to DCASR, San
Francisco for bidding and billing purposes on an interim basis.

Rather than setting forth these specific rates, it is
requested that contracts provide for reimbursement at billing
rates acceptable to the Contracting Officer, subject to
retroactive adjustment to fixed rates negotiated on the basis
of historical cost data. Included in payroll burden are such
costs as vacation, holiday, and sick leave pay, social security
taxes, and contributions to employee benefit plans.

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SCHEDULE C

TRAVEL COSTS

Air fare is based on prices for travel to Washington, D.C., at
$310 round trip tourist established in the Official Airline
Guide dated December 1, 1971.

Domestic subsistence rates and travel by private automobile
are established standards based on cost data submitted to and
approved by DCAA.

SCHEDULE D

CONSULTANTS

The estimated costs for outside consultants are based on
previous experience on this program and are estimated at $
36,000 for the period proposed.
Specific consultants and their rates have not yet been
determined. The client will be kept informed as such needs
develop.
     Representative consultants recently contributing to the ARC
     program are:
          Dr. James A. Fadiman, Management Consultant
          Donald I. Andrews, Systems Programmer

SCHEDULE E

REPORT   COSTS

Report costs are estimated on the basis of the number of pages
of text and illustrations and the number of copies of reports
to be produced, in accordance with the following rates per page
which have been reviewed by DCAA:

          Editing $ 2.18
          Composition $ 2.02
          Report coordination   .57
          Proofreading   .92
          Press/Bindery/Photography   .02 per impression

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  The following is a breakdown of the estimated cost of report
production:

   Printing, 300 pages at $ 5.69 per page = $ 1,707
    (including composition, report coordination,
    proofreading)
   Press, bindery at $ .02 per printed page = 300
    (for 300 printed pages - 50 copies)
   Total estimated report costs   2,007

  This estimate is made with consideration for special
techniques of report production to be used for this report
including on-line computer aids for editing, text manipulation,
and illustration.

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SCHEDULE F
FACILITY COSTS

Total Facility Costs: $ 766,303

    Computer Facility Support   630,916
      Lease Cost   588,216

        Computer Facility $ 496,824
          PDP-10: $ 350,154
            (P.O. B13477)
            21 Mo. @ $ 16,674
                Basic lease $ 13,320
                Use Tax   666
                Maintenance $ 2,688
          ME-10 memory 32k   68,712
            21 months at $ 3,272
            (including maintenance)
            (Verbal quote Feb 72 from Les Taylor, DEC)
          Bryant Drum   57,798
            19 months at $ 3,042
            (Verbal quote Feb 72 from Charles Farrier, Bryant)
          Bryant disc maint.   16,800
            (P.O. B 54148)
          Bryant drum maint.   3,360
            (P.O. B 54677)
        Terminal expenses   54,579
          Monthly rate: 2,599
            Teletypes (Mod 33) 3 @ $ 50 =   150
              (P.O. R54760)
            Texas Instruments   9 @ $115 = 1,035
              (P.O. 54305)
            Texas Instruments   3 @ $146 =   438
              (P.O. 55031)
            Couplers   8 @ $ 15 =   120
              (P.O. R54760)
            Cassette recorders 8 @ $ 107 =   856
              (P.O. B55739)

        Telephone expenses   36,813
          Datasets - 21 mo at 280 5,880
            7 - 103s at $35.00   245.00/mo
            1 - 103s at $35.00   35.00/mo
          Lines to remote sites 19,761
            Dataline   21 mo at 609/mo= 12,789

Proposal for Research No. ISU-71-94 (revision 2)
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                    3 - 202s included
                       (P.O. B 52159)
                  Voiceline   21 mo at 332/mo=   6972
            NIC service   11,172
                  Fixed cost   21 mo at 132/mo=   2,772
                       including
                       PA Answering Service @ $40 / Mo.
                          (P.O.73018)
                       Enterprise Service @ $92 / Mo.
                          (SRI 23-70)
                  Toll calls   21 mo at 400/mo= 8,400
          Maintenance and Operation   42,700

          Maintenance Materials   21,500

               Such as:
               Picture tubes 20 @ $ 75= $ 1,500
                  (P.O.64901)
               CRTs   20 @ $500= $ 10,000
                  (Verbal quote Fairchild-Dumont,
                  Mr. Bob Koppelon, 1/18/72)
               Vidicons   40 @ $150= $ 6,000
                  (P.O.66508)
               Other $ 4,000

               (Actual components and costs will depend upon the
               results of further design work. This estimate is based
               upon previous experience in the field.)

          Operating Supplies   21,200

               Mag tape   180 @ $15 = 2,700
                  (SRI Comp Center)
               NIC mailing costs =   4,500
               Paper tape, printer
                  paper,etc.=   4,000
               Xerox for NIC dist   10,000
                  (These estimates are based upon initial and
                  anticipated experience in NIC.)

          Anticipated improvements   135,387

               Disc storage

Proposal for Research No. ISU 71-94 (revision 2) - Part Two Business
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                    RPO2 Disc Storage: 12 months @   5,567 = 66,804
                        Lease costs: $ 4,585/ mo.
                            1 DF-10 channel
                            Disc Controller
                            5 Disc Drives
                        Maintenance costs $ 982/ mo.
                        (based on P.O. B 13477)
                    RPO3 Disc Storage: 9 months @   6,287 = 56,583
                        Lease costs: $ 5,305/ mo.
                            1 DF-10 channel
                            Disc Controller
                            8 Disc Drives
                        Maintenance costs $ 982/ mo.
                    RPO2 Controller changeover cost   12,000
                        (based on P.O. B 13477 and telecon 2/7/72 with Les Taylor
                        of DEC)

Proposal for Research No. ISU 71-94 (revision 2) - Part Two
Business Proposal
Proposal for Research No. ISU-71-94 (revision 2)
In response to Proposal Request F30602-72-Q-0257

(J8925)   11-FEB-72 18:23;   Title: Author(s): S.R.I. - Augmentation
Research Center, James C. Norton/&SRI-ARC JCN; Distribution: Duane L.
Wtone/DLS; Sub-Collections: SRI-ARC; Clerk: JCN;
Origin: <NORTON>J8925.NLS;2, 11-FEB-72 14:10 JCN ;
.RTJ=0;   H1="   H1P=2;   SRI-ARC 10 FEB 72 8925";

The ARC EMC met 7 Feb with DCE and RWW CHI EKV and JCN present   1

   and 10 Feb with RWW CHI EKV and JCN present: 1a

   TOPICS DISCUSSED with DCE 7 Feb: 1b

      Net interface   1b1
      Diskpacks   1b2
      ARC funding vs personnel additions   1b3
      32k memory addition   1b4
      Display terminal study   1b5
      Information management team   1b6
      Scheduling of system use - by types of use   1b7

   TOPICS DISCUSSED 10 Feb: 1c

      Jacques Vallee employment offer   1c1
      Mimi Church: transfer of information before she leaves.   1c2
      COM for journal hardcopy: alternatives and costs   1c3
      Log printer   1c4
      Bryant drum for backup - included in RADC 21 month
      proposal   1c5
      CIRAD programmer visit this week   1c6
      EMC and planning   1c7

   7 Feb: 1d

      NET INTERFACE   1d1

        We discussed the BBN network interface study with DCE
        and agreed to order the BBN equipment.   1d1a

        Since the meeting the requisition has been submitted,
        although it awaits the arrival of authorization for
        additional 302k RADC project funding before being placed
        as an order by SRI.   1d1b

      DISKPACKS   1d2

        The diskpacks will not be shipped to ARC until DEC
        recieves some official notification that the project has
        been extended. This was expected to arrive early this
        week from RADC, but was delayed (by RADC). The arrival
        of a promised TWX from RADC (today, Friday, 2/11)? may
        ease the situation. We are following events closely as
        we need the diskpacks as soon as possible.   1d2a

ARC FUNDING VS PERSONNEL ADDITIONS   1d3

   We reviewed the funding picture briefly, agreeing that
we should proceed with the search for a NIC
Operations/Net Liaison man now.   1d3a

   Jim Norton will update the overall funding study as
soon as possible (this week?) and present to the EMC and
DCE.   1d3b

32K MEMORY ADDITION   1d4

   We agreed with DCE that the 32k memory order should now
be placed.   1d4a

   This has been done since the meeting, but it also
awaits SRI's receiving RADC notification of the project
extension.   1d4b

DISPLAY TERMINAL STUDY   1d5

   We decided to hold off a little longer before starting
the study we proposed in the 3 Feb EMC meeting
(8716,1i).   1d5a

   There are too many other pressing items to work on
first, and the need is not really great now.   1d5b

INFORMATION MANAGEMENT TEAM   1d6

   The need for an ARC team to work on the general
information management aspects of the catalog, (Xdoc,
NIC, SDIS, and Journal), baseline record, and other
collections of information was discussed.   1d6a

    People who would seem appropriate to be involved
are: 1d6a1

      JBN   1d6a1a

      JCN   1d6a1b

      MDK   1d6a1c

      RWW   1d6a1d

      Vallee   1d6a1e

WLB	1d6a1f
WSD	1d6a1g

RWW will take the initiative in getting this started soon.   1d6a2

SCHEDULING OF SYSTEM USE - BY TYPES OF USE   1d7

CHI is preparing a suggested schedule for use of the system that will be presented to the users for comments and suggestions before a new operational schedule is decided upon.   1d7a

10 Feb: 1e

JACQUES VALLEE EMPLOYMENT OFFER   1e1

The offer was mailed about 9 Feb. We await his reply.   1e1a

MIMI CHURCH: TRANSFER OF INFORMATION BEFORE SHE LEAVES.   1e2

Dick Watson asked if the software people were working with MSC so as to have an effective transfer of information about her part of the system work before she leaves in a few weeks.   1e2a

CHI said he would look into it, but felt that it would present no problems.   1e2b

COM FOR JOURNAL HARDCOPY: ALTERNATIVES AND COSTS   1e3

Journal hardcopy still has problems keeping up.   1e3a

The monitor bug (if that's the problem) should be traced and fixed as soon as possible.   1e3a1

Ralph Prather should be trained in the hardcopy process as soon as practical.   1e3a2

We should consider not sending the author of ARC documents an author copy.   1e3a3

Surely not &SRI-ARC when it's the author, for SRI-ARC has several other copies.   1e3a3a

The cost of COM work at Lockheed appears to be close to 25 cents per page. This is too costly for routine

printing. Thus, relief for our local printer from
journal hardcopy work should be sought elsewhere.   1e3b

Bruce should continue trying the Lockheed FR-80 system
for reports and other purposes, but we need a study of
the alternative sources of printer service.   1e3c

Perhaps we could dump sequential files on a mag tape
and process on someone else's line printer.   1e3c1

This may need a courier if not at SRI.   1e3c1a

They might be: 1e3c2

PDP-11 of ISE has a line printer   1e3c2a

.. speed .. availability?   1e3c2a1

SRI-AI might be of help?   1e3c2b

CDC 6400 in the basement?   1e3c2c

Outside commercial services?   1e3c2d

Get another printer for ARC? (not in funding plan.
and not a very desireable alternative?)   1e3c3

This problem should be looked into by Mike Kudlick, if
he agrees. EKV and JCN will discuss it with him.   1e3d

LOG PRINTER   1e4

We need also to look into faster printers 120cps? for
the logging TTY's. Mike again? or who? EKV will handle.   1e4a

BRYANT DRUM FOR BACKUP - INCLUDED IN RADC 21 MONTH
PROPOSAL   1e5

JCN noted that although funds for a second Bryant drum
were included in the 21 month RADC proposal under
preparation today, the decision to actually acquire the
equpment has not been made. DCE will want to be part of
this decision, too, as JCN has assured him he will.   1e5a

CIRAD PROGRAMMER VISIT THIS WEEK   1e6

The programmer from CIRAD was here for two days this
week, watching Diane Kaye work on the system and trying

to get some idea of what goes on here in the programming
environment.   1e6a

Our reaction to the possibility of working with CIRAD
is that it is still not too promising.   1e6b

EMC AND PLANNING   1e7

The EMC will meet Tuesday to discuss planning and at
least short term goals. We are not trying to set ARC's
goals independently, but are trying to get a picture of
what we think (as a team) about where we are and should
be going. We will include our picture of this in meeting
notes.   1e7a

6

(J8927) 14-FEB-72 14:57; Title: Author(s): Richard W. Watson, Charles
H. Irby, Ed K. Van De Riet, James C. Norton/EMC; Distribution: Diane S.
Kaye, Paul Rech, Michael D. Kudlick, Donald R. Cone, Don Limuti, William
R. Ferguson, Priscilla Lister, Robert L. Dendy, Linda L. Lane, Marilyn
F. Auerbach, Walter L. Bass, Mary S. Church, William S. Duvall, Douglas
C. Engelbart, Beauregard A. Hardeman, Martin E. Hardy, J. D. Hopper,
Charles H. Irby, Mil E. Jernigan, Harvey G. Lehtman, John T. Melvin,
Jeanne B. North, James C. Norton, Cindy Page, Bruce L. Parsley, William
H. Paxton, Jeffrey C. Peters, Jake Ratliff, Barbara E. Row, Ed K. Van De
Riet, Dirk H. van Nouhuys, Kenneth E. Victor, Don C. Wallace, Richard W.
Watson, Don I. Andrews, Bonnar Cox/SRI-ARC BC; Sub-Collections: EMC
SRI-ARC; Clerk: JCN;
Origin: <NORTON>J8927.NLS;3, 14-FEB-72 11:27 JCN ;
HJournal="   EMC (JCN) 14 FEB 72 8927";

Richard W. Watson
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Access Copy

8928

(J8928)   28-FEB-72 7:48;   Title: Author(s): Richard W. Watson, Charles
H. Irby, Ed K. Van De Riet, James C. Norton/EMC; Distribution: Diane S.
Kaye, Paul Rech, Michael D. Kudlick, Donald R. Cone, Don Limuti, William
R. Ferguson, Priscilla Lister, Robert L. Dendy, Linda L. Lane, Marilyn
F. Auerbach, Walter L. Bass, Mary S. Church, William S. Duvall, Douglas
C. Engelbart, Beauregard A. Hardeman, Martin E. Hardy, J. D. Hopper,
Charles H. Irby, Mil E. Jernigan, Harvey G. Lehtman, John T. Melvin,
Jeanne B. North, James C. Norton, Cindy Page, Bruce L. Parsley, William
H. Paxton, Jeffrey C. Peters, Jake Ratliff, Barbara E. Row, Ed K. Van De
Riet, Dirk H. van Nouhuys, Kenneth E. Victor, Donald C. Wallace, Richard
W. Watson, Don I. Andrews/SRI-ARC; Sub-Collections: EMC SRI-ARC; Clerk:
JCN;
Origin: <NORTON>J8928.NLS;2, 25-FEB-72 17:55 JCN ; Hjournal="***
DRAFT ***   EMC (JCN) 15 MAR 72 4:48AM 8928";   SN=0;

The ARC EMC met 14 Feb with Bart Cox. RWW, CHI, JCN were present — EKV was not at SRI today. DCE was also away during this meeting time.   1

    Topics discussed prior to Bart Cox's arrival: 1a
      AMR seminar: who should attend (if anyone from ARC)   1a1
      Letter from BBN (RWW)   1a2
    Topics discussed with B. Cox (BC) 14 Feb: 1b
      CHI's EMC memo on scheduling   1b1
      Bart Cox and/or Dave Brown attendance at ARC EMC meetings 1b2
      Use of DEX by the PSO (and others?)   1b3
      Don Cone and PSO/ARC needs   1b4
      Steve Miller's current activity: on terminal study and on
NASA Ames   1b5
      Funding study: status and when to expect it   1b6
      ARC proposals and contract status   1b7
      NIC operations/liaison person: job description for BC   1b8
    Topics discussed after BC left: 1c
      P. Rech initial tasks   1c1
      Signing in for ARC people and the hours of work pattern
status   1c2

AMR Seminar: Who Should Attend (if anyone from ARC)   1d

    We concluded that ARC would not send someone to the AMR
(American Management Research) Seminar on system
measurement. This particular seminar does not appear
useful enough to justify the expense involved. It is being
held in Los Angeles, March 6-8.   1d1

Letter from BBN   1e

    RWW told us about a BBN seminar on NCP/IMP's to be held
March 16. Should we send JTM, DCW, KEV? Should decide by
3/5.   1e1

CHI's EMC Memo on Scheduling   1f

    This has since been submitted to ARC for consideration.
See (9130,).   1f1

Bart Cox and'/or Dave Brown attendance at ARC EMC Meetings   1g

    In order to increase Bart's understanding of and
appreciation for ARC's operations and plans (and vice
versa?), he plans to attend EMC meetings on a regular
basis, in addition to receiving EMC Meeting notes. EMC
felt that his attendance at planning meetings would be more

informative than sitting in on the more routine meetings.
We will try to partition meetings to this end. When Bart
is away, others, such as Dave Brown, may represent him.   1g1

Use of DEX by the PSO (and others?)   1h

JCN suggested that since DEX and its needed equipment are
now available and working, PSO and others should use it for
transcription and other appropriate tasks. This will
involve some added Dex-system and TECHNIQUE learning by ARC
to get the system-load relief it offers.   1h1

    (This document was entered via DEX-1 and PSO, killing
    a bug in the process)   1h1a

Don Cone and PSO/ARC Needs   1i

We agreed that Don Cone's role in helping PSO get started
is near completion and that we must find "part-time" help
from a pusher who is a "permanent" ARC member. Either a
combination administrative assistant'/secretary or some
better arrangement should be found. We are currently
interviewing secretaries. B. Cox had a specific person we
might hire in mind and will check on her availability.   1i1

Steve Miller's Current Activity: on the Terminal Study and on
NASA Ames   1j

JCN thinks Steve's activities for ARC have been in a
"holding pattern" and will discuss this with him. We think
this arrangement should be terminated now due to recent
changes in our needs and plans. (This has since been done
-- Steve agrees.)   1j1

Funding Study: Status and when EMC may expect It   1k

JCN has been working on this, but isn't ready. By Thursday
2/16, he will have some kind of over-all picture. (2/22:
JCN has reviewed with RWW. CHI & EKV by 2/25?)   1k1

ARC Proposals and Contract Status   1l

We are in final negotiating (red,tape) phase on the 3 month
($300K) and 21 month ($2,300K) proposals. Expecting a TWX
to free up our 32K memory and terminal orders and the DEC
disk pack shipping. The $75K RADC negotiation is slowed
due to fixed-price contract form discussion.   1l1

NIC Operations/Liaison Person: Job Description for BC   1m

    We further described this job and Bart will send on our
request for action.   1m1

P. Rech Initial Tasks   1n

    JCN reviewed the discussion he and RWW had with PR about
working in DNLS, writing about his ideas on research
organization, helping on early stages of RADC project, and
moving toward making a picture of ARC's "market place"
dynamics.   1n1

Signing in for ARC People and the Hours of Work Pattern Status   1o

    JCN will complete the survey of working hours patterns of
ARC people and summarize for use in showing SRI and others
a picture.   1o1

Another Proposal for Handling Old Versions of NLS Files

Ken and I rapped about the Old Versions problem and came up with
the following proposal:

(1) NLS would maintain only one active version of each file;
after an Update or Output File to a new version, the extension of
the old version would be changed from "NLS" to something like
"DEL" (for deleted). This way all versions which have been
active during a given day would be available for use, and if they
were known to be needed subsequently they could be renamed
appropriately.

(2) The "DEL" files would be dumped in the normal manner. At the
end of the dump, the operator would give a "!DELETE <*>*.DEL;*"
command to the EXEC to delete all files in the system with
extension "DEL" and would then run DELD to expunge all
directories. This operator procedure can be programmed into the
dumper if it proves satisfactory after a trial period.

Please let us know how you feel about this proposal. If you have
any further suggestions for possible file system laxatives,
please send them along as well. Thanks   1

Another Proposal for Handling Old Versions of NLS Files

(J8930)   8-FEB-72 16:10;   Title: Author(s): Walter L. Bass/WLB;
Distribution: Diane S. Kaye, Paul Rech, Michael D. Kudlick, Donald R.
Cone, Don Limuti, William R. Ferguson, Priscilla Lister, Robert L.
Dendy, Linda L. Lane, Marilyn F. Auerbach, Walter L. Bass, Mary S.
Church, William S. Duvall, Douglas C. Engelbart, Beauregard A. Hardeman,
Martin E. Hardy, J. D. Hopper, Charles H. Irby, Mil E. Jernigan, Harvey
G. Lehtman, John T. Melvin, Jeanne B. North, James C. Norton, Cindy
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Ratliff, Barbara E. Row, Ed K. Van De Riet, Dirk H. van Nouhuys, Kenneth
E. Victor, Don C. Wallace, Richard W. Watson, Don I. Andrews/SRI-ARC;
Wub-Collections: SRI-ARC; Clerk: WLB;