Impact Statements on FY74 Deferred Items

impact statements are provided to AFSC regarding the items which make
up the deferred $1.9 million FY74 funds.

Impact Statements on FY74 Deferred Items

From: ISIM/(Mr. Panara/330-3857)   1

To: AFSC/(DLC/Lt Col McGinnis)   2

Subject: P.E. 63728F, Advanced Computer Technology - Impact of FY74
Funds Reduction (Reference DLC message R281700Z Nov73)   3

1. This project is a broad based computer technology program and
addresses many critical Air Force problems in this area. Recognition
of this fact is borne out by General Brown, Commander AFSC, giving
direction to his staff (General Alder in particular) in FY-73 to
reprogram funds from other program elements to insure that proposed
work in this project be funded. Although funds could not be
identified from 6.3 in FY-73, we were able to get two tasks, Security
and Software Reliability started by using exploratory development
funds and delaying the start of some efforts for which these funds
were identified.   4

2. The $1.9 million FY-74 funds being impacted herein represent funds
intended to be in direct response to the above direction. In
anticipation of the release of these funds on 1 Jan 74, efforts have
been incrementally funded to 1 Jan 74, expecting that the release of
funds would carry these efforts to 30 Jun 74, and procurement actions
have been started for new efforts to insure contract awards in early
1974.   5

3. The individual cases have been reported in impact statements
received from ESD/MCI, Message P041730Z Dec 73 and AFAL/TEA-2,
Message R051555Z Dec 73. The remaining tasks/efforts are discussed
on Attachment 1.   6

4. AFAL has stated that the funding requirement for its task has
changed because of the three month delay in the release of funds.
Therefore if these funds are released they will be used to fund over
ceiling efforts in the Associative Processor task (i.e. (1) to MITRE
to explore the applicability of associative processing to ESD system
enhancement programs such as NORAD CMC Improvements, Tactical Air
Control & Monitoring, and Multisource Information Information
Correlation and (2) for a Signal Processing study designed to make
the associative capability integral to a radar system thereby
increasing the effectiveness and adaptability of the radar) and
Security task.   7

5. It is felt that prior to any cut-back, AFSC should assess the
priority of work in this project as compared to other 6.3 work and
resist the temptation to cut back because the funds are deferred.
The cut-back, based on past experience, will affect the release of
FY-75 funds and therefore; as has been the case over the past two
years in this program element, planning based $3.2 million FY-75

Impact Statements on FY74 Deferred Items

ceiling is difficult to say the least. If only $1.0 million is
released in FY-74, then it is expected that only a maximum of $1.0
million will be released in FY-75 until the FY-75 appropriations bill
is signed. Further, there will be a stipulation that there can be no
new starts. This could mean that this same problem will be facing us
next year and USAF will still have a weak advanced development
program addressing its problems in the computer technology area.   8

FOR THE COMMANDER   1 Atch
Col Thayer   Effort Impact Statements   9

coordination   ISIM   ISI   ISC   DOT   10

Info: ESD/(MCI/COL O'Keefe)
      LG Hancom Fld Mass   11

      AFAL/(TEA-2/Mr Conklin)
      WPAFB Ohio   12

      DOT/Mr Craig   13

TASK IMPACT STATEMENTS

14

Task 01 Associative Processor: ($215,000)

15

Interactive Display Interface - All hardcore aspects of this task
are started or have been completed with the exception of a
suitable display. The nature of functions such as those being
investigated for AWACS applications require an interactive display
with both alphanumeric and graphics capabilities. Such a system
has been defined. It consists of the RADC owned Tactical Modular
Display and digital-to-video converter interfaced to the
associative processor. If the FY74 funds are cut-back, the display
interface hardware will not be built and it will be difficult to
meet the SAF/R&D directive to demonstrate the advantages to be
derived in processing real time data using an associative
processor.

15a

Data Manipulator - The full power of associative processing
devices can be realized only if the parallelism of the problem at
hand is totally exploited. Under the present configuration this
can not be done, namely when data residing in a set or sets of
processing elements (PEs) memories must be transferred to other
sets of PEs. This occurs in matrix operations , tracking, weather
forecasting and many other important application areas. A data
manipulator has been designed by Syracuse University under RADC
contract. It can create all possible communication paths between
groups of PEs so that the heretofore time consuming operation can
be conducted in a manner which significantly increase the
utilization of the associative processor. Further, it is possible
to bypass faulty PEs causing only slight degradation to system
operation - a feature felt to be important to real time airborne
systems. If this data manipulator is not built, it means that it
will have to be built for future systems applications as high risk
untried and untested hardware.

15b

Syracuse University - The present contract will be completed in
Feb 74 at which time a new contact will be negotiated for 24
months. Personnel at the university have been an integral part of
the associative processor team since this task was approved. Past
work has lead to design of architecture for increasing the
efficiency of associative systems and efficient algorithms for
utilizing this hardware. Loss of these team members will seriously
curtail timely demonstration of the associative processor
capabilities.

15c

Impact Statements on FY74 Deferred Items

Library Routines - The AWACS functions being implemented by RADC and Boeing Computer Services Company require trignometric routines. If these routines are available as library routines, it means in-house and contractor personnel requiring the use of such routines in their applications programs will have them already written thus eliminating the need for duplication of effort and unnecessary expenditure of contract dollars. Further, these routines will be available for future application programming efforts.

15d

Fast A Programming Language (APL) -APL is a concise and precise programming language and is well suited for describing the associative processing architecture design which will result from this task to support air surveillance systems. The objective of this effort is to provide RADC with a reliable and useful APL for describing and exercising the evolving associative processing computer system. Without this capability, the specification for the follow-on associative processor will be ambiguous. An added benefit of this contract is that as a result of this development, all government MULTICS users will have this capability available to them on their machines.

15e

Task 08 Software Certification, Reliability and Timeliness: ($520,000)

16

Failure to release funds for this task means that the Air Force will not have a program to assess whether or not Structured Programming is an effective means for producing software and reducing the cost for producing software nor will it have a program to optimize higher order languages and produce non-ambiguous language specifications. The net effect is that the Air Force will not be tackling one of its most significant problems in an effective manner - namely the problem of reducing the skyrocketing software costs.

16a

The Software First program is zero-funded past FY74, pending a more complete definition of the Software First concept and the hardware to support it. RADC programmed $50,000 in FY73 Exploratory Development) and $50,000 in FY74 (Project 5550) to sponsor a study to define the concept and $40,000 of the deferred money to expand the study to define the hardware to support it. If the deferred money is not forthcoming, this hardware definition will not be completed, the expertise will be dispersed at the completion of the concept study and the program will come to a standstill.

16b

Task 09 ADP System Security: ($620,000)

17

Impact Statements on FY74 Deferred Items

Impact has been forwarded to you by ESD/MCI - reference ESD/MCI
message P041730Z Dec 73.   17a

Task 10 Semi-automated Requirements Analysis: ($15,000)   18

Impact has been forwarded to you by ESD/MCI - reference ESD/MCI
message P041730Z Dec 73.   18a

Task 11 High Capacity Aerospace Components : ($290,000)   19

Impact has been forwarded to you by AFAL/TEA-2 -reference
AFAL/TEA-2 message R051555Z Dec 73. In the message AFAL stated
thet all of the above funds could not be expended in FY74. Refer
to the cover letter, paragraph 4 for other uses for these funds. 19a

Task 13 Multi-Source Data Fusion: ($40,000)   20

The objective of this effort is to conduct an initial study to
identify and characterize the various categories of Air Force
Command and Control fusion processes and to assign a priority to
each based on expected impact on Command and Control missions. It
is planned to follow this study with actual technique developments
for specific fusion usage categories. If the funds are not made
available, it means that this study will be delayed for a minimum
of one year and that the Air Force will be delaying the
implementation of a technology which promises to increase the
effectiveness of Command and Control missions by orders of
magnitude by providing the capability to identify significant
changes in domains of interest in a timely manner through the
automatic fusion of data from multiple sources.   20a

Task 14 Source Data Automation: ($200,000)   21

There are two efforts planned under this task which will be
impacted: 21a

Global Weather Central - The objective of this effort is to
upgrade the capability for weather forecasting by the AF Global
Weather Central (AFGWC). The effort was initiated in FY73 when it
appeared there was a possibility for getting additional FY73
funds. RADC/IS evaluated proposals from two contractors in May
1973 and has been awaiting release of funds. The upgraded
capability has been scheduled for use on a classified project by
the Special Projects Office/AFGWC in Sept 74. We estimated this
schedule could be met if funds were released in Oct 73. Slippage
is estimated to be on a one-to-one basis (i.e. one month delay in
release means one month delay in operational capability). The
slippage is based on one other important factor: that the
contractor prices remain firm. If they do not, it will mean a
delay because the procurement process will have to be recycled.
Although we already will slip two months on the IOC based on a
1Jan74 release, AFGWC has an approved DAR for this work and if

funds can not be obtained from this project, another source will
have to be found; otherwise a bona-fide requirement will remain
unsatisfied.   21b

Airborne Command and Control Display Console - This effort
represents work designed to satisfy a technology need originated
by ESD and also represents the conclusion to the RADC Plasma
Display Development Program after several years of exploratory
development investigations. Its objective is to provide a
militarized display that is better suited for the airborne and
tactical environments than the existing cathode ray tube types
because it is inherently more reliable, more rugged, smaller,
lighter, and consumes less power. If this program is prematurely
terminated because of the lack of funds, airborne systems such as
481B (AABCP) and 411L (AWACS) will have to continue using a
technology that is not best suited for operation in their
environments. Also, many redundant units will be necessary to
achieve a satisfactory reliability due to system degradation
anticipated over the mission period. Such redundancy is costly.   21c

Impact Statements on FY74 Deferred Items

(J20842) 11-DEC-73 05:52;   Title: Author(s): Roger B. Panara/RBP;
Sub-Collections: RADC; Clerk: RBP;
Origin: <PANARA>IMPACT.NLS;1, 11-DEC-73 05:48 RBP ;

<TENEX-DOC> to be deleted at the request of DCW.

The NIC would like to move the JSYS Manual and Tenex User Guide
currently in NIC directory <TENEX-DOC>. This would allow us to
delete <TENEX-DOC> as it conflicts with the name of another
directory.   <DOCUMENTATION> would become the home of these files.
If you have no objections, a formal notice and action will happen
December 20.   1

20843 Distribution
   Jerry D. Burchfiel, William W. Plummer, Donald C. (Snokey) Wallace,
   Michael D. Kudlick, Kenneth E. (Ken) Victor,

<TENEX-DOC> to be deleted at the request of DCW.

(J20843) 11-DEC-73 08:53; Title: Author(s): Kirk E. Kelley/KIRK; Distribution: /JDB WWP DCW MDK KEV; Sub-Collections: SRI-ARC; Clerk: KIRK;

A Very Good Weekend Seminar   1

I would like to bring to your attention that there is an excellent
weekend seminar which is being offered presently once a month in San
Francisco.   2

It deals with relationships in all its forms; friends, marriage,
children, business relationships, work, or whatever relationship is
important in your life. Its purpose is to lead participants towards
more clarity, greater certainty, and more fun. And they really do a
good job at it.   3

The seminar is called "Together" and is run by Ron and Alexandra
Seigels. (They also conduct seminars on Communications and on
Fundamentals of Certainty). It costs $80.   4

Should you be interested in finding out more about it, you can call:

                    The "Natural Learning Center"
                    1921 Vallejo St.
                    San Francisco, Ca. 94123
                    Tel. 929-0444   5

                                                                     6

20844 Distribution

Donald C. (Smokey) Wallace, Richard W. Watson, Don I. Andrews,
James H. Bair, A. Jim Blum, Meredith(Reddy) E. Dively, Jeanne M.
Leavitt, Rodney A. Bondurant, Jeanne M. Beck, Mark Alexander Beach,
Judy D. Cooke, Marcia Lynn Keeney, Carol B. Guilbault, Susan R. Lee,
Elizabeth K. Michael, Charles F. Dornbush, Elizabeth J. (Jake)
Feinler, Kirk E. Kelley, N. Dean Meyer, James E. (Jim) White, Diane
S. Kaye, Paul Rech, Michael D. Kudlick, Ferg R. Ferguson, Douglas C.
Engelbart, Beauregard A. Hardeman, Martin E. Hardy, J. D. Hopper,
Charles H. Irby, Mil E. Jernigan, Harvey G. Lehtman, Jeanne B. North,
James C. Norton, Jeffrey C. Peters, Jake Ratliff, Edwin K. Van De
Riet, Dirk H. Van Nouhuys, Kenneth E. (Ken) Victor

An Interesting Weekend Seminar

(J20844) 11-DEC-73 09:22; Title: Author(s): Paul Rech/PR;
Distribution: /SRI-ARC; Sub-Collections: SRI-ARC; Clerk: PR;
Origin: <RECH>SEM.NLS;2, 11-DEC-73 09:19 PR ;

Bibliography on the Economics of Information

This bibliography was given to me by Mike Rothkopf. He told me that
I can publish it in our Journal System.

BIBLIOGRAPHY ON THE ECONOMICS OF INFORMATION AND THE ROLE OF INFORMATION IN ECONOMICS

1

NOTE:

2

Mike Rothkopf of XEROX very obligingly shared with me his bibliography on the economics of information. I list it here for those within ARC who are interested in that subject.

2a

Mil Jernigan is acquiring these papers for us. Please contact her if you want to see them.

2b

JACOB MARSCHAK'S VIEWS:

3

"Organizational Economics of Planning" Abstract of a Talk to the AAAS 12/28/65

3a

"Decision Making: Economic Aspects" "International Encyclopedia of the Social Sciences", 4, pp. 42-55, 1968

3b

"Economic Planning and the Cost of Thinking" "Social Research" 33 (1966)

3c

"Economic Comparability of Information Systems" "Internat. Econ. Rev.", 9, (1968).

3d

"Economics of Inquiring, Communicating, Deciding" "An. Econ. Rev.", 58, (1968)

3e

"Problems in Information Economics" "Management Controls: New Directions in Basic Research" McGraw-Hill, 1964

3f

COMPUTER SYSTEMS

4

Bonney, M. C., "Some considerations of the Cost and Value of Info." "Computer JOurnal" 12, (1969), pp. 118-123.

4a

PARTICULAR ECONOMIC AND PANNING MODELS

5

Borch, K., "the Opt. Mgnt. Policy of an INsur. Co." "Proc. of the Casualty Actuarial Society, 51, (1965).

5a

Kriebel, C. H., "Quadratic Teams, Information Econ., and Aggrgate Planning Dec." "Economietrics," 36, (1968).

5b

Nelson, R. R., "Uncetainty, Prediction, and Competitive Equilibrium," "Quart. Journal of Econ,", 75, (1951).

5c

Smith, K. R., "the Effect of Uncertainty on Monopoly Price,

Capital Stock and Util. of Cap." "Journal of Econ. Theory", 1,
(1969)   5d

GENERAL EQUILIBRIUM   6

Borch, K., "General Equilibr. in the Econ. of Uncertainty." "Risk
and Uncertainty" Macmillan, 1968.   6a

Borch, K. "Equilibr., Optimum, and Prejudices in Capital Markets"
"Behav. Sci", 14, (1969).   6b

Arrow, K. J., "Le Role des Valeurs Boursieres Pour la Repartition
la Meilleure des Risques" Franc. Centre National de la Recherche
Scientifique", 40, (1953)   6c

Allais, M. "L'Extension des Theories de l'Equilibre Economique
Genral et du Rendement Social au Cas du Risque" "Econometrica",
21, 1953.   6d

Radner, Roy, "Competitive Equilibrium under Uncertainty"
"Econometrica", 36, (1968)   6e

20845 Distribution
   Donald C. (Smokey) Wallace, Richard W. Watson, Don I. Andrews,
   James H. Bair, A. Jim Blum, Meredith(Reddy) E. Dively, Jeanne M.
   Leavitt, Rodney A. Bondurant, Jeanne M. Beck, Mark Alexander Beach,
   Judy D. Cooke, Marcia Lynn Keeney, Carol B. Guilbault, Susan R. Lee,
   Elizabeth K. Michael, Charles F. Dornbush, Elizabeth J. (Jake)
   Feinler, Kirk E. Kelley, N. Dean Meyer, James E. (Jim) White, Diane
   S. Kaye, Paul Rech, Michael D. Kudlick, Ferg R. Ferguson, Douglas C.
   Engelbart, Beauregard A. Hardeman, Martin E. Hardy, J. D. Hopper,
   Charles H. Irby, Mil E. Jernigan, Harvey G. Lehtman, Jeanne B. North,
   James C. Norton, Jeffrey C. Peters, Jake Ratliff, Edwin K. Van De
   Riet, Dirk H. Van Nouhuys, Kenneth E. (Ken) Victor

Bibliography on the Economics of Information

(J20845) 11-DEC-73 10:15; Title: Author(s): Paul Rech/PR;
Distribution: /SRI-ARC; Sub-Collections: SRI-ARC; Clerk: PR;
Origin: <RECH>ECON.NLS;3, 11-DEC-73 10:09 PR ;

A belated, but not too late announcement: The quarterly staff meeting for this quarter will be held tommorow evening, Wednesday the 12th, at 8:00 p.m., in the Ness Auditorium of the I Building. Coffee and dessert will be served in the adjoining Exhibition Hall beginning at 7:30 p.m. Mr. Anderson, Dr. Gibson, and Mr. Robison will discuss SRI's relationships with the USSR and report on their recent visits to the Soviet Union. Mr. Robison will share with you, if you attend, a few of the slides he took while there. In addition, Mr. Anderson will report on SRI's performance and comment on the December meeting of the SRI board of directors. The Division Office has asked that invitations be extended to 5 (five) staff members from the Augmentation Research Center. Bankning on past experience, and considering the late date of the invitation, it is assumed that there is very little danger that more than 5 staff members will be wanting to attend the meeting. If there are lots more that want to go, we can draw straws. If you want to go to the meeting, please let me know: I need to tell the Division office. Thanks.   1

20846 Distribution
   Donald C. (Smokey) Wallace, Richard W. Watson, Don I. Andrews,
James H. Bair, A. Jim Blum, Meredith(Reddy) E. Dively, Jeanne M.
Leavitt, Rodney A. Bondurant, Jeanne M. Beck, Mark Alexander Beach,
Judy D. Cooke, Marcia Lynn Keeney, Carol B. Guilbault, Susan R. Lee,
Elizabeth K. Michael, Charles F. Dornbush, Elizabeth J. (Jake)
Feinler, Kirk E. Kelley, N. Dean Meyer, James E. (Jim) White, Diane
S. Kaye, Paul Rech, Michael D. Kudlick, Ferg R. Ferguson, Douglas C.
Engelbart, Beauregard A. Hardeman, Martin E. Hardy, J. D. Hopper,
Charles H. Irby, Mil E. Jernigan, Harvey G. Lehtman, Jeanne B. North,
James C. Norton, Jeffrey C. Peters, Jake Ratliff, Edwin K. Van De
Riet, Dirk H. Van Nouhuys, Kenneth E. (Ken) Victor

(J20846)   11-DEC-73 11:25;   Title: Author(s): Jeanne M. Leavitt/JML;
Distribution: /SRI-ARC; Sub-Collections: SRI-ARC; Clerk: JML;

Output Processor User's Guide and DDSI Services

This information was distributed in hard copy along with the Output
Processor User's Guide.

One feature of the Online System that we develope at ARC is the
capacity to control layout of documents printed from our files.   1

As many of you know it is possible to insert directives in NLS which
control the format of the printed page. Normally the pages are
printed on a line printer, but it is also possible to print them via
a CRT and Computer Output to Microfilm. From them you can make
Xeroxes for proofing or plates for offset printing. This method of
output allows a choice of type faces, proportional spacing with
attendant increased density per page, columnation, and a variety of
other typographic features.   2

The attached guide gives instruction for all these features and is
itself an example.   3

A commercial COM service DDSI of Los Angeles prepares the microfilm,
proof copies, or plates from NLS files. DDSI is a few blocks from
ISI. We normally create files on our machine, move them to ISI via
FTP where a messenger from DDSI picks them up. DDSI mails the output.
The whole cycle takes about a week.   4

DDSI would be glad to have business from the Net. You may prepare a
file through our Output Processor, and send it to DDSI either through
the mail or via ISI. ISI is game to offer this service as long as
requests to their operator to handle tape do not become too numerous.
If you put your billing address in the file header, DDSI will make
proofs, bill you, and mail the proofs to you. Appendix one gives
DDSI's current prices.   5

DDSI also prints from a variety of tape formats. Appendix two
describes their service in general. If you want to use their COM
services without formating via NLS, please get in touch with Robert
Spencer at DDSI to arrange logistics.   6

If you have questions on any of these matters please feel free to ask
me or Dean Meyer (Dirk van Nouhuys,415 326-6200, x 3370;DVN@NIC Dean
Meyer, 415 326-6200, x4372; NDM@NIC)   7

Appendix One   8

  A. Photocomposed page on 35mm film.   8a

        Single font $ 2.20 page   8a1

        Mixed fonts   2.60 page   8a2

        Minimum amount   200.00   8a3

  B. Copyflo bond proofs 8 1/2 x 11   8b

S.10 per page   8b1

Minimum amount $25.00   8b2

C. Camera ready copy - KP5   8c

S.60 per page   8c1

Minimum amount $25.00   8c2

Appendix TWO   9

October 12, 1973   9a

Dirk van Nouhuys
Dean Meyer
Augmentation Research Center
Stanford Research Institute
Menlo Park, California 94025   9b

Dear Dirk/Dean,   9c

In response to your letter of September 28, I will try to describe
to you the services that we can provide to users of the ARPA
Network   9d

Our COMP-80 is able to perform   9e

1. Graphics from mag tapes formatted for the FR80 Displayer
package. (We can provide the specs needed to generate files in
this format).   9e1

2. SC4020 Simulation - High quality with the capability to go
"many up" (more than one image per frame).   9e2

3. SC4060 (Meta or IGS) simulation.   9e3

4. Calcomp Plotter simulation (we can handle SOME formats -
calcomp seems to have hundreds of formats).   9e4

5. Gerber plotter simulation.   9e5

6. Line Printer simulation with: 9e6

a. choice of any font (any size between 6pt. and 24 pt.)   9e6a

b. mono spacing with com fonts, proportional spacing with
graphic art fonts (soon).   9e6b

c. Any set of carriage controls (as long as we know their
positions and meaning).   9e6c

d. EBCDIC, G.E., Honeywell, Burroughs or BCD coding.   9e6d

e. Many images per frame.   9e6e

f. Fixed or variable blocking. (Best around block 10)   9e6f

g. Any line size (up to 255 Characters).   9e6g

h. Forms overlay.   9e6h

7. Text with illustration merge via our MiSUR package.   9e7

a. MiSUR Phase I provides illustration merge with nono
spaced com (stick fonts) only - basically straight print
format with illustration merge and forms overlay capability.   9e7a

b. MiSUR Phase II which provides the following: 9e7b

1. Multiple Fonts - The number is limited only by the
available disk storage. Font switching "on the fly" is
available via carriage control.   9e7b1

2. Change character size, spacing and feed on the fly -
Also via carriage control.   9e7b2

3. Monospaced AND proportionally spaced fonts.   9e7b3

4. Horizontal justification (left/right) to a measure
specifiable on the fly.   9e7b4

5. Ability to specify (via carriage control) the
starting position of a line on a page. (This permits
user to specify multi-column formats).   9e7b5

C. MiSUR II has these LIMITATIONS: 9e7c

1. No font switching in mid-line when doing justified
text.   9e7c1

2. No stick-font capability graphic arts fonts only.   9e7c2

3. No double-struck (by carriage control) characters in
a line in proportially spaced fonts (unless the entire
line is double-struck).   9e7c3

4.   No vertical justification, leading or pagination on
the fly.   9e7c4

We will provide needed user specs upon request.   9f

I hope this is the information you hoped to receive. If you have
any questions, I'm sure you'll call.   9g

Sincerely,

Floyd C. Dozier   9h

FCD/jp   9i

20847 Distribution
   Douglas C. Engelbart, N. Dean Meyer, Richard W. Watson, James C.
   Norton, Michael D. Kudlick, Elizabeth J. (Jake) Feinler, Jeanne B.
   North, Ed H. Satterthwaite, Robert N. Lieberman, Jim O. Calvin, Duane
   L. Stone, Ernest H. Forman, Alex A. McKenzie, John T. Melvin, David
   C. Walden, Emir H. Shuford, Ira W. Cotton, David H. Crocker, David H.
   Crocker, John S. Perry, Steve D. Crocker, Jean Iseli, Nancy J.
   Neigus, Prentiss H. Knowlton, Jonathan B. Postel, Gordon A. Smith,
   Alan R. Hill, Michael R. Plesset, Alan R. Hill,

Output Processor User's Guide and DDSI Services

(J20847) 11-DEC-73 11:56;   Title: Author(s): Dirk H. Van Nouhuys/DVN;
Distribution: /DCE(fyi) NDM(fyi) RWW(fyi) JCN(fyi) MDK(fyi) JAKE(fyi)
JBN(fyi) EHS RLL JOC DLS EHF AAM JTM DCW3 EHS2 IWC DHC DHC JSP SDC2 JI
NJN PHK JBP GAS ARH MRP ARH; Sub-Collections: NIC SRI-ARC DPCS COM;
Clerk: DVN;
Origin: <VANNOUHUYS>DDSI.NLS;5, 11-DEC-73 11:45 DVN ;

new <NLS> file: EXECFL

I have created a new file in <NLS> called EXECFL. This was necessary
because IOEXEC got too large for l10 to compile it. i have placed
the routines that i have been writing for the exec file commands in
EXECFL and removed them from IOEXEC. I updated <rel-nls>runldr. If
i should have done anything else i didn't because this is all i know
about, and no knowledgable people were around when the crisis arose.   1

20848 Distribution
    Donald C. (Smokey) Wallace, Kenneth E. (Ken) Victor, James E. (Jim)
    White, Charles F. Dornbush, Elizabeth K. Michael, Diane S. Kaye, Don
    I. Andrews, J. D. Hopper, Charles H. Irby, Harvey G. Lehtman,

new <NLS> file: EXECFL

(J20848)   11-DEC-73 15:18;   Title: Author(s): Kenneth E. (Ken)
Victor/KEV; Distribution: /NPG; Sub-Collections: SRI-ARC NPG; Clerk:
KEV;

copy and show directory are useable

both copy and show directory should be useable in xnls. i know that
there are still some problems with some of the syntax and will see to
these when i get back. in the meantime you should be able to get
some use from them. save any questions, gripes, etc. that may come
up until i get back. see you all in a week or two.   1

20849 Distribution

Donald C. (Smokey) Wallace, Kenneth E. (Ken) Victor, James E. (Jim) White, Charles F. Dornbush, Elizabeth K. Michael, Diane S. Kaye, Don I. Andrews, J. D. Hopper, Charles H. Irby, Harvey G. Lehtman,

copy and show directory are useable

(J20849) 11-DEC-73 18:05; Title: Author(s): Kenneth E. (Ken)
Victor/KEV; Distribution: /NPG; Sub-Collections: SRI-ARC NPG; Clerk:
KEV;

Meeting at MIT with John Davidson

(J20850)   11-DEC-73 19:32;   Title: Author(s): John Davidson/JD;
Distribution: /JHS JD; Sub-Collections: NIC; Clerk: JD;

Meeting at MIT with John Davidson

prof. Saltzer; The aloha system at the univ. hawaii is initiating
research in secure operating systems. In particular, we will be
addressing questions of security for TENEX -- questions much like
you are looking at for MULTICS. Steve Crocker has suggested I talk
with you during the Christmas break when I will be on the East
coast. Can we arrange this? Please SNDMSG to me at DAVIDSON at
i4-tenex, and I will elaborate.   John Davidson   1

20850 Distribution
    Jerome H. Saltzer, John Davidson,

NORGE,NORGEBLAANENDE OPP AV DET GRAAGROENNE HAV OEYER OMKRING SOM
FUGLEUNGER FJORDER I TUNGER, UTOVER DER HVOR DET STILNER AV   1

(J20851) 12-DEC-73 00:59;   Title: Author(s): O. A. Hansen/OAH;
Sub-Collections: NIC; Clerk: OAH;
Origin: <NORSAR-TIP>OAH.NLS;1, 12-DEC-73 00:54 OAH ;

Closing the loop

Al DeLucia is was my boss when I first came to the Center 12 years
ago. Being a good civil servant, he's always loking for ways o save
the gov't money. He sent me the trip report below, and asked me to
check to see if the use of a PDP-15 front-end was feasible. Have you
given this any consideration? Or is it incompatable with your PDP-10
configuration and NLS philosophy?

TRAVEL DUTY REPORT	1
Name(s) of Traveler(s):	1a
Al Delucia, IRD # 416	1a1
Name and address of place(s) visited:	1b
a. ASIS National Conference, Los Angeles, CA	1b1
b. Center for Computer Based Studies, UCLA, Los Angeles,CA	1b2
Period covered	1c
From:	1c1
21 Oct 73	1c1a
To:	1c2
26 Oct 73	1c2a
# of days:	1c3
6	1c3a
Purpose of visit:	1d
a. To participate in panel discussion on Computer Networking and attend conference sessions for ASIS Annual Meeting.	1d1
b. Review draft of final TR and transition of inventory, and unliquidated funds from old to new contract for ARPA 1488; review progress of completion of ARPA 2098.	1d2
Persons contacted:	1e
Major Dale Seastrom - USAF/PRCOM	1e1
Mr. Harvey Lehtman - SRI	1e2
Miss Pauline Atherton - Syr. Uni.	1e3
Mr. Peter Meinke - U. of Toronto	1e4
Mr. Robert Meeker - CCBS, UCLA	1e5
Mr. Miles Rogers - CCBS, UCLA	1e6

Mr. Thomas Quigley — NSF   1e7

Minutes available? (yes or No--if yes when and where):   1f

   No   1f1

Contract Number(s):   1g

   F30602-70-C-0016/J. Trczpacz   1g1

Project Number: 1h

   ARPA 1488   1h1

Task Number: 1i

   0001   1i1

Commitments made? (yes or no):   1j

   No   1j1

Follow up requirements? (yes or no--if yes complete next 3 items)   1k

   Yes   1k1

      ASAP   1k1a

   Date Required: 1k2

      A. DeLucia   1k2a

   Responsible agency or individual: 1k3

      See Paragraph B below   1k3a

   Action Item: 1k4

Summary of events: 1l

   A. Major Dale Seastrom heard the traveler's presentation on
   the Networking Panel entitled "Terminal Oriented Distributed
   Processing". He is assigned to USAF Directorate of Command
   Control and Communication and in a private discussion asked
   many questions about the exploratory development efforts
   supporting TOSS, namely TISS (Terminal Independent Support
   System), DPC (Distributive Processing Concept), CPA
   (Concentrator Processing Application) and TOSS Common User
   Capability. I gave him copies of the reports that I had with

me. He will call IRD concerning the I&W program and it,s
interfaces with Command and Control.   1l1

B. A Mr. Harvey Lehtman who works on the ARPA program for
"Augmentation of Human Intellect" (AHI) at SRI indicated that
the PDP-10 they are using is overloaded, a great deal of it in
Input/Output processing. He agreed that distributed processing
was the way to go and that they would be making a decision
shortly on a minicomputer to work with their PDP-10. I
strongly recommended that SRI look at the computer
configuration at the Center for Computer Based Behavioral
Studies (CCBS) at UCLA. Their computers consist of a PDP-10
supported by a PDP-15 for i/o processing. The PDP-15 at CCBS
are unique in that they share a common core rather that hanging
the PDP-15 on the PDP-10 as another peripheral. The software
at CCBS is designed and oriented toward analyst on-line
interaction and large segments of it could probably be used by
SRI. Bob Meeker informed the undersigned that a PDP-15 may be
available at SRI from the ARPA Automaton effort. I will take
this matter up with Mr. Duane Stone, the RADC monitor for the
AHI effort at SRI.   1l2

C. Miss Atherton and Mr. Meinke were interested in ARPA
Network resources oriented towward analyst on-line interaction.
They were unaware of the CCBS program nor the fact that they
were on the ARPA Network. They met the undersigned at CCBS on
25 Oct and were briefed on the capabilities of the system.   1l3

D. The undersigned reviewed the inventory of ARPA 1488 data
processing and support equipment. The list is to be
coordinated with PM personnel prior to preparing for transfer
of accountability to contract F30602-74-C-0015. Miles Rogers
has been appointed as CCBS focal point for all external users.
The status of completion and projected milestones for the CCBS
interface to the ARPA Network were reviewed. The Final Report
for 70-C-0016 will be a comprehensive document so that it can
be used as a future handout to prospective users of the system.
The final draft will not be received prior to 1 Jan. Delivery
of the CCBS PDP-11/45 is still scheduled for 1 January 1974.
Mr. Meeker indicated that they are much closer than originally
estimated in providing an independent demonstration made of
CCBS software for the RADC PDP-11/45.   1l4

Date: 1m

   6 Nov 73   1m1

Symbol: 1n

3

IRDA   1n1

Traveler: 1o

Closing the loop

(J20852) 12-DEC-73 09:28; Title: Author(s): Duane L. Stone/DLS;
Distribution: /HGL; Sub-Collections: RADC; Clerk: DLS;
Origin: <STONE>TRIPREPORT.NLS;1, 10-DEC-73 13:50 DLS ;

Comment on links

XNLS would not jump to link in one of my files; I changed their
delimiters from anglebrackets to parentheses and then they worked.
Comment: If there is a direct relationship here, it implies that I
have to changes scores of links in many files. Surely this is not
true   ??   1

20857 Distribution
   New Nls,

Comment on links

(J20857)   12-DEC-73 12:09;   Title: Author(s): Jeanne M. Beck/JMB;
Distribution: /NEWNLS; Sub-Collections: SRI-ARC NEWNLS; Clerk: JMB;

1

NOTE: The following text is being advertised for the next several
days (beginning 12-Dec-73) via a short message to NIC users at
log-in time. The text is in <NIC>NEWS.TXT, and will be updated
whenever new info warrants that.

1a

The Network Information Center is planning to shift its com-
puter user services to a new PDP-10 Tenex facility at TYMSHARE,
Inc., in Cupertino California.

2

We expect the changeover to occur sometime shortly after 17-Dec-73.

3

The computer the NIC will be using will be connected to the
ARPANET through a TIP at TYMSHARE.

4

The HOST NAME of the new facility is "OFFICE-1".

5

The HOST ADDRESS is 43 decimal (53 octal).
 [TIP users of course use the decimal address, TELNET users
 the octal address.]

6

We will keep you informed, with messages like this at SRI-ARC,
as to the exact date of the changeover. (The date depends on
successful checkout of the TYMSHARE facility.)

7

AT THE TIME OF THE CHANGEOVER ALL PRESENT NIC USER DIRECTORIES,
FILES, AND IDENTS, TOGETHER WITH ALL ONLINE NIC COMPUTER SER-
VICES, WILL BE MOVED TO THE NEW FACILITY, AND WILL NO LONGER
BE ACCESSIBLE AT SRI-ARC.

8

The new facility will be operational Mondays through Saturdays,
5:00 AM to 9:00 PM Pacific Time.

9

The computer software available at the new facility will ini-
tially be the same as that at the present SRI-ARC facility.

10

The "group allocation scheme" developed at SRI-ARC will be used
to guarantee access to an estimated minimum of four (4) NIC users
at all times during the new facility's operational periods.

11

... Mike Kudlick

12

20858 Distribution

James H. Bair, Ferg R. Ferguson, Marcia Lynn Keeney, Michael D. Kudlick,

Pam J. Klotz Cutler, Stan Golding, Steve G. Chipman, John P. Barden, Martha A. Ginsberg, Shirley W. Watkins, Janet W. Troxel, Connie D. Rosewall, Anita L. Coley, Carol J. Mostrom, Robert H. Thomas, Alan R. Hill, Abhay K. Bhushan, Robert P. Blanc, Barbara Noble, Leroy (Lee) C. Richardson, Frank G. Brignoli, Elizabeth J. (Jake) Feinler, Michael D. Kudlick, James E. (Jim) White, Michael A. Padlipsky, Kenneth L. Bowles, A. Wayne Hathaway, Jean Iseli, David H. Crocker, Nancy J. Neigus, Stephen M. Wolfe, Ronald M. Stoughton, Jim O. Calvin, Douglas C. Engelbart, James C. Norton, Richard W. Watson, James E. (Jim) White, Jeanne B. North, Elizabeth J. (Jake) Feinler Ruth Ann McDermott, Angie R. Yingling, Michael M. Dervage, Carolyn E. Taynai, Easter D. Russell, Leonard B. Fall, Peggy D. Irving, Roy Levin, M. P. McCluskey, Pitts Jarvis, Barbara A. Nicholas, Terence E. Devine, Paul M. Rubin, Paula L. Cotter, O. A. Hansen, Dan Dechatelets, Marcia Lynn Keeney, Margaret A. (Maggie) Bassett, J. A. Smith, Leina M. Boone, Diana L. Jones, Nancy J. Neigus, Terry Sack, Frances A. (Toni) McHale, Lucille C. (Lucy) Gilliard, Ed J. Collins, Gary Blunck, John F. Heafner, David J. King, Sue Pitkin, Jerry Fitzsimmons, Gloria Jean Martin, Roberta J. Peeler, Craig Fields, Margaret Iwamoto, Dee Larson, Robert E. Doane, Jeanne B. North George N. Petregal, Michael B. Young, Michael A. Padlipsky, Schuyler Stevenson, L. Peter Deutsch, John Davidson, Thomas O'Sullivan, Sol F. Seroussi, Scott Bradner, Robert H. Thomas, Michael J. Romanelli, Ronald M. Stoughton, A. D. (Buz) Owen, Robert L. Fink, Jeanne B. North, Steve D. Crocker, Thomas F. Lawrence, John W. McConnell, James E. (Jim) White, A. Wayne Hathaway, Richard A. Winter, Harold R. Van Zoeren, Alex A. McKenzie, Abhay K. Bhushan, B. Michael Wilber, Edward A. Feigenbaum, Robert T. Braden, James M. Pepin, John T. Melvin, Lynne Van Driest, Susan K. Mahon, Brenda B. Epling, Ethyl J. Abeita, Jane A. Bialosky, Marion C. Bedell, Kasee N. Menke Jim O. Calvin, Donna R. Cooper, Jeffrey B. Rubin, John F. Wakerly, Tom C. Rindfleisch, Leonard B. Fall, David L. Hyde, Gary Blunck, Tom P. Milke, Alan H. Wells, Chuck R. Pierson, Carl M. Ellison, Robert P. Blanc, Jay R. Walton, Terence E. Devine, David J. King, William L. Andrews, Milton H. Reese, Kenneth M. Brandon, Lou C. Nelson, Jeffrey P. Golden, Richard B. Neely, Dan Odom, Robert G. Merryman, P. Tveitane, Adrian V. Stokes, David L. Retz, Reg B. Martin, Gene Leichner, Jean Iseli, James E. (JED) Donnelley, William Kantrowitz, Michael S. Wolfberg, Yeshiah S. Feinroth, Anthony C. Hearn, Robert M. (Bob) Metcalfe, Bradley A. Reussow, Daniel L. Kadunce

NIC USER COMPUTER SERVICES TO BE TRANSFERRED TO A NEW HOST, OFFICE-1

(J20858) 12-DEC-73 12:16;   Title: Author(s): Michael D. Kudlick/MDK;
Distribution: /NLG NSAG USING DCE JCN RWW JEW JBN JAKE JHB WRF MLK MDK;
Sub-Collections: SRIARC NIC NLG NSAG USING; Clerk: MDK;
Origin: <KUDLICK>ANNOU.NLS;10, 12-DEC-73 12:04 MDK ;

Protocols Distribution Policy for Non-Network-Related Requestors

We will send this letter (and the documents listed in it) to those
persons requesting information about Network Protocols, but who are
not "officially" associated with the Network.

Dear   ...   :   1

In response to your request, we have sent you the following ARPA
Network Protocol documents, in separate mail: 2

   1.   NIC #   7101   Initial Connection Protocol
   2.   NIC #   8246   Host/Host Protocol
   3.   NIC # 18639   Telnet Protocol
   4.   NIC # 17759   File Transfer Protocol   2a

We hope these documents will be of use to you.   3

Please take note that these documents may be revised from time to
time by the Network developers, without notice to you. This is
because these are working documents in draft form, and undergo
frequent revisions as the Network itself evolves.   4

At the present time, other Network-related documents are not
available to you, since you are not now an official Network user.
The Network Information Center is, however, developing procedures
that will allow other documents and updates to documents to be
acquired by you. We hope to have such procedures finalized in the
near future.   5

Sincerely,

Michael Kudlick
Network Information Center   6

20859 Distribution
   Michael D. Kudlick, Jeanne B. North, Elizabeth J. (Jake) Feinler,
   Marcia Lynn Keeney, James E. (Jim) White, Richard W. Watson,

Protocols Distribution Policy for Non-Network-Related Requestors

(J20859) 12-DEC-73 12:28;   Title: Author(s): Michael D. Kudlick/MDK;
Distribution: /MDK JBN JAKE MLK JEW RWW; Sub-Collections: SRI-ARC;
Clerk: MDK;
Origin: <KUDLICK>PROTO.NLS;3, 10-DEC-73 17:02 MDK ;

I MAY BE WRONG BUT...

These are my thoughts on our current situation after the meeting with
Gabe on Dec. 11 on MISes (for RADC & AFSC).

I MAY BE WRONG BUT...

"There are always areas of unknown in any operation. You start your
mission and you light your lamps as you go, picking your way through
the dark, making your journey from lamp to lamp and never looking
back. But there are patches of dark and you skirt them, have to,
because your lamps are too small to show you everything. They light
only the way."   1

This is how I have been operating the past few weeks in this MIS
game. It now appears that much of our attention has been directed in
the wrong areas. The Sentinel documented last night that there is a
shortage of toilet paper looming in the future--so maybe our proposal
will be good for someting after all. My feeling is that what Gabe is
telling us to provide in no way corresponds to what we have offerred.
If a propsal is a plan to be accepted or rejected, then ours was
certainly rejected.   2

There are too many dark patches for me to understand everything but
it does appear that we have a completely new game in front of us now.   3

   (1) provide a detailed study for an RADC Data Management System   3a

   (2) decide whether to pitch the Technical Manager's Council (TMC)
   in the 3rd week of Jan   3b

   (3) decide what and where we should go with our original proposal   3c

      Let's look at these one at a time.   3c1

(1) RADC DMS   4

   We must write a hard-hiting executive paper (devoid of all
   philosophy or knowledge) that will be our recommendations for
   using proven technology to supply an opeational formatted file
   system with complete cost/time breakouts (including where the
   funds might come from). The system should be in operation within a
   year, must have good response times and costs must be limited to
   only the bare necessities.   4a

   This framework seems to indicate that we are faced with the same
   constaints that governed the selection of FEMIS and we are doomed
   to the same ending. In any event, three alternatives strike me as
   being apparent (but first maybe we should find out why everyone
   is so dissatidfied with FEMIS).   4b

      (a) Use IDS with a sprinkling of NLS being available at just
      the division level (for pride's sake, if nothing else). The
      goal of this effort becomes providing a more sophisticated
      filing structure than the first generation flat, sequential
      files that are now being used. Little developement will have to

I MAY BE WRONG BUT...

be done since our prime objective is just duplicating present
work and providing a sevice. Since this is so heavily
service-oriented, it is best left to contractors as much as
possible.   4b1

The bigggest proble arise from the use of the H635 and its
loaded system. This makes response times a serious problem
and the only development work we will provide is with the
Query Language. This is a capability beyond what they have
now and will not be available in the year time table. ICL
will habe to be expanded, made more interactive, faster,
given more capabilities, and hooked up to the TPE. The
conclusion of this effort would be having the 3500 data on
the 635 in an integrated database (a giant xstep forward but
nothing to shout about from the rooftops) and a query
capability will be provided. There alot of dark patches here
but what I can see from my lamps tell me that this is what
Gabe whats and all we might hope to sell [of course, I can't
see why we would want to sell this either but that's another
story).   4b1a

(b) Use the ARPA Network to get at another system elsewhere (at
Wright-Patt, Recon Central, System 2000, etc). The enticing
thing about this approach is that we should be able to get the
job off our hands completely. We might help in the selection of
a DMS but we don't have the experience in it to the degree
necessary to implement it so we might as well let someone else
do it. The Network considerations rightly belong in Patterson's
Branch.   4b2

The costs for this might be higher than using IDS locally
since most of the costs involved with IDS are necssary for
the construction of any database system (except for work on
the query language) while there will be Network costs,
computer costs for the other site, etc and these may outway
our one-shot dev costs.   4b2a

(c) Construct A MANAGER'S SYSTEM (AMS) on a dedicated,
minicomputer. For about 60k we could get a 32k mini that could
support up to 50 users but not concurretly. The very minimum of
data would be included in the database but hopefully enough so
that the PMS, CMS and Personnel could be covered. And then we
could still provide MASIS or JOCAS reports.   4b3

Response times with this system should be spectacular.
Filing structures are available for minis but of course they
are not as sophisticated as IDS but they could handle the
job. One problem will be in building a query language for
the system but we face the same problem with IDS. I haven't

I MAY BE WRONG BUT...

           thought too much about this but in light of our current
situation, I think it bears some thought by the Center MIS
group (or more rightly Center DMS group).   4b3a

(2) AFSC MIS   5

Gabe emphasized even more with this system that it must rely on
operational state-of-the-art. My feeling is that our concept of an
MIS is certainly not at this stage. (N.B. I had a discussion with
Shosani that leads me to believe that we are even further away
from this than I thought..more on that later).   5a

My recommendation: Let Gabe drop this.   5b

(3) Our proposal   6

First, I think it is time to stop referring to our proposal as an
MIS (everyone knows what an MIS is, as evidenced by Gabe's
insight, and we are only beating our heads against the wall). I
hereby suggest a new phrase to encompass the concept we are trying
to push...
    An Information Science System (ISS)   6a

       or AISS or maybe even drop the I completely.   6a1

This proposal is only the foundation for a long process. It might
be a branch level decision on how or whether we should proceed
with it. It is unrealistic to believe that we could get someone to
buy off on it in its present condition or even expect us to be
able to deliver it in a few years and a few bucks. If we decide to
pursue it further, it might be along these lines: 6b

    *research it a littler more carefully than we have had time to
in getting it into a proposal stage   6b1

    *begin a system analysis study to identify the exact
requirements and needs it can help with and to determine the
cost savings it could bring (if we can't specify where the
system would save money, all anyone would do is say how nice it
might be but never come up with any coins)   6b2

    *pitch it only from the standpoint of a research and
development effort (not an operational system that a user could
have in a short while)   6b3

20860 Distribution
   Roger B. Panara, Edmund J. Kennedy, Duane L. Stone, Rocco F. Iuorno,
John L. McNamara, Frank J. Tomaini,

I MAY BE WRONG BUT...

(J20860) 12-DEC-73 13:44;   Title: Author(s): Joe P. Cavano/JPC;
Distribution: /RBP EJK DLS RFI JLM FJT; Sub-Collections: RADC; Clerk:
JPC;
Origin: <CAVANO>GABEMEET.NLS;1, 12-DEC-73 13:30 JPC ;

I MAY BE WRONG BUT...

PACKAGING NLS FOR THE NIC   1

INTRODUCTION   2

NLS can be delivered to users outside ARC: 2a

    1) in either toto, or
    2) packaged in small modules for customer-oriented use, or
    3) in any combination thereof.   2a1

ARC is taking the first approach with the NLS Utility. As I
understand it, we are essentially going to make available to all
Utility users the full range of NLS services available at ARC.   2b

In accordance with the knowledge workshop philosophy so often
expounded by Doug, Dick and Jim, we are attempting to augment the
Utility users in an integrated fashion rather than concentrate on
a few specific functions first. Although this approach to
technology transfer has some shortcomings (I discuss them in
another note), it is needed in our present situation as it offers
unique opportunities for ARC.   2c

The main one being that it will allow us to obtain real feedback
from full scale aplications of our technology in a wider variety
of situations and environments. However, no matter what reasons
support the choices that were made, it is very doubtful that they
will enhance our goals if the applications are not oriented: 2d

    1) towards applied research projects in information handling
       procedures, or
    2) towards strictly exploratory applications for testing and
       feedback purposes.   2d1

I do not believe that the NLS Utility should be geared towards
fully integrated end-use applications at all. It would be a
mistake because we are simply not yet ready for such endeavors and
all the development efforts that are still so badly necessary to
realize our most fundamental goals would certainly suffer from
such a reorientation.   2e

Thus, the launching of the Utility, although a necessary step in
ARC's development, is frought with danger and the question
immediately arises how can we protect ourselves from the
potentially difficult that could arise from the Utility venture.
I believe that our safeguard in this respect will come from the
badly battered NIC. It might allow us to develop an alternative
delivery approach for NLS.   2f

Let us consider the NIC poblem.   Four NIC users will be allowed

access to the new Utility at all times, for 16 hours per day, and 6 days per week. This represents a significant resource that must be allocated in such a fashion that the whole NIC community benefits from it in a manner that is consistent with the NIC mission and goals.   2g

This excludes providing free access to the whole range of NLS services for every NIC user. Therefore, some basic partitioning scheme must be considered for these services and we must figure out how this should be done. This problem should be most welcome in ARC as it will present us with a golden opportunity.   2h

A PACKAGING SCHEME FOR THE NLS SERVICES   3

If, within the NIC quota, we allow free access to all the Utility services, then most likely a few NIC users will rapidly preempt all the available resources for NON-NIC usage and practically prevent all other potential users from accessing the system under that quota for much more legitimate NIC usage.   3a

Therefore, a time limit on NIC logins will probably have to be set. It could operate like an extended elog option, that could be called "NICLOG" for instance. It could allocate, say, 15 minutes to each user. This would provide the NIC, under its contemplated allocation quota, with a minimum of 16 "service modules" per hour or 256 service modules per day if all the resources are fully utilized.   3b

   If this is not enough, a time limit of 10 minutes could be set.
   This would amount to 384 modules per day.   3b1

   Furthermore, to avoid mutiple successive logins by the same
   person, a rule could be enforced automatically by the system
   that would prohibit another login within a certain time period,
   say one hour, after each service.   3b2

Under these conditions, the NIC could begin to serve quite effectively its potentially very large user population by offering a limited series of online services that could be delivered in predetermined modules in a predictable fashion. This service system could have the following characteristics: 3c

   1) It could be designed to be stable and dependable. Its
   stochastic behavior could be determined and, since a minimal
   control could be exercised over the service times and the
   number of channels of the system, a reasonably reliable service
   mechanism could be made available to all bona fide NIC users.   3c1

   2) A queueing system could be instituted that could minimize

uncertainty of access. Whenever all the NIC ports are busy a
waiting system could be put in operation that would compute the
expected waiting times and communicate them to the users.
Should a user decide that he wants to wait, the system would
keep him informed of his position in the queue at regular
intervals until he gets his time allocation. This would
introduce more predictability in the service system and reduce
accordingly the unpleasantness of uncertainty.   3c2

3) One of the four NIC ports could be dedicated to a
reservation system whereby prescheduled time periods are
allocated for specific uses such as teleconferencing, or
linking, or whatever other services NIC wishes to offer.
Reservations could be made by the NIC on a predetermined basis
via messages through the three other communication channels or
simply by telephone.   3c3

4) A priority system could be set up that would allow, under
prearranged conditions, priority access to the service modules.
Both preemptive priority and queueing priority should be
considered and the system should also be flexible enough to
allow the handling of occasional justified priority requests.   3c4

Under such a partitioning scheme the NIC problem would then be
reduced to choosing among all the possible services that could be
packaged in such modules those that would be the most valuable for
the NIC population at large. For instance, a user could be
allowed   3d

   - to query the NIC data bases,
   - to send or receive messages via SNDMSG,
   - to compose and edit short journal items with NLS,
   - to distribute these via a NIC Journal System,
   - to read or printout journal mail,
   - to use the NIC journal catalog for subsequent retrieval,
   - and so on.   3d1

Obviously, the issue of what services should be offered is
strictly a NIC problem. It suffices to point out here that these
services should be modularized enough to stand alone and allow
easy online training and guidance for all potential users.   3e

The main point of this whole discussion is to emphasize that a
framework could be set for special delivery of the NLS
capabilities for specific customer-oriented needs.   3f

CONCLUSIONS   4

By adopting a modular delivery approach via the NIC, ARC would

gain real experience with specific, customer-oriented needs and
learn how to tailor its services to meet their requirements. This
would present several advantages.   4a

First, it would provide ARC with an alternative for its present
delivery approach through the NLS Utility. If that approach
fails, and the NIC modular approach proves successful and
manageable, ARC could always convert some global NLS delivery
ports of the Utility into an equal number of more restricted and
modular delivery ports.   4b

Second, these modular NIC ports could offer a viable alternative
for the widely used SNDMSG system on the ARPANET, or at least
offer some complementary capabilities for special usage. A
streamlined version of NLS could thus become the basic vehicle of
an ARPANET message system and the NIC could possibly become a
message center offering cataloguing and retrieval facilities.   4c

Finally, in the long run, the NIC could become one of the major
outlets for ARC's development products and provide ARC with a
means for gradual release of new features under easily controlled
conditions.   4d

20861 Distribution
    Donald C. (Smokey) Wallace, Richard W. Watson, Don I. Andrews,
    James H. Bair, A. Jim Blum, Meredith(Reddy) E. Dively, Jeanne M.
    Leavitt, Rodney A. Bondurant, Jeanne M. Beck, Mark Alexander Beach,
    Judy D. Cooke, Marcia Lynn Keeney, Carol B. Guilbault, Susan R. Lee,
    Elizabeth K. Michael, Charles F. Dornbush, Elizabeth J. (Jake)
    Feinler, Kirk E. Kelley, N. Dean Meyer, James E. (Jim) White, Diane
    S. Kaye, Paul Rech, Michael D. Kudlick, Ferg R. Ferguson, Douglas C.
    Engelbart, Beauregard A. Hardeman, Martin E. Hardy, J. D. Hopper,
    Charles H. Irby, Mil E. Jernigan, Harvey G. Lehtman, Jeanne B. North,
    James C. Norton, Jeffrey C. Peters, Jake Ratliff, Edwin K. Van De
    Riet, Dirk H. Van Nouhuys, Kenneth E. (Ken) Victor

Packaging NLS for the NIC

(J20861) 12-DEC-73 15:06;   Title: Author(s): Paul Rech/PR;
Distribution: /SRI-ARC; Sub-Collections: SRI-ARC; Clerk: PR;
Origin: <RECH>PACK.NLS;14, 12-DEC-73 15:01 PR ;

The National Software Works

This Is a letter to the designers of the National Software Works
(NSW) commenting on some aspects of their preliminary design.

The National Software Works

To:
  Robert Balzer
  T.E. Cheatham
  Steven Crocker
  J.C.R. Licklider
  John Perry
  Stephen Warshall   1

From:
  Charles H. Irby
  Donald C. (Smokey) Wallace   2

Gentlemen: 3

We have just read the initial design document for the National
Software Works and are really excited about the prospect of something
we have been thinking about for a long time actually happening. By
"we" we mean Charles and Smokey. Of course we have told our
management about writing this letter but we certainly do not want you
to be confused about whether the opinions expressed are "official".
In fact, if at all possible, we would like to duck the usual
political implications associated with the design and simply address
the technical issues. Many of us here at the Augmentation Research
Center(ARC) have been pushing for automation of the program
development process and have made a start for our own usage. Quite
frankly the phraseology of your design sounds much like what we at
ARC have been saying for a long time.   4

    We should point out that if the NSW is a failure, an absolutely
    necessary step in the evolution of software technology will be set
    back many years. Consequently, we are highly motivated to see that
    the NSW is a great success. The basic question we have is "how can
    we help"?   4a

CRITERIA FOR A SUCCESSFUL NSW   5

    The Production Programmers Position   5a

        We claim the production programmer's traditionally conservative
        position with respect to automating the production of programs
        is a valid one, backed by years of experience with fads and
        gimmicks and systems that did not really work. A primary
        experience has been one of extra work and effort to make up for
        the deficiencies of the latest super programming system or
        tool.   5a1

        The bugs that we in the R & D community tolerate as a matter of
        course have catastrophic effects in the production environment.
        Lost data, programs, unreliable results and erroneous messages

The National Software Works

or diagnostics are major impediments in the production
environment. The "get the job done on time" oriented programmer
spends the major portion of his time getting around the
"features" of the system. A new system or manual of programming
practices that is obviously neat to the R & D community will
not entice the now firmly entrenched production programmer to
abandon his presently reliable method or surrender his boxes of
cards.   5a2

Phased Project   5b

In large part, the success of the NSW will depend upon a
gradualy phased project. The NSW's initial goals should be
modest ones with the most effort and energy being expended to
ensure reliability and consistency. Consequently, we suggest a
"pilot project".   5b1

Pilot Project   5c

Rather than attempting to automate the entire community in one
giant step, we would suggest that a highly motivated pilot
group be selected. The size of the selected group is critical.
Care should be taken that the selected group's project is not
in the critical path of some larger project as this would put
unreasonable pressures on everyone. It should be recognized
that the net effect on the selected group will be a major
perturbation and that current schedules and plans will no
longer be valid. It should not be anticipated that there will
be any initial improvements in performance because of startup
and training difficulties. The desired improvements will only
be attained when the group reestablishes equilibrium. Special
attention should be given to documentation and training. The
primary purpose of the pilot project approach is that it would
allow the developers to interact with the end user in an effort
to remove operational difficulties before making it available
to more vulnerable groups.   5c1

Programming Task Force to Build the NSW   5d

We understand that it is a hard pill for us in the computer
business to swallow, but if there is one thing we do know its
that large programming groups are virtually impossible to
manage. If ARPA wishes to solve this long-standing problem in
building the NSW, we suggest they do it as a separate effort
and not gamble the success of the NSW on an in-progress
solution. We therefore suggest that the model for the
development of the TENEX time sharing system be used.
Specifically, we propose that a small (absolute max = 10)
programming task force be setup to do the actual interface

programming and integration. The flavor of this task force
should cross the many system boundaries of the proposed
components of the NSW. The members of this task force need to
be experienced members of smoothly working programming projects
with emphasis on collaborative relationships between the
members. Prima Donnas are great, but not for the NSW.   5d1

The Display Based Editor   5e

Although conceptually the screen based editor described is very
straightforward, there are considerable difficulties in
implementing such an editor so that it satisfies the criteria
of being the basis for a single integrated facility. We
realize that although most editors, or editor philosophies,
have much of the nature of a religion (and, of course, we have
our brand) but, we have had years of experience in this area
and feel that we understand many of the issues fairly well. We
hope that we can be of help here.   5e1

THE STATE OF THE ARPANET COMMUNITY AND ITS IMPACT ON NSW   6

The Framework   6a

We are rather confused about the apparent research nature of
the proposed Framework. We were under the impression that the
initial NSW would be put together out of existing system
components and these two components clearly do not exist. We
recognize that there needs to be some new stuff to pull all the
components together but the Framework sounds rather ambitious
for the initial system. The alluded-to slight extension of the
procedure call mechanism is conceptually nice, but we see it as
a major modification to existing systems and probably will not
set well with the developers of those systems. Particularly if
they have not had a hand in it's design and development. The
Executive sounds like the Distibuted Operating System work now
in its early stages of research and developement at BBN. It
seems a bit premature to be building the NSW (an applicaton
system) with this technology.   6a1

The Nature Of Existing Arpanet System Components   6b

Most of the existing systems in the ARPANET have been designed
as tools for specific research oriented tasks (with the marked
exception of the Datacomputer), and have never been
sufficiently concerned with such things as execution speed,
program size, resource accounting, or networking. The linking
together of many slow, expensive modules will hardly suffice
for the NSW The ARPANET will, of necessity, introduce
bottlenecks to the program production process and how those

bottlenecks impact the user must be well thought out. The
whole nature of a responsive interactive network-based system
such as the NSW is not very well understood.   6b1

We are anticipating the evolution of NLS into just such a
system since the advantages of networking are too large to
ignore. Our initial thinking and experimentation suggest that
the highly interactive portions of the system must be local to
the user. We have had considerable experience with
dissatisfied users complaining about unresponsive remote
display use of our system and, this has resulted in many
unfruitful experiments in an attempt to solve a fundamental
networking problem.   6b2

Protocols   6c

We hope you realize that the NSW will precipitate one of the
great protocol battles in the history of the ARPANET. Some of
the issues have already been addressed by Bob Thomas at BBN but
in his own words he has just scratched the surface. Bob has
accomplished much by building his own private protocols and has
ducked most of the major network issues such as machine
independence and accounting. He now faces the almost
insurmountable tasks of getting his protocols or equivalents
accepted as standards.   6c1

Tight Schedule   6d

In your design you point out the traditional fault of
over-estimating ones' ability to produce running systems, and
then proceed to commit the same sin. Our experience tells us
that it takes considerably longer to get a system smoothly
running in an operational environment than it takes to get one
initially running, especially if that system is going to be
used for "real" work.   6d1

If you got this far we would like to thank you for taking the time
to read our outpourings. We are both quite committed to the
programming profession and are continually dismayed by the lack of
fallout from projects in the R & D community. The NSW has the
promise of being a vehicle for such fallout but, we cannot stress
enough the idea of "passing" the fruits of our labor to our fellow
programmers in an ACCEPTABLE form rather than laying another
hastily conceived, unintegrated and incomplete system on them.

Charles and Smokey   6e

20862 Distribution
Donald C. (Smokey) Wallace, Richard W. Watson, Don I. Andrews,
James H. Bair, A. Jim Blum, Meredith(Reddy) E. Dively, Jeanne M.
Leavitt, Rodney A. Bondurant, Jeanne M. Beck, Marc Alexander Beach,
Judy D. Cooke, Marcia Lynn Keeney, Carol B. Guilbault, Susan R. Lee,
Elizabeth K. Michael, Charles F. Dornbush, Elizabeth J. (Jake)
Feinler, Kirk E. Kelley, N. Dean Meyer, James E. (Jim) White, Diane
S. Kaye, Paul Rech, Michael D. Kudlick, Ferg R. Ferguson, Douglas C.
Engelbart, Beauregard A. Hardeman, Martin E. Hardy, J. D. Hopper,
Charles H. Irby, Mil E. Jernigan, Harvey G. Lehtman, Jeanne B. North,
James C. Norton, Jeffrey C. Peters, Jake Ratliff, Edwin K. Van De
Riet, Dirk H. Van Nouhuys, Kenneth E. (Ken) Victor

1

The National Software Works

(J20862) 12-DEC-73 15:47;   Title: Author(s): Donald C. (Snokey)
Wallace, Charles H. Irby/DCW CHI; Distribution: /SRI-ARC;
Sub-Collections: SRI-ARC; Clerk: DCW;
Origin: <WALLACE>NSW.NLS;16, 12-DEC-73 11:51 DCW ;

Smokey will play Santa

The ARC Xmas party has been moved to Rod Bondurant's sprawling
mansion at 425 Embarcadero Road in Palo Alto. The time and date (3PM
on Friday the 14) are still the same.   1

20863 Distribution

Donald C. (Smokey) Wallace, Richard W. Watson, Don I. Andrews,
James H. Bair, A. Jim Blum, Meredith(Reddy) E. Dively, Jeanne M.
Leavitt, Rodney A. Bondurant, Jeanne M. Beck, Mark Alexander Beach,
Judy D. Cooke, Marcia Lynn Keeney, Carol B. Guilbault, Susan R. Lee,
Elizabeth K. Michael, Charles F. Dornbush, Elizabeth J. (Jake)
Feinler, Kirk E. Kelley, N. Dean Meyer, James E. (Jim) White, Diane
S. Kaye, Paul Rech, Michael D. Kudlick, Ferg R. Ferguson, Douglas C.
Engelbart, Beauregard A. Hardeman, Martin E. Hardy, J. D. Hopper,
Charles H. Irby, Mil E. Jernigan, Harvey G. Lehtman, Jeanne B. North,
James C. Norton, Jeffrey C. Peters, Jake Ratliff, Edwin K. Van De
Riet, Dirk H. Van Nouhuys, Kenneth E. (Ken) Victor

Smokey will play Santa

(J20863) 12-DEC-73 15:51; Title: Author(s): Marcia Lynn Keeney/MLK;
Distribution: /SRI-ARC; Sub-Collections: SRI-ARC; Clerk: MLK;

Re Append command

Append command:
Could we have some noise word to indicate what is wanted when the
prompt (in DNLS) T:/B:/[A] appears (the second time) expecting an
LSEL of the stuff to insert between he appendees.
At one point in a scenario, when the prompt is B:/[A:, the feedback
line shows "Append Statement at to"; then you give your bug, then the
prompt changes to T:/B:/[A] but the feedback line still holds at
"Append Statement at to". This could be made more clear. At this
point I understood that typing <control-n> would be available as an
alternative to SP BC. If this is still what's planned (it's what
I've documented), it would be nice to have a noise word like:
    "insert between (type <control-n> for null typein)"
or something shorter if necessary, appear when ready for the LSEL.
Thanks, Jeanne B.   1

20864 Distribution
   New Nls,

1

Re Append command

(J2)864)   12-DEC-73 16:23;   Title: Author(s): Jeanne M. Beck/JMB;
Distribution: /NEWNLS; Sub-Collections: SRI-ARC NEWNLS; Clerk: JMB;

Rom Banin

I would like to enter Rom Banin in the identfile. Could you tell me
his middle initial and phone number. Also, Jake Feinler here has
mentioned that Rom is the Liaison at SCI; is this true or are you
still acting as liaison -- we have been sending all documentation to
you. Let me know if there have been any changes. Thank you.
Marcia Keeney 326-6200 ext 3007 or MLK through the journal   1

20865 Distribution
   Gene Leichner,

Ron Banin

Visitlog, Dec 7: Annenberg USC

For your action.

Visitlog, Dec 7: Annenberg USC

Please read and make any changes/additions in (bair,visit,) before I
submit it to the Journal. (The protections are set to read/write
all.) Thank you.   1

20856 Distribution
    James C. Norton, Richard W. Watson, Douglas C. Engelbart, Paul Rech,

Visitlog, Dec 7: Annenberg USC

(J20866)   12-DEC-73 17:56;   Title: Author(s): James H. Bair/JHB ;
Distribution: /JCN   RWW   DCE   PR ; Sub-Collections: SRI-ARC ; Clerk:
JHB ;

Superwatch Average Graphs for Week of 12/3/73

```
TIME PLOT OF AVERAGE IDLE TIME FOR WEEK OF 12/3/73
x axis labeled in units of hr:min,   xunit = 30 minutes                     1

     67.5  **           *
     60.0  **           *
     52.5  **           *                                              **
     45.0  **        **                                               **
     37.5  ***       **                                               **
     30.0 **** ***** *                                              ****
     22.5 ********** **                              *  ***  *****
     15.0 *****************                              *****  *****
      7.5 ******************  *  *  *      *          **************
      0.0 **********************************************************
          +!!!!!!!!!+!!!!!!!!!+!!!!!!!!!+!!!!!!!!!+!!!!!!!!!
          0:00       5:00      10:00     15:00     20:00                    1a

TIME PLOT OF AVERAGE NUMBER OF GO JOBS FOR WEEK OF 12/3/73
x axis labeled in units of hr:min,   xunit = 30 minutes                     2

      6.0                   *       *
      5.5                 ****    *
      5.0                 ****  ***  ******
      4.5                 *********************
      4.0                 *********************
      3.5                 ********************
      3.0              ************************* *
      2.5             ****************************    **
      2.0             ********************************
      1.5     *       *************************************
      1.0   *****   **************************************
      0.5  ****** **************************************
      0.0 ********************************************************
          +!!!!!!!!!+!!!!!!!!!+!!!!!!!!!+!!!!!!!!!+!!!!!!!!!
          0:00       5:00      10:00     15:00     20:00                    2a
```
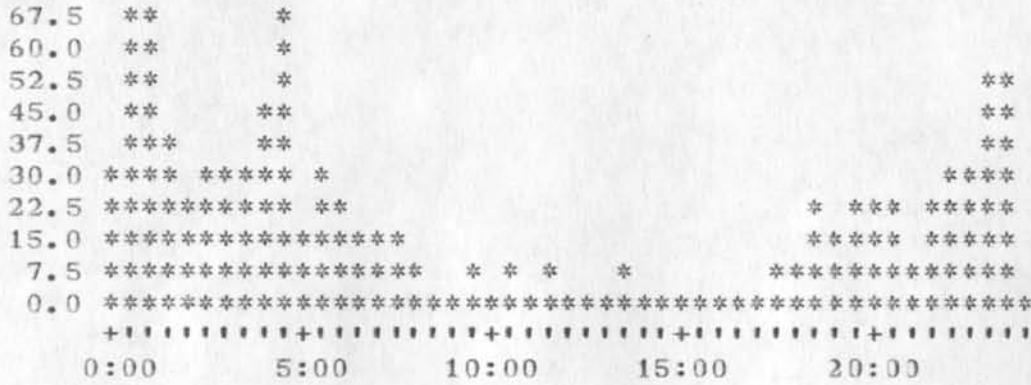
Superwatch Average Graphs for Week of 12/3/73

TIME PLOT OF AVERAGE PER CENT OF SYSTEM USED IN DNLS FOR WEEK OF
12/3/73
x axis labeled in units of hr:min,   xunit = 30 minutes   3

```
    24.0
    22.0                                    ****
    20.0                                    ******
    18.0                              *      *******
    16.0                            *   *    *******
    14.0                         ** ****     ********
    12.0                         **********  ********
    10.0                         ***********************
     8.0                         ***********************     **
     6.0                    **  ******************************  *  ****
     4.0                    ***************************************** *******
     2.0        ***         **************************************************
     0.0  ***************************************************************************
          +..........+..........+..........+..........+..........
          0:00      5:00      10:00     15:00     20:00                         3a
```

TIME PLOT OF AVERAGE PER CENT OF CPU TIME CHARGED TO USER ACCOUNTS
FOR WEEK OF 12/3/73
x axis labeled in units of hr:min,   xunit = 30 minutes   4

```
    61.6                        *        *   *    **
    53.9        *            ********************* *       *
    46.2      ***      *    ****************************** * *   *
    38.5     *****   ***************************************************
    30.8     *****   ****************************************************
    23.1    ******  *****************************************************
    15.4    ******  ******************************************************
     7.7  *********************************************************************
     0.0  *********************************************************************
          +..........+..........+..........+..........+..........
          0:00      5:00      10:00     15:00     20:00                         4a
```

Superwatch Average Graphs for Week of 12/3/73

TIME PLOT OF AVERAGE NUMBER OF NETWORK USERS FOR WEEK OF 12/3/73
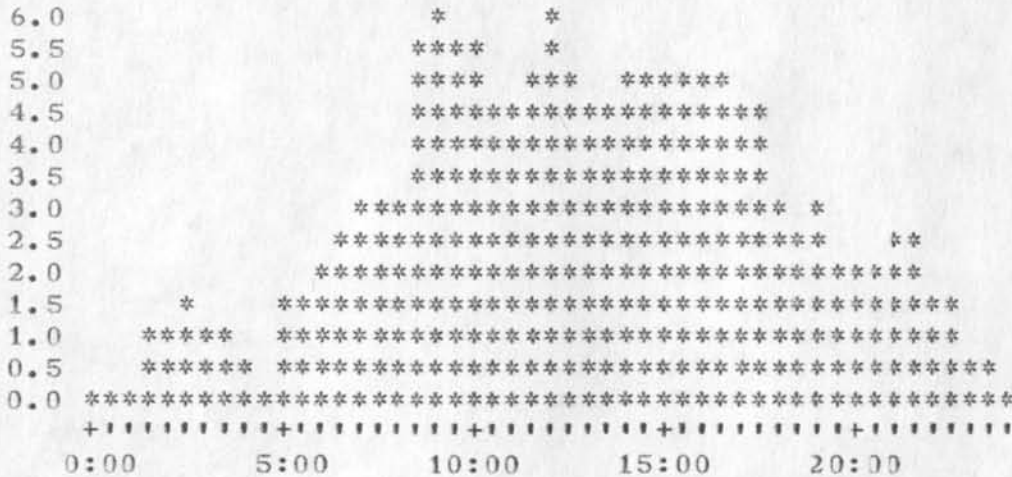x axis labeled in units of hr:min,   xunit = 30 minutes   5

```
 8                    ****
 7                    *****
 6                    *******
 5                    ********  * *    *
 4                   *******************
 3                   ******************
 2             ***********************    **** ******    *
 1 **************************************************************
 0 *************************************************************
   +I I I I I I I I+I I I I I I I I I+I I I I I I I I I+I I I I I I I I I+I I I I I I I I
   0:00        5:00        10:00        15:00        20:00
```
                                                                              5a

TIME PLOT OF AVERAGE NUMBER OF USERS FOR WEEK OF 12/3/73
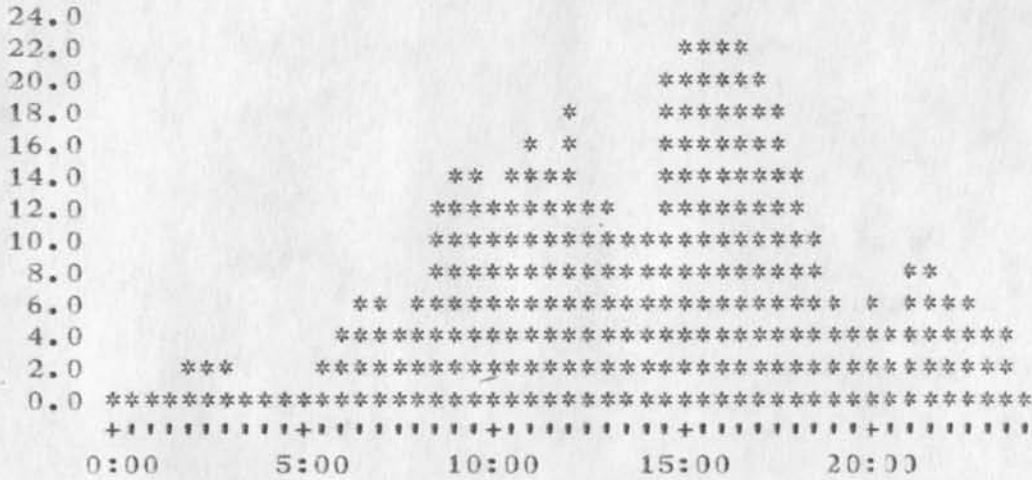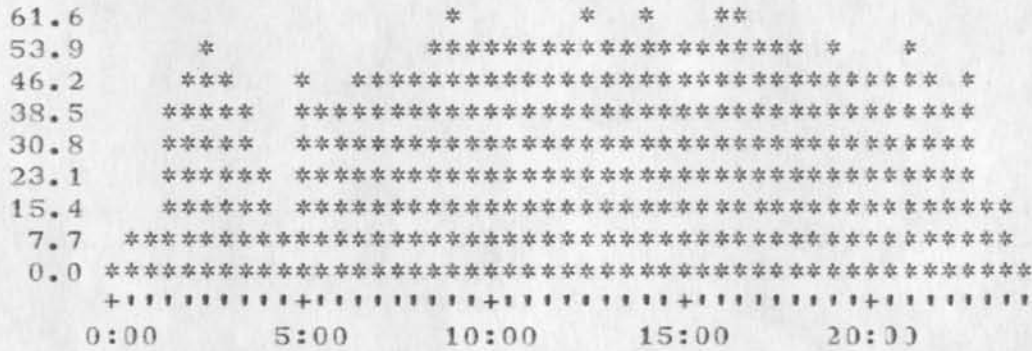x axis labeled in units of hr:min,   xunit = 30 minutes   6

```
18                    *
17                    **     *
16                    ********
15                   *********   **
14                  *************  ********
13                 *****************************
12                ***************************
11               ****************************
10               ****************************
 9               **************************** **    *
 8             ****************************** ***
 7             ********************************** ***
 6             **************************************
 5      **     ***********************************************
 4      *****************************************************
 3    *****************************************************
 2  *********************************************************
 1  *********************************************************
 0  **********************************************************
    +I I I I I I I I I+I I I I I I I I I+I I I I I I I I I+I I I I I I I I I+I I I I I I I I I
    0:00        5:00        10:00        15:00        20:00
```
                                                                              6a

20867 Distribution
    James C. Norton, Richard W. Watson, Douglas C. Engelbart, Paul Rech,
    Jeffrey C. Peters, Dirk H. Van Nouhuys, Elizabeth J. (Jake) Feinler,
    Kirk E. Kelley, Duane L. Stone, Beauregard A. Hardeman,

1

Superwatch Average Graphs for Week of 12/3/73

(J20867) 12-DEC-73 17:15;   Title: Author(s): Susan R. Lee/SRL;
Distribution: /JCN RWW DCE PR JCP DVN JAKE KIRK DLS BAH;
Sub-Collections: SRI-ARC; Clerk: SRL;
Origin: <LEE>WEEK12/3GRAPHS.NLS;2, 12-DEC-73 17:13 SRL ;

Re Jump to Name--SUGGESTIONS

(1)
In DNLS, Change prompt after Jump to Name from CA:/C: to B:/C:
because your choice at that point is really between a Bug (which
elsewhere is prompted B:) or one of the command-words Only, First,
Next.
Also, I think the name read should be fed back immediately after you
bug it (this is re choice Bug after Name)
(2) Jump to Name Only should be changed to Jump to Name Any if that's
what it does when that name exists more than once in the file
--Jeanne B.   1

20858 Distribution
    New Nls,

Re Jump to Name--SUGGESTIONS

(J20868)   12-DEC-73 18:03;   Title: Author(s): Jeanne M. Beck/JMB;
Distribution: /NEWNLS; Sub-Collections: SRI-ARC NEWNLS; Clerk: JMB;

Jin -- What is the status of the NMC's NLS class? I heard runors of
our not rating one, and want to check with you before bitching.

Also, what are the plans regarding NMC use of OFFICE-1?

Perhaps we should talk. I will be in in the afternoons, but
tied up portions of thurs and fri. let me know if you want me to call
you.

Tnx. Dave.   1

20869 Distribution
   James C. Norton,

(J20869)   12-DEC-73 19:12;   Title: Author(s): David H. Crocker/DHC;
Distribution: /JCN; Sub-Collections: NIC; Clerk: DHC;

Journal Documents Received and READ to early Nov. 73

For personal use, Journalized to release disk space.

Journal Documents Received and READ to early Nov. 73

Journal Documents Received and Read: 12-DEC-73   Journalized   1

JCN 24-OCT-73 17:33   19848
Reply to (19825,): Append Command Needs
Message: Robert: About the append ideas-- you might like to try the
user-program append with the goto programs get append and then goto
programs execute append   connamd. This asks you what group of
statements you want appended and what text inserted between then as
they go together. Is this what you want?? lso, there is a smarter
input sequential user program called inseqh or such. I think it does
som level setting stuff according to the number of consequetive
CR's....might help. I assume you are using the INMES stuff on
sndnsgs..it's a user program too...I guess we discussed it. Let me
know if this helps you ok? Jim

                                                                             2

JCN 23-OCT-73 13:00   19831
Note to Connie McLindon, ARPA re: Workshop Architect Role
Location: (LJOURNAL, 19831, 1:w)

                                                                             3

DVN 22-OCT-73 10:12   19816
Documentation Review
Location: (LJOURNAL, 19816, 1:w)

                                                                             4

DCE   17-OCT-73 17:35   19746
 NP for SNDMSG, User Program INMES, and round-trip conversion between
NLS and sequential files
Location: (LJOURNAL, 19746, 1:w)

                                                                             5

    Comments: Time for more dialogue re improved facilities for NLS
    support of composng, sending, and managing SNDMSG traffic?   5a

KIRK 16-OCT-73 17:09   19731
Decisions in the help database for Oct 16
Location: (LJOURNAL, 19731, 1:w)

                                                                             6

DVN 9-OCT-73 15:38   19587
Miscellaneous Notes on HELP System Design Meetins 10/4 and 10/9
Location: (KJOURNAL, 19587, 1:w)

                                                                             7

DVN 5-OCT-73 17:21   19540
TNLS Outline Citation
Message: <IJOURNAL>17030.NLS;1, 4-JUN-73 "Outline for June 4-8 TNLS
Course"; Author(s): Dirk H. Van Nouhuys   8

Journal Documents Received and READ to early Nov. 73

Comments: This is the most recent outline of a TNLS curse   8a

(DVN)   26-SEP-73 20:28 19331   When We Might Be Able to Give a TNLS
    (JJOURNAL, 19331, 1:w)   Class At UCLA.   9

Comments: A reply to 19315   9a

(DVN)   17-SEP-73 09:27 19108   Did Changing Control Characters Help?   10

    Message: We haven't much expereince with people working in NLS
    through IBM equipment, but obvioulsy it will happen more in the
    future.   In that line I'd be glad to hear if the information I
    sent you about changing control characters helpt with the
    2741-Tycoms?
    *****Note: fyi*****   10a

(DVN)   13-SEP-73 13:30 19062   An Introduction to the Current Status
    (JJOURNAL, 19062, 1:w)   of the Help Data Base   11

(DVN)   24-AUG-73 10:44 18642   Daughter of Failure to Log into ARC
    (MJOURNAL, 18642, 1:w)   12

JI 4-NOV-73 22:29   20042
Output Processor Cue Card
Message: This is a mini-suggestion for the construct of an Output
Processor Cue card like the NLS cue card that was distributed several
months ago. In using the Output Processor, I find it a great
annoyance and real handicap to always "thumb" through the manual to
obtain the appropriate directives. I feel sure that many people react
the same way and would be very appreciative to have such a cue card
constructed and mad available.Would invite your consideration of this
request. The few people I have mentioned it to would also like to
have copies if they were available. Thanks.......Jean

                                                                           13

FJT 7-NOV-73 08:09   20081
Additional Info on Tickler
Location: (LJOURNAL, 20081, 1:w)

                                                                           14

DVN 7-NOV-73 20:34   20094
Dean Meyer Will Make an Output Processor Cue Card
Message: Dean Meyer has agreed to do an output processor cue card.
He clearly seems the right person. He will be glad to listen to
suggestions about format and directives to be listed. When he has a
draft we will bring it to your attention.

                                                                           15

MEJ JI 4-NOV-73 10:58   20037

Journal Documents Received and READ to early Nov. 73

Suggestion for Initial File Journal Item Indexing
Location: (LJOURNAL, 20037, 1:w)

16

FJT 5-NOV-73 05:33   20043
Tickler - 5 - 16 November
Location: (LJOURNAL, 20043, 1:w)

17

AAM 5-NOV-73 08:39   20046
Scheduled Software Maintenance
Message: This is a reminder that Network Software Maintenance is
scheduled between the hours of 0700 and 0900 (Eastern Time) on
Tuesday, 6 November 1973. Although software releases are checked out
as much as possible in the BBN test cell, thre are sometimes
problems of scale which are not detected until after a release;
hence there is a small but finite possibility that the software will
be troublesome for a few hours after the scheduled release.
Sincerely,
Alex McKenzie (for the Network Control Center)

18

KIRK 5-NOV-73 16:42   20055
LEVEL-ADJUST, a painful option.
Location: (LJOURNAL, 20055, 1:w)

19

    Comments: The definition for LEVEL-ADJUST in the new command
    language that I proposed in 20024 was as unclear as the original.
    This document contains what I meant to say. For a current list of
    observations, questions, and desired changes discovered while
    using the new command parser, see <userguides,changes,1:wym>.   19a

KIRK 2-NOV-73 17:47   20024
Request for changing the definition of LEVEL-ADJUST
Location: (LJOURNAL, 20024, 1:w)

20

FJT 1-NOV-73 06:06   19989
Tickler for 29 Oct - 9 Nov
Location: (LJOURNAL, 19989, 1:w)

21

TFL 31-OCT-73 07:40   19975
MESSAGE TO RADC AKW PRINTER USERS-31 OCT '73
Location: (LJOURNAL, 19975, 1:w)

22

Journal Documents Received and READ to early Nov. 73

TFL 31-OCT-73 12:39   19978
AKW PRINTER MESSAGE-AN UPDATE
Location: (LJOURNAL, 19978, 1:w)

23

DVN 12-OCT-73 17:48   19640
DRAFT Primer for Revised Command Lnaguage
Location: (LJOURNAL, 19640, 1:w)
*****Note: fyi*****

24

NDM 29-OCT-73 16:23   19907
Developing Insert Message file User Program
Message: Ken: I have changed the user program INMES as we discussed.
It now always takes the login directory message.txt file, it includes
the time received, and it handles messages without titles properly.
Try it and let me know what you think. We can then discuss the
addition of a check for time of last read.
*****Note: fyi*****

25

   Comments: See (19746,) for possible directions in this area.   25a

DVN 21-OCT-73 17:04   19795
Alternative DRAFT of ARC Primer with Examples Spread
Location: (LJOURNAL, 19795, 1:w)
*****Note: fFor Your Information*****

26

DVN 15-OCT-73 19:57   19284
RSD Contract Status Report for July, Project 2697
Location: (LJOURNAL, 19284, 1:w)

27

TFL 11-OCT-73 08:07   19604
AHI PRINTER-A MESSAGE TO USERS
Location: (LJOURNAL, 19604, 1:w)

28

DLS 25-OCT-73 05:52   19851
RADC-MIS..TR
Message: Hi Jim,
Things have been slow recently on the RADCMIS proposal. System has
been unavailable 2 days this week. Also, there are the continual
diversions..5550 writeups, briefings etc. Roger, Joe and Dave all
have files in their own directory with similar names, where they are
doing therir own thing. Also see (stone,proposal,) for beginning
attack on the proposal itself. I wouldn't plann too heavily on using
the RADC machine, until we find out for sure that it will be on the

ARPANET.   Then we will have to fac all the political problems of
making it a Host.   Since we don't have too much money, maybe we could
swap some computer time??   I will enquire into the TR and see if it
can't be moved..The delay is approaching the rediculous

29

   Comments: Is you ident listed as JMB in the user statistics??

29a

FJT 25-OCT-73 06:31   19852
tickler for week 22 Oct - 2 Nov
Location: (LJOURNAL, 19852, 1:w)

30

DVN 17-OCT-73 21:55   19749
Next Week a Mysterious File Will Appear In Your Directory if You Use
DNLS
Location: (LJOURNAL, 19749, 1:w)

31

BAH 16-OCT-73 10:52   19725
OCT 7-13. 1973: A WEEK IN REVIEW
Location: (LJOURNAL, 19725, 1:w)

32

   Comments: Believe it or not, there is still a WAR (weekly analysis
report) Apologies for the gap, but attribute it to AUGMENTATION.
In the upcoming week I plan to produce the backlog of reports
beginning with the most recent first. For the RADC people, only
the most recent report will have an account of disc usage.
-bah

32a

EJK 11-OCT-73 13:25   19616
AKW System Inputting
Message: Mrs. Cafarelli has progressed to the point where she can
input the system with reasonable proficiency. This I define as being
better than many of us males. You may have noticed that yesterday
and today I was logged into the system quite a bit. Most of that was
really her. She has been inputting quite a few things, some of which
wil appear in the tickler file as links. For example, when the
tickler shows that the R & T Selection of the month is due, moving to
the link in that statement will give you the latest instructions on
what is appropriate for consideration and the format in which it
should be submitted.   Anne, however, is not my personal inputter
she is available for any sizeable inputting jobs you may have.
Please contact me if you have an inputting job, or if you have any
questions.

33

FJT 9-OCT-73 07:21   19572

Additional info for Tickler
Location: (KJOURNAL, 19572, 1:w)

34

FJT 9-OCT-73 05:54   19565
Tickler - 8 - 19 Oct 73
Location: (KJOURNAL, 19565, 1:w)

35

NDM 8-OCT-73 15:17   19552

Message: Jim: Welcome   Got yor message.   I know of no simple way
to move one line over to the left margin. The simplest way that I
can think of to do it is to move the left margin over, then back
again. For instance, if you wished a line to begin at position zero,
and if the statement is at level two and LMBase is at zero, you could
put the directive in the previous line, then reset LM to its
previous value in the current line. Give me a call anytime for more
help on this or anything. See you soon.   Dean

36

(JMB)   21-SEP-73 13:50 19252   More on SPACE (HJOURNAL,19252)

37

(DVN)   20-SEP-73 17:01 19166   Followup on Space War   38

Message: <jjournal,19147> was delayed in delivery until this
afternon, so don't feel obliged to reply, if you plan to reply, until
Monday.   38a

(DVN)   19-SEP-73 11:26 19147   Blanks or Brackets
   (JJOURNAL, 19147, 1:w)   39

(AAM)   24-SEP-73 06:20 19262   Scheduled Software Release   40

Message: This is a reminder that Network Software Maintenance is
scheduled between the hours of 0700 and 0900 (Eastern Time) on
Tuesday, 25 September 1973. Although software releases are checked
out as much as possible in the BBN test cell, thre are sometimes
problems of scale which are not detected until after a release;
hence there is a small but finite possibility that the software will '
be troublesome for a few hours after the scheduled release.
Sincerely,
Alex McKenzie (for the Network Control Center)   40a

DCE   4-OCT-73 16:21   19519
   Visit Log: 4 Oct 73, Nat Rochester and Elmer Sharp, IBM
Location: (KJOURNAL, 19519, 1:w)

41

Comments: Potential Utility subscriber; interested in any
fee-based training courses we set up; borrowed a keyset; could become
a collaborator.   41a

DLS 5-OCT-73 07:06   19521
More or Renamed Directories for RADC
Location: (KJOURNAL, 19521, 1:w)

                                                                      42

(DCE)   30-MAR-73 7:14 15398   Inviting RADC AHI guys to participate
    (MJOURNAL, 15398, 1:w)   in community-development dialogue   43

(DLS)   23-APR-73 06:09 16050   Comments on current and planned journal
    (MJOURNAL, 16050, 1:w)   service   44

Comments: Dirk, I'm not sure who this should go to--will leave it up
to you to disseminate further. Also, yes we would like a monthly
index for RADC submitted/received journal items; online would be fine
if a notice could be placed in each RADC user's initials file.   44a

(DLS)   26-APR-73 15:41 16203   Text Editor Comparisons--Request for
    (MJOURNAL, 16203, 1:w)   Help   45

(JCN)   26-APR-73 16:50 16182   Letter to Dr. Leon Richman, Syracuse
    (MJOURNAL, 16182, 1:w)   Univ.   46

(***)   9-JUL-73 08:58 17698   CONTENT ANALYZER PRIMER
    (KJOURNAL, 17698, 1:w)
    [From: &SRI-ARC]   47

Comments: Hard copy is available from Marcia Keeney.
The current NLS version can always be found through
<userguides>arclocator.   47a

(***)   11-JUL-73 11:55 17737   NLS CALCULATOR IS UP
    [From: &SRI-ARC]   48

Message: The NLS Calculator is now up and running. It adds
calculation abilities to SRI-ARC's NLS information system.
Documentation is available as follows:
     On-Line:
          TNLS (userguides,calculator-tnls,1)
          DNLS (userguides,calculator-dnls,1)
     Off-Line: copies available from Marcia Keeney
          TNLS (17419,)
          DNLS (17418,)   48a

TALK to and Victor...: (DSK)   27-JUL-73 11:44 18043   Your Recent
Imlac Difficulties   48b

Message: I have responsibility for handling NLS recreate display
problems. (I have nothing at all to do with "Inlac programs".) I
have seen your note (17632,) and do not know (having talked to
Elizabeth Michael) if that represents your current state. Let me
know if you have reproducible legitimate NLS-type problems. I can
handle any which are recreatable here...Diane Kaye   48b1

(GAB)   7-SEP-73 08:27 18846 Interview results for NLS Users
   (JJOURNAL, 18846, 1:w)   48c

   Comments: Journaling to free file space   48c1

(DLS) 30-AUG-73 14:08 18726 AKW Group Meeting..Status and Problems
   (MJOURNAL, 18726, 1:w)   of Project   48d

(JPC) 27-JUN-73 07:48 17489 Some Thoughts on the Forms System
   (JJOURNAL, 17489, 1:w)   48e

(DLS) 11-JUN-73 14:25 17112 Review of (michael,forms,)
   (JJOURNAL, 17112, 1:w)   48f

Comments: This took me about 1 hour and 40 minutes from creation of
the file to submission to the journal, with side trips to the candy
machine, others directory and the journal ident system. It would
have taken me a couple of days minimum to get out the same note using
the secretary and MTSTs. How much of a cost savings is this????   48g

(DVN)   9-MAY-73 20:22 16344 A Start at Planning NLS Tests
   (IJOURNAL, 16344, 1:w)   48h

(DVN)   9-MAY-73 20:50 16346 A Start at NLS Tests
   (IJOURNAL, 16346, 1:w)   48i

(DVN) 12-SEP-73 08:03 18995 I'd Like To Hear About How Your TNLS
                                  Class Went   48j

   Message: As I guess you learned, they changed the allocation of
   documentation unbeknownst to me just when your class began. Sorry.
   In general how did it go? I'd be glad if you sent us some time a
   little journal item to add to our fund of teaching lore. DCE is
   now teaching a clas of 30 people in England...the last time I
   heard they were getting about 2 characters per second acrross, but
   I think that's fixed for the class.
   *****Note: fyi*****   48j1

(DVN) 10-SEP-73 22:21 18980 People's Computer Center Meeting on
   (JJOURNAL, 18980, 1:w)   Computer Aided Instruction This
                                Thursday in Menlo Park   48k

(DLS)   21-MAY-73 14:36 16711   response to Draft Training Design Doc
  (IJOURNAL, 16711, 1:w)   (16639,)   48l

(DLS)   12-MAY-73 08:18 16379   IS Reorg..Impact on AKW Program
  (IJOURNAL, 16379, 1:w)   48m

  Comments: These are my personal reactions to the reorganization of
  the division. I would be interested in hearing your comments.   48m1

(DVN)   5-JUL-73 08:43 17640   Note to Jim Bair about Who Can Help
                                with the Imlac   48n

  Message: I put a copy of your Imlac problems [journal,17632,) on
  te desk of Ken Victor (ekv). He is the guy who can best solve it.
  If things don't get better in a reasonable time, let me know.   48n1

(RHT2) 17-JUL-73 14:56 17849   SOFT WARE RELIABILITY PAPER   48o

  Message: Idneed a paper on software relibility to give to the
  group at woods hole.   48o1

(EJK)   19-JUL-73 15:09 17934   help
  (LJOURNAL, 17934, 1:w)   48p

(DLS)   20-AUG-73 12:02 18510   SOFTWARE SCIENCES TECHNOLOGY   TPO-11
  (MJOURNAL, 18510, 1:w)   48q

(JEW)   9-AUG-73 13:55 18338   Ident Confusion Reported by BBN-TENEX
  (MJOURNAL, 18338, 1:w)   48r

(DVN)   2-AUG-73 15:50 18179   Trip Report: July 16th Visit to RADC
  (LJOURNAL, 18179, 1:w)   48s

(JMB)   2-AUG-73 09:46 18167   TNLS Device--Terminette--Special
  (LJOURNAL, 18167, 1:w)   characters & keys   48t

  Comments: Jim, would you please check the set of characters on
  your Terminette (correct spelling?) device against those listed in
  this table and let me know what they are? This is for TNLS
  documentation revision as per our phone conversation--1 Aug 73.
  Thank you for your time. --Jeanne Beck   48t1

(DVN)   16-AUG-73 16:17 18480   TNLS Availability, Courses in Southern
  (MJOURNAL, 18480, 1:w)   Calif.   48u

(DLS)   10-AUG-73 06:08 18348   RADC USER STATISTICS--JAN 73-JUL 73
  (MJOURNAL, 18348, 1:w)   48v

(NJN)   27-AUG-73 08:30 18674   Step-daughter maybe? response to
                                (18642,) --EXPLANATION--   48w

   Message: Dirk--   48w1

      The following is BBN's (Neigus) response to SRI's comment
      (18642,) about the continuing problem of broken and silent
      connections.
      Thanks for your pointer to ILA's message (journal,17838,).   It
      does make sense but is not related to the problem Bair is
      experiencing.   When the load averageis high, the NCP is slow to
      respond to incoming RFC's (requests for connection).   The TIP
      has a timeout of about 30 seconds (to receive a responce to the
      RFC) and if it doesn't come by then, it times out and aborts
      the login attempt.   Most hosts have longer timeout periods in
      their user Telnets, and the connection attempt is often
      successful there.   The TIP timeout is sufficient for most hosts
      at most times, but a high load average on a TENEX can cause
      trouble.   One way to get around this on a tip is to do a series
      of login attempts ina row, until one matches.
      --Nancy

                                                                            48w1a

(AAM)   29-AUG-73 05:50 18702   Response to a SNDMSG from RADC   48x

   Message: Dear Mr. Bair,
   I apologize for not sending a message to RADC on Monday morning,
   August 27, reminding your personnel that Tuesdays are release
   days.   On the other hand, our records show that both RADC and
   SRI were up and operating correctly from 8am (Eastern Time) on.
   While I understand your frustration, there is little we can do ex
   post facto to help diagnose the causes of your trouble.   The next
   time it occurs, would you call Nancy Neigus at the Network Control
   Center and perhaps we can make some progress.
   Regards,
   Alex McKenzie   48x1

(WRF)   14-SEP-73 08:44 19078   Monitor Work for Next Few Weeks   48y

   Message: For the next few weeks, Jim Blum and I will be working
   on assembling and testing the TENEX monitor for the Tymshare
   utility.   Our work is going to require some amount of system
   downtime.   I realize that this may pose an inconvenience to some
   of you, but please bear with us.   In an attempt to allow you to
   arrange your schedules, I will keep the UP-DOWN schedule current.
   If you have any large jobs which will require the system at night,
   feel free to tell me, and we will negotiate the schedule.   48y1

Journal Documents Received and READ to early Nov. 73

(AAM)   1-OCT-73 10:50 19383   Network Software Maintenance
   (JJOURNAL, 19383, 1:w)   48z

EJK 30-AUG-73 07:58   18716
Jim Bair's finale
Message: capt Bair will be making a summary and status report on his
findings in the evaluation to-date. Mac' office 1500 30 Aug. Too bad
if you don't log in and get your mail — you missed it.

                                                                      48a@

JLM 4-SEP-73 06:26   18802

Message: Has any one heard of a set of reports done by a firm called
Frost & Sullivan?I got a call from Major Zarra at esd and they have
been referred to these reorts as a excellent summary of the sota in
daa procesing but they are quite expensive and he is hoping that we
might have a set.They sound like they are simalar to the ones done by
Auerabach.I have to call him back by wed.Send me a message if you
have heard of them or know there where abouts.

                                                                      48aa

AAM 30-AUG-73 14:32   18728
Scheduled Software Maintenance
Location: (MJOURNAL, 18728, 1:w)

                                                                      48ab

DLS 30-AUG-73 14:19   18727
Leith Plays at the IMLAC (accompanied by the ELF on the Execuport)
Location: (MJOURNAL, 18727, 1:w)

                                                                      48ac

BAH 10-AUG-73 15:29   18366
JUL 29 — AUG 4, 1973: A WEEK IN REVIEW
Location: (MJOURNAL, 18366, 1:w)

                                                                      48ad

BAH 30-JUL-73 11:33   18075
JUL 15-21, 1973: A WEEK IN REVIEW
Location: (LJOURNAL, 18075, 1:w)

                                                                      48ae

WPB 20-JUL-73 08:22   17946
bethke directory
Message: subject..bethke file user.. capt daughtry shares this
file with the esteeemed chief..ex-chief that is..subnitt messages
with appropriate attention comments..thank you. dave.

                                                                      48af

EJK 19-JUL-73 08:17   17885

untitled
Message: uncritical comment, we'll miss you when you're gone - but
not too much.
*****Note: this is a test,and the message is for bair*****

48ag

BAH 19-JUL-73 13:15   17892
JUL 8-14, 1973: A WEEK IN REVIEW
Location: (LJOURNAL, 17892, 1:w)

48ah

TFL 18-JUL-73 14:14   17872

Message: this is a test mesage to seee if DVN has fixed the Journal
distribution to groups...If he has this should go to all people
listed under the group ident RADC

48ai

NDM KIRK 13-JUL-73 14:53   17782 [NWG/RFC# 544]
Locating On-Line Documentation at SRI-ARC
Location: (LJOURNAL, 17782, 1:w)

48aj

DVN 16-JUL-73 08:50   17820
Advanced NLS Course Outline for Rome July 17th-18th
Location: (LJOURNAL, 17820, 1:w)

48ak

BAH 9-JUL-73 11:48   17719
JUN 24-30, 1973: A WEEK IN REVIEW
Location: (KJOURNAL, 17719, 1:w)

48al

JPC 9-JUL-73 11:04   17715
'PROFUSIONCY' Exercise
Location: (KJOURNAL, 17715, 1:w)

48am

BAH 12-JUL-73 12:59   17767
JULY 1-7, 1973: A WEEK IN REVIEW
Location: (KJOURNAL, 17767, 1:w)

48an

BAH 11-JUL-73 21:59   17754
Revised Revised JUN 24 - 30: A WEEK IN REVIEW
Location: (KJOURNAL, 17754, 1:w)

48ao

BAH 11-JUL-73 21:51   17753

Journal Documents Received and READ to early Nov. 73

REVISED JUN 24 - 30: A WEEK IN REVIEW
Location: (KJOURNAL, 17753, 1:w)

48ap

    Comments: This document replaces 17719. Thanks to Paul, some
    horrendous errors were discovered, and are now corrected.   48ap1

EJK 6-JUL-73 11:23   17687
my first journal - the cherry is busted
Message: this is not going the way i expected it to. i did not expect
to submit text at this point. all i have done so far is to give the
ejsm bit. but, no matter perhaps the thing knows what in hell it is
doing.

48aq

BAH 29-JUN-73 17:18   17584
Jun 17-23, 1973: A WEEK IN REVIEW
Location: (JJOURNAL, 17584, 1:w)

48ar

BAH 21-JUN-73 15:54   17407
JUNE 10-16, 1973: A WEEK IN REVIEW
Location: (JJOURNAL, 17407, 1:w)

48as

JCN   17-JUN-73 14:35   17248
ARC SYSTEM USE GROUP ALLOCATIONS AND ASSIGNMENTS
Location: (JJOURNAL, 17248, 1:w)

48at

    Comments: This is submitted for your review and comments. Please
    transmit any responses to RWW DCW and JCN via the Journal. I will
    be away from ARC until 6/25, but will pick up again there.   48at1

BAH 12-JUN-73 16:56   17142
June 3-9, 1973: A WEEK IN REVIEW
Location: (JJOURNAL, 17142, 1:w)

48au

BAH 12-JUN-73 09:17   17126
May 27 - June 2, 1973: A WEEK IN REVIEW
Location: (JJOURNAL, 17126, 1:w)

48av

BAH 8-JUN-73 11:38   17099
May 20-26, 1973: A WEEK IN REVIEW
Location: (GJOURNAL, 17099, 1:w)

48aw

TFL 6-JUN-73 08:00   17056
Sendprint Instructions for RADC troops
Location: (HJOURNAL, 17056, 1:w)

48ax

    Comments: Journaling to free up file space for new directories   48ax1

TFL 6-JUN-73 08:14   17058
Instructions for using DNLS via ARPANET from IMLAC
Location: (HJOURNAL, 17058, 1:w)

48ay

    Comments: Journalizing to free file space for new directories   48ay1

TFL 6-JUN-73 08:07   17057
Requirement for Graphics Printer
Location: (HJOURNAL, 17057, 1:w)

48az

    Comments: Journalizing to free file space for new directories   48az1

TFL 6-JUN-73 08:36   17060
Statement of Work for AKW Line Printer
Location: (HJOURNAL, 17060, 1:w)

48b@

    Comments: Journalizing to free file space for new directories   48b@1

TFL 6-JUN-73 08:26   17059
notes on interfacing line printer, tycom, ti 725, inlac to TIP
Location: (HJOURNAL, 17059, 1:w)

48ba

    Comments: Journaling to free file space for new directories   48ba1

DLS 19-MAY-73 13:28   16697
First Impressions of the TNLS Calculator
Location: (IJOURNAL, 16697, 1:w)

48bb

BAH 25-MAY-73 10:47   16806
May 15-19, 1973: A WEEK IN REVIEW
Location: (IJOURNAL, 16806, 1:w)

48bc

    Comments: There is data for a partial week again due to the
    consequence of the system crash mentioned in last week's
    comments...bah   48bc1

BAH 17-MAY-73 17:00 16652
May 6-11, 1973: A WEEK IN REVIEW
Location: (IJOURNAL, 16652, 1:w)

48bd

   Comments: The values are a little short this week (6 day instead
   of 7 day week) because of a system crash that resulted in loss of
   fact data. Also, the entry for Sweet (Xerox) was in error and had
   to be deleted...bah   48bd1

DVN 21-MAY-73 12:44 16705
Editing Proficiency Test :My Thoughts on (radc,prog,)
Message: In response to (JOURNAL,16658,) I have read (radc,prof,). I
agree that it looks good for atleast a first cut at an editing
proficiency test . Maybe we would want something more extensive
later.

48be

BAH 22-MAY-73 10:51 16763
RADC JOURNAL CATALOG
Location: (IJOURNAL, 16763, 1:w)

48bf

BAH 10-MAY-73 16:57 16352
APR 29 - May 5: A WEEK IN REVIEW
Location: (IJOURNAL, 16352, 1:w)

48bg

DVN 30-APR-73 16:30 16245
A Matrix is More Useful Than a Tree
Location: (MJOURNAL, 16245, 1:w)

48bh

DLS 5-MAY-73 13:00 16297
List of topics for JLM to cover during visit to ARC
Location: (IJOURNAL, 16297, 1:w)

48bi

   Comments: Add to or subtract from this list as you see fit--RADC
   troops should do this before Tuesday, MAY 8th.   48bi1

BAH 3-MAY-73 21:53 16280
April 22-28, 1973: A WEEK IN REVIEW
Location: (IJOURNAL, 16280, 1:w)

48bj

JCN 1-MAY-73 07:04 16258
Note to Jim Bair
Message: Thanks for the note on the ICA. I'm glad you got to Bell. I

was impressed with their people. No, I don't think your text ed
comparison should go to them until it is finished. I think these
comparisons (from what I've seen so far) are difficult to bring off
in a way that gives readers a feeling that a "fair" comparison was
made. I'll look at yours and comment.....maybe it does it. Typos
ignored (the last time I thought we were under pressure haha)

48bk

BAH   1-MAY-73 01:59   16255
APR 15-21, 1973, A WEEK IN REVIEW
Location: (MJOURNAL, 16255, 1:w)

48bl

DVN 13-APR-73 08:58   15931
The Journal is One Kind of Dialog Support
Message: The Journal is a subsetof the Dialog Support System. Shared
images, for example are, another dialog support system within nls.
But because the journal has been far and away the most prominent
system, people have often confused the part with the whole; that is
sloppy use of language.

48bm

DLS 11-APR-73 09:26   15734
Cheap DNLS terminals--Superbee
Location: (MJOURNAL, 15734, 1:w)

48bn

DLS 5-APR-73 07:55   15503
Mustang, Weather, Misc--Response to 15495--
Message: The Mustang has quit--the transmission gave out at 94,000.
I may unload it on a young kid, who has more time than brains. (he
thinks he can fix it) The weather is something I'd rather not talk
about--cold raining floods snow last night. This is not unusual for
this part of the country, this time of year; but we have been spoiled
by a mild winter and an early (we thought) Spring.--Look forward to
talking with you about work topics via SNDMSG and Journal in the near
future. Procurement has the extension for the BR-700 for six months.
Our management has agreeded to extend for a year, but will extend for
another six months out of FY-74 funds (if we get any).

48bo

TFL 3-APR-73 07:35   15468
RADC LINE PRINTER
Location: (MJOURNAL, 15468, 1:w)

48bp

DLS 4-APR-73 05:43   15480
Response to 15467--ARPANET Line Printer
Message: As a patient but frustrated user of the curren line printer,

Journal Documents Received and READ to early Nov. 73

I agree with Tom's suggestion that we revive the ARPANET line printer
buy. Red Moran has been extremely helpful in trying to get the
current kludge running but he is working with an antiquated and
unnecessarily complicated piece of equipment. We might someday want
to get tapes off the ARPANET, so we shouldn't abandon the equipment
altogether, but the printer part of it has seen better days. We can
limp along another few months while a new printer is being procured,
but we should start on the procurement now

                                                                    48bq

DVN 3-APR-73 12:13   15459
A Few Thoughts on 'Experiences with AHI'
Location: (MJOURNAL, 15459, 1:w)

                                                                    48br

JCN 2-APR-73 18:07   15442
Notes for Jim Bair on His Paper 4/2
Location: (MJOURNAL, 15442, 1:w)

                                                                    48bs

DLS 30-MAR-73 6:50   15401
Expanded Use of the ARPANET
Location: (MJOURNAL, 15401, 1:w)

                                                                    48bt

    Comments: This is my personal opinion. It has not been
    corrdinated with anyone. I hope it will stimulate some debate on
    the subject.   48bt1

DLS 30-MAR-73 13:40   15400
Minutes of meeting on time accounting in ISI
Location: (MJOURNAL, 15400, 1:w)

                                                                    48bu

BAH   29-MAR-73 23:03   15396
 MAR 18-24, 1973, A Week In Review
Location: (MJOURNAL, 15396, 1:w)

                                                                    48bv

JCN   27-MAR-73 17:59   14405
ARC Questions of ARPA Regarding Commercial Users' Access to the
Workshop Utility
Location: (MJOURNAL, 14405, 1:w)
*****Note: Author Copy*****

                                                                    48bw

JCN 16-MAR-73 7:40   15127
About Workshop Utility Costs - Comments for Jim Bair, RADC

Journal Documents Received and READ to early Nov. 73

Location: (LJOURNAL, 15127, 1:w)

48bx

DLS 12-MAR-73 7:15   15006
Response to Borden meeting
Location: (LJOURNAL, 15006, 1:w)

48by

    Comments: I think we need meetings on evaluation and training
    similar to that recently held on terminals--to review the progress
    and plans in each of these areas.   48by1

DCE   19-MAR-73 16:47   15141
  115 Relevant statements transcribed from Drucker X(3074,) X(4247,),
Anderson and Coover X(13956,), and DCE's OSR62 X(3905,). as relevant
to Knowledge Workshops, cf J(14724,).
Location: (LJOURNAL, 15141, 1:w)

48bz

JEW 20-FEB-73 11:28   14546
Bugs Fixed in Print Journal
Location: (IJOURNAL,14546,1:w)
*****Note: (Secondary Distribution Copy)*****

48c@

DLS 9-FEB-73 8:15   14359
RADC TRIP TO ARC
Location: (IJOURNAL, 14359, 1:w)

48ca

    Comments: I will start a file (stone,sabpitch,) which you can look
    at anytime ; which will contain my thoughts on the presentation.   48ca1

DVN 9-FEB-73 17:38   14360
In Case of Trouble Call Ken
Location: (IJOURNAL, 14360, 1:w)

48cb

JLM   7-FEB-73 6:24   14327
task write ups
Message:

48cc

    Comments: I am now beginning to use the task write ups for a
    number of uses.One inparticlar is to update a report i intend to
    giv to behke and ft on a monthly basis.As a result it is important
    that the task write ups be updated once a month.The reort is
    titled misp in my file and i suggest you read for info .Lets make
    the 15th of each month.   48cc1

Journal Documents Received and READ to early Nov. 73

JCN 1-FEB-73 14:46 13419
Re: Net Port Availability - Response to (14124,)
Location: (IJOURNAL, 13419, 1:w)

48cd

BAH 1-FEB-73 11:25 14166
JAN 21-27, A Week In Review
Location: (IJOURNAL, 14166, 1:w)

48ce

BAH 23-APR-73 21:54 16099
APR 8-14 1973, A Week In Review
Location: (MJOURNAL, 16099, 1:w)

48cf

    Comments: Overlook the journal item that preceded this one--the
    date is incorrect.   48cf1

BAH 23-APR-73 21:43 16098
APR 1-7 1973, A Week In Review
Location: (MJOURNAL, 16098, 1:w)

48cg

BAH 18-APR-73 00:03 15995
APR 1-7 1973, A Week In Review
Location: (MJOURNAL, 15995, 1:w)

48ch

BAH 6-APR-73 23:16 15626
MAR 25-31, 1973, A Week In Review
Location: (MJOURNAL, 15626, 1:w)

48ci

LPD 29-MAR-73 23:49 15416
Re: text editors vs. NLS
Message: Replying to your SNDMSG: I'm not actively involved in any
NLS vs. text editor comparison, although I am interested in the
subject and participated in a NLS vs. WYLBUR dialog [in the Journal)
with Dick Watson (RWW) and others last year. I will read your file
(BAIR,TEXTED,) with interest. I am familiar with the 940 text
editor, QED, the PDP-10 editor, TECO, the Nova series editor, and
various ATS/360 services; also with 940 and PDP-10 RUNOFF; also with
some lesser-known systems like the BBN-LISP editor [which is entirely
LISP-oriented but has a lot of similarities to the NLS structure
editor). Please keep me posted on further investigations.

48cj

    Comments: I prefer the Journal for communication since I get a
    permanent copy.   48cj1

BAH   21-MAR-73 10:38   15223
 MAR 11-17, A Week In Review
Location: (LJOURNAL, 15223, 1:w)

48ck

BAH   14-MAR-73 21:57   15104
 MAR 4-10, 1973, A Week In Review
Location: (LJOURNAL, 15104, 1:w)

48cl

    Comments:
    Master Copy Printed by WRF
    Access Copy Printed by WRF

48cl1

DFB 12-MAR-73 8:23   15003

Message: James— When is an updated copy of the general users manual
going to be available? FROM DEANE

48cm

BAH   7-MAR-73 21:43   14926
 FEB 25 — MAR 3, 1973, A Week In Review
Location: (IJOURNAL, 14926, 1:w)

48cn

    Comments: 48cn1

DLS 5-MAR-73 6:34   14871
PROPOSAL FOR ADDITIONAL AKW TERMINALS
Location: (JJOURNAL, 14871, 1:w)

48co

    Comments: THIS REPRESENTS THE FINAL THINKING FROM ISIM ON
    ADDITIONAL TERMINALS FOR AKW EVALUATION EFFORT. WE NEED QUICK
    ACTION ON THIS IF WE ARE TO BUY ANY BEFORE THE END OF FY-73   48co1

DVN 5-MAR-73 8:20   14882
Please enter items about COM in the DPCS subcollection
Message: When you send journal items to Dean asking for COM services,
such as (journal,14868,), it would be a service if you would specify
subcollection DPCS as well as SRI-ARC. By the way, you can only do so
in TNLS.

48cp

    Comments: This item is addressed to Dick Watson, but goes to all
    of you for information.   48cp1

DLS 2-MAR-73 13:16   14850
Minutes of Meeting on Terminal Proposal

Journal Documents Received and READ to early Nov. 73

Location: (JJOURNAL, 14850, 1:w)

                                                                    48cq

   Comments: Includes revvisions based on comments recieved   48cq1

DVN 20-FEB-73 21:04   14542
NLS Continuing Education; Continue, Change, or Drop?
Location: (IJOURNAL, 14542, 1:w)

                                                                    48cr

BAH   28-FEB-73 10:54   14822
 FEB 18-24, 1973, A Week In Review
Location: (IJOURNAL, 14822, 1:w)

                                                                    48cs

   Comments:
   Master Copy Printed by WRF
   Access Copy Printed by WRF   48cs1

DLS 28-FEB-73 10:10   14826
Draft Proposal for Additional Terminals
Location: (IJOURNAL, 14826, 1:w)

                                                                   .48ct

   Comments: Pleas review this and be ready for discusion at meeting
   28 Feb 73.
   Master Copy Printed by WRF
   Access Copy Printed by WRF   48ct1

BAH   22-FEB-73 12:08   14707
 FEB 11-17, 1973, A Week In Review
Location: (IJOURNAL, 14707, 1:w)

                                                                    48cu

   Comments: 48cu1

DLS 20-FEB-73 11:34   14540
Trip Report--SRI--13-14 FEB
Location: (IJOURNAL, 14540, 1:w)

                                                                    48cv

   Comments: This report was prepared by using the "trip" file in the
   RADC directory. It contains hopeful words about the calculator
   and the forms packages. Also note the use of links to eliminate
   replication of verbage.
   Master Copy Printed by WRF
   Access Copy Printed by WRF   48cv1

DVN 12-FEB-73 9:49   14385

Dean Meyer Is the Best Person to Help You with Output Processor or
User Programs
Location: (IJOURNAL, 14385, 1:w)

48cw

BAH   8-FEB-73 10:50   14339
 Jan 28 - Feb 3, 1973, A Week In Review
Location: (IJOURNAL, 14339, 1:w)

48cx

   Comments:
   Master Copy Printed by WRF
   Access Copy Printed by WRF   48cx1

DVN 31-JAN-73 13:48   14151
Network Ports; comment on (journal,14124,) & (journal,14139,)
Message: They're right.

48cy

DVN 30-JAN-73 16:36   14140
A Few Ways to Avoid Putting Output Processor Directives in by Hand;
reply to 14117
Location: (IJOURNAL, 14140, 1:w)

48cz

DVN 29-JAN-73 19:57   14130
Help With Output Processor Directives; reply to [14097)
Location: (IJOURNAL, 14130, 1:w)

48d@

DLS   29-JAN-73 13:53   14119
NEW JOURNAL COMMAND FORM
Message: There is a new method of submitting files and messages to
the journal. A brief description contained in (nls,status,1a35). It
is a little easier in that it allows you to use all the editing
commands available in NLS etc.

48da

   Comments: I used the system described in the link above to submit
   this message. Pay no attention to the "not for network users"--if
   you get this message it works over the network.   48da1

KIRK 8-NOV-73 17:12   20121
NOUN-TYPE keywords should allow adverbs and adjectives where it saves
typing.
Location: (IJOURNAL, 20121, 1:w)

48db

KIRK 3-NOV-73 10:10   20032

Journal Documents Received and READ to early Nov. 73

Update to Request for changing the definition of LEVEL-ADJUST
Message: 20024 below refers to the Command language in the
experimental system

                                                                     48dc

BAH   DVN   26-JAN-73 10:28   14084
 JAN 15-19, A Week In Review
Location: (IJOURNAL, 14084, 1:w)

                                                                     48dd

    Comments: You can look to receive a report of this sort by
    Thursday of every week. -bah   48dd1

DVN 23-JAN-73 10:00   14042
Plans for Command Changes that May be of Interest to People on the
Net.
Location: (IJOURNAL,14042,1:w)
*****Note: (Secondary Distribution Copy)*****

                                                                     48de

DVN 17-JAN-73 9:26   13838
DRAFT Spec for Regular Report to Rome on System Use
Location: (MJOURNAL, 13838, 1:w)

                                                                     48df

    Comments: This is a draft. If no one tells me about changes he
    wants by 1/23, I will deam it the spec and ask BAH to do it.   48df1

DVN 3-JAN-73 15:55   13665
How to print through a TIP
Message: When you send an NLS file through our output processor, you
creat a sequential file. It is possible to print such sequential
files throug a TIP. A somewhat criptic description of the commands
involved appears in (wallace,send-print-how,). Within a few days I
plan to issue a rewrite that will demand less background knowledge.

                                                                     48dg

Journal Documents Received and READ to early Nov. 73

(J20870) 12-DEC-73 21:57;   Title: Author(s): James H. Bair/JHB;
Sub-Collections: SRI-ARC; Clerk: JHB;
Origin: <BAIR>JOURNALREAD.NLS;1, 12-DEC-73 21:55 JHB ;