

TRANSMITTAL TO: Ralph Alter

TRANSMITTAL TO: Ralph Alter  
Packet Communications Inc.  
176 2nd Avenue  
Waltham, Massachusetts 02154

FROM: Marcia Keeney (NIC)  
Station Agent

1

Enclosed is your Network Resources Notebook (NIC 6740). You will  
receive updates to it as they are issued.

1a

16066 Distribution  
Station Agent,

1  
1a

TRANSMITTAL TO: P. Tveitane

TRANSMITTAL TO: P. Tveitane  
P.O. Box 51  
2007 Kjeller  
NORWAY

FROM: Marcia Keeney (NIC)  
Station Agent

1

Enclosed is your Network Resources Notebook (NIC 6740). You will  
receive updates to it as they are issued.

1a

16067 Distribution  
Station Agent,

MLK 31-MAY-73 17:15 16067

TRANSMITTAL TO: P. Tveitane

(J16067) 31-MAY-73 17:15; Title: Author(s): Marcia Lynn Keeney/MLK  
; Distribution: /SA ; Sub-Collections: NIC ; Clerk: KIRK ;

TRANSMITTAL TO: Dr. Adrian Stokes

TRANSMITTAL TO: Dr. Adrian Stokes  
Institute of Computer Science  
44 Gordon Square  
London, W.C.1  
ENGLAND

FROM: Marcia Keeney (NIC)  
Station Agent

1

Enclosed is your Network Resources Notebook (NIC 6740). You will receive updates to it as they are issued.

1a

16068 Distribution  
Station Agent,

1  
1a

TRANSMITTAL TO: Mr. O. A. Hansen

TRANSMITTAL TO: Mr. O. A. Hansen  
Royal Norwegian Council for Scientific and  
Industrial Research  
P.O. Box 51  
2007 Kjeller  
NORWAY

FROM: Jeanne North (NIC)  
Information and Station Agent Coordinator

1

Dear Mr. Hansen:

1a

We have received notice that your office is now a Site on the ARPA Network and that you will be acting as Station Agent.

1b

Enclosed is you Station Collection which includes the following Functional Documents:

1c

NIC 5145 Current Catalog of the NIC Collection  
1-DEC-72

NIC 5150 Current Directory of Network Participants  
15-DEC-72

NIC 7590 Network Information Center User guide  
2-MAR-73

NIC 6740 Network Resource Notebook  
APR-73

1c1

NIC 7104 Current Network Protocols is not now available; I will send it as soon as it is ready. 22-JAN-73

1d

Also enclosed are a number of background documents (see list below).

1e

Approximately every other week you will receive additions to your collection. Along with the new documents will be a numbered transmittal letter which lists what is being sent, and also indicates what has recently been sent to your Site's Technical Liaison. These transmittal letters should be filed in the Transmittal Letter section of your Current Catalog (NIC 5145).

1f

We will be glad to supply copies of particular documents indicated by a back arrow in the Catalog Listings, and will loan or direct you to sources of other documents in the Listings.

1g

c: S. Crocker (ARPA)

1h

encl:

1i

The ARPA Network  
Resource Sharing Computer Networks



TRANSMITTAL TO: Mr. O. A. Hansen

NIC 7542	
NIC 7750	NIC 12324
NIC 8480	NIC 11626
NIC 10507	NIC 11763
NIC 11681	

111

16069 Distribution  
Station Agent,

1  
1a

TRANSMITTAL TO: Miss H. A. Thompson

TRANSMITTAL TO: Miss H. A. Thompson  
University of London  
Institute of Computer Science  
44 Gordon Square  
London, W.C.1  
ENGLAND

FROM: Jeanne North (NIC)  
Information and Station Agent Coordinator

1

Dear Miss Thompson

1a

We have received notice that your office is now a Site on the ARPA Network and that you will be acting as Station Agent.

1b

Enclosed is you Station Collection which includes the following Functional Documents:

1c

- NIC 5145 Current Catalog of the NIC Collection  
1-DEC-72
- NIC 5150 Current Directory of Network Participants  
15-DEC-72
- NIC 7590 Network Information Center User guide  
2-MAR-73
- NIC 6740 Network Resource Notebook  
APR-73

1c1

NIC 7104 Current Network Protocols is not now available; I will send it as soon as it is ready. 22-JAN-73

1d

Also enclosed are a number of background documents (see list below).

1e

Approximately every other week you will receive additions to your collection. Along with the new documents will be a numbered transmittal letter which lists what is being sent, and also indicates what has recently been sent to your Site's Technical Liaison. These transmittal letters should be filed in the Transmittal Letter section of your Current Catalog (NIC 5145).

1f

We will be glad to supply copies of particular documents indicated by a back arrow in the Catalog Listings, and will loan or direct you to sources of other documents in the Listings.

1g

c: S. Crocker (ARPA)

1h

encl:

1i

The ARPA Network  
Resource Sharing Computer Networks

TRANSMITTAL TO: Miss H. A. Thompson

NIC 7542	
NIC 7750	NIC 12324
NIC 8480	NIC 11626
NIC 10507	NIC 11768
NIC 11681	

111

16070 Distribution  
Station Agent,

1  
1a

TRANSMITTAL TO: Nils Maras

TRANSMITTAL TO: Nils Maras  
P.O. Box 51  
2007 Kjeller  
NORWAY

FROM: Marcia Keeney (NIC)  
Station Agent

1

Enclosed is your Network Resources Notebook (NIC 6740). You will receive updates to it as they are issued.

1a

16071 Distribution  
Station Agent,

1  
1a

TRANSMITTAL TO: Tim Diller

TRANSMITTAL TO: Tim Diller  
2500 Colorado Avenue  
Santa Monica, California 90406

FROM: Marcia Keeney (NIC)  
Station Agent

1

At your request, I am sending NIC 13982. NIC 12849 and 13974 are too large for us to reproduce and we keep only 1 copy for ARC use. I suggest you obtain the latter two from their respective publishers.

1a



16072 Distribution  
Station Agent,

MLK 31-MAY-73 17:04 16072

TRANSMITTAL TO: Tim Diller

(J16072) 31-MAY-73 17:04; Title: Author(s): Marcia Lynn Keeney/MLK  
; Distribution: /SA ; Sub-Collections: NIC ; Clerk: KIRK ;

TRANSMITTAL TO: Robert Silberski

TRANSMITTAL TO: Robert Silberski  
National Systems Design Dept., w185  
The MITRE Corporation  
Westgate Research Park  
McLean, Virginia 22101

FROM: Marcia Keeney (NIC)  
Station Agent

1

We seem to have lost our file copy of NIC 10159 UCSB IMP Interface  
Specs. I suggest you get one from UCSB or you may wait until we  
receive a new copy from UCSB and then get it from us (the latter  
being the more time-consuming method).

1a

16073 Distribution  
Station Agent,

MLK 31-MAY-73 17:00 16073

TRANSMITTAL TO: Robert Silberski

(J16073) 31-MAY-73 17:00; Title: Author(s): Marcia Lynn Keeney/MLK  
; Distribution: /SA ; Sub-Collections: NIC ; Clerk: KIRK ;

TRANSMITTAL TO: Margaret Iwamoto

TRANSMITTAL TO: Margaret Iwamoto  
University of Hawaii  
THE ALOHA SYSTEM  
2540 Dole Street  
Honolulu, Hawaii 96822

FROM: Marcia Keeney (NIC)  
Station Agent

1

At your request, I am sending PR #26 (NIC 14500) with pages 3 and 4 included.

1a

16078 Distribution  
Station Agent,

1  
1a

TRANSMITTAL TO: T. J. Zubek

TRANSMITTAL TO: T. J. Zubek  
Programmer Analyst  
Computer & Systems Services  
AIR CANADA  
Place Ville Marie,  
Montreal 113  
CANADA

FROM: Marcia Keeney (NIC)  
Station Agent

1

At your request, I am enclosing NIC 7958, Specification for  
Interconnection of a Host and an IMP. We do not have BBN Report No.  
2277 for distribution; please contact Nancy Neigus at BBN to obtain a  
copy. We are able to send out NIC 7104 (ARPA Current Network  
Protocols) and the RFC series only to members of the Network. If you  
are really interested in becoming an associate on the ARPA Network, I  
suggest you write to Steve Crocker, the Liaison at ARPA.

1a



16080 Distribution  
Station Agent,

1  
1a

TRANSMITTAL TO: Carolyn Huntsman

TRANSMITTAL TO: Carolyn Huntsman  
Stanford University  
Electronics Research Laboratory  
Stanford, California 94305

FROM: Marcia Keeney (NIC)  
Station Agent

1

At your request, I am sending NIC 5646, 6024, 6025, and 6610 for you to keep. 9374 is a book which we don't loan out. 10108 seems to be entirely missing from our files.

1a

Can you ask Vint if he still has NIC 13975 Interactive Television by W. S. Baer? Another site has been asking for it.

1b

16088 Distribution  
Station Agent,

1  
1a

NIC LOCATOR

This file is formatted for easy access online. No changes were made for easier readability offline.

## NIC LOCATOR

## USING THE LOCATOR ONLINE

1

The Locator organizes selected NIC documents so that you can reach and read any part of documents online with few commands.

1a

In the syntax for commands,

\* = the prompt FROM the system

SP = space

CR = carriage return which is COMMAND ACCEPT.

& = the ampersand key, (not "and").

STATEMENTNUMBER = the characters at the beginning of every statement when statement numbers are on.

The text inclosed in [square brackets] is echoed on full-duplex terminals.

1a1

To load locator type:

1a2

\*SP (nic,locator, CR

1a2a

To print the introduction and instructions:

1a3

\*p[rint] b[ranch] .1 SP ↑ CR CR

1a3a

To list documents that you can reach with Locator:

1a4

\*p[rint] b[ranch] .2 SP ↑ CR CR

1a4a

To see the table of contents for a specific document:

1a5

\*p[rint] b[ranch] .STATEMENTNUMBER SP ↑ CR CR

1a5a

When you access a document from LOCATOR, the system prints a view of the document and then responds with its <DIRECTORY>FILENAME.

1a6

At this point, unless other instructions are printed, pick the heading of interest to you and print the branch with the viewspecs set to display the complete text by typing:

1a7

\*p[rint] b[ranch] .STATEMENTNUMBER CR w CR

1a7a

To return to LOCATOR, type:

\*SP & CR until the system responds with <NIC>LOCATOR.NLS;

1a8

Type CTRL X for command delete. (Control X, ↑X)

1a9

Type CTRL O to stop printing. (Control O, ↑O)

1a10

## NIC LOCATOR

## NIC DOCUMENTS

(:xebm)	2
ARPA NETWORK RESOURCES NOTEBOOK (:xebm)	2a
To read the current Network Resource Notebook, type:	2a1
*g[oto] N[IC Resource Query] CR	2a1a
CURRENT DIRECTORY OF ARPA NETWORK PARTICIPANTS NIC 5150 (:xebm)	2b
TELEPHONE NUMBERS OF NETWORK INDIVIDUALS (nic,idbiincnl,entry:wmCh)	2b1
COMPLETE DIRECTORY OF NETWORK INDIVIDUALS (nic,ideiincnl,entry:Dwn)	2b2
COORDINATORS FOR NETWORK GROUPS (nic, idbgincnl,entry:wh)	2b3
COMPLETE DIRECTORY OF NETWORK GROUPS (:tebm)	2b4
ANTS Support Group (asmemlist,1:xmh)	2b4a
ALPHA Satellite System (assmemlist,1:xmh)	2b4b
Computer Based Instruction Group (cbigmemlist,1:xmh)	2b4c
File Transfer Protocol Interest Group (ftpigmemlist,1:xmh)	2b4d
Imlac Interest Group (iigmemlist,1:xmh)	2b4e
International Network Working Group (inwgemlist,1:xmh)	2b4f
International Network Working Group Sub-Comittee One (inwg1memlist,1:xmh)	2b4g
International Network Working Group Sub-Comittee Two (inwg2memlist,1:xmh)	2b4h

## NIC LOCATOR

Network Working Group Steering Committee (nwgscmemlist,1:xmh)	2b4i
Network Associates Group (nagmemlist,1:xmh)	2b4j
Network Facilitators (nfmemlist,1:xmh)	2b4k
Network Graphics Group (nggmemlist,1:xmh)	2b4l
Network Liason Group (nlgmemlist,1:xmh)	2b4m
Network Measurement Group (nmgmemlist,1:xmh)	2b4n
Network Station Agent Group (nsagmemlist,1:xmh)	2b4o
Remote Job Entry (rjememlist,1:xmh)	2b4p
Speech Understanding Research Group (surgmemlist,1:xmh)	2b4q
Speech Understanding Research Group Steering Committee (surscmemlist,1:xmh)	2b4r
TENEX Users Group (tugmemlist,1:xmh)	2b4s
TIP Users Group (tipugmemlist,1:xmh)	2b4t
TNLS Users Group (tumemlist,1:xmh)	2b4u
XIC3 Group (xic3memlist,1:xmh)	2b4v
DIRECTORY OF NETWORK ORGANIZATIONS (nic,ideaincnl, entry:wmDh)	2b5
DIRECTORY OF ENTERPRISE AND ZENITH NUMBERS (NIC,Dirent, entry:wDmh)	2b6

## NIC LOCATOR

INDEX TO NETWORK IDENTS (nic,idclincnl,entry:wmDh)	2b7
CURRENT NETWORK PROTOCOLS (:ebn)	2c
NIC 7104 has not yet been implemented online.	2c1
For information call Jim White (SRI-ARC) (415) 329-0740.	2c2
INDEXES TO ARC JOURNAL ITEMS (:tebbm)	2d
To JULY 1972 (:tebm)	2d1
AUTHOR INDEX (:ebbsn)	2d1a
In order to see the journal numbers and titles for a specific author, type:	2d1a1
*p[rint] b[ranch] .aa SP † .AUTHORNAME CR CR	2d1a1a
(aa)(kjournal,11163,1:zxnh)	2d1a1a1
To see succeeding indexed items, type:	2d1a2
*p[rint] CR CR	2d1a2a
NUMBER INDEX (:ebbsn)	2d1b
In order to see the journal items for a specific NIC NUMBER, type:	2d1b1
*p[rint] b[ranch] .n SP † .NUMBER CR CR	2d1b1a
(n)(kjournal,11162,1:zxrCnh)	2d1b1a1
To see succeeding indexed items, type:	2d1b2
*p[rint] CR CR	2d1b2a
TITLEWORD INDEX A-L (kjournal,11164,xentry:nwh)	2d1c



## NIC LOCATOR

TITLEWORD INDEX M-Z (kjournal,11165,xentry:nwh)	2d1d
Since JULY 1972 (:tebm)	2d2
AUTHOR INDEX (catalog,arcjaincnl,1:zwDnh)	2d2a
NUMBER INDEX (catalog,arcjnincnl,1:zxrDhn)	2d2b
TITLEWORD INDEX A-F (catalog,arcjtafincnl, 1:zxbrDhn)	2d2c
TITLEWORD INDEX G-O (catalog,arcjtgoincnl, 1:zxrDhn)	2d2d
TITLEWORD INDEX P-Z (catalog,arcjtpzincnl, 1:zxrDhn)	2d2e
INDEXES TO NIC JOURNAL ITEMS (:tebbm)	2e
To JULY 1972 (:tebm)	2e1
AUTHOR INDEX (:ebbsn)	2e1a
In order to see the journal numbers and titles for a specific author, type:	2e1a1
*p[rint] b[ranch] .aa SP † .AUTHORNAME CR CR	2e1a1a
(aa)(kjournal,11163,1:zxnh)	2e1a1a1
To see succeeding indexed items, type:	2e1a2
*p[rint] CR CR	2e1a2a
NUMBER INDEX (:ebbsn)	2e1b
In order to see the journal items for a specific NIC NUMBER, type:	2e1b1
*p[rint] b[ranch] .n SP † .NUMBER CR CR	2e1b1a

## NIC LOCATOR

(n)(kjournal,11162,1:zxrCnh)	2e1b1a1
To see succeeding indexed items, type:	2e1b2
*p[rint] CR CR	2e1b2a
TITLEWORD INDEX A-L (kjournal,11164,xentry:nwh)	2e1c
TITLEWORD INDEX M-Z (kjournal,11165,xentry:nwh)	2e1d
Since JULY 1972 (:tebm)	2e2
AUTHOR INDEX (catalog,nic,jaincnl,1:zxrDhn)	2e2a
NUMBER INDEX (catalog,nic,jnincnl,1:zxrDhn)	2e2b
TITLEWORD INDEX A-F (catalog,nic,jtafincnl,1:zxbrDhn)	2e2c
TITLEWORD INDEX G-O (catalog,nic,jtgoincnl,1:zxrDhn)	2e2d
TITLEWORD INDEX P-Z (catalog,nic,jtpzincnl,1:zxrDhn)	2e2e
INDEXES TO THE NIC CATALOG COLLECTION (:tebm)	2f
AUTHOR INDEX (catalog,nic,aaincnl,1:Dwnh)	2f1
NUMBER INDEX (catalog,nic,nincnl,1:Dwnh)	2f2
INDEXES TO NIC GROUP NOTES (:tebm)	2f3
ASS ARPANET SATELLITE SYSTEM NOTE INDEX (nic,ASSINDEX,067:wCh)	2f3a
CBIG COMPUTER BASED INSTRUCTION GROUP NOTE INDEX (nic,CBIINDEX,063:wCh)	2f3b

## NIC LOCATOR

INWG INTERNATIONAL NETWORK WORKING GROUP NOTE INDEX (nic,inwgindex,069:wCh)	2f3c
NMG NETWORK MEASUREMENT GROUP NOTE INDEX (nic,nmgindex,055:wCh)	2f3d
PRG PACKET RADIO GROUP NOTE INDEX (nic,prgindex,055:wCh)	2f3e
RFC REQUEST FOR COMMENT INDEX (nic,rfcindex,0448:wCh)	2f3f
SURG SPEECH UNDERSTANDING RESEARCH GROUP NOTE INDEX (nic,surindex,069:wCh)	2f3g
TIPUG TIP USERS GROUP INDEX (nic,tipugindex,061:wCh)	2f3h
TITLEWORD INDEX A-O (catalog,nictincnl-A,1:Dwnh)	2f4
TITLEWORD INDEX C-Z (catalog,nictincnl-B,1:Dwnh)	2f5
ONLINE BBN DOCUMENTATION (:ebtm)	2g
JSYS MANUAL (TENEX-DOC,jsysmanual,1:xb)	2g1
TENEX USER'S GUIDE (TENEX-DOC,tug,0:dsm)	2g2
ARPANET NEWS (:etbbn)	2h
To read the ARPA Network Newsletter, type:	2h1
*g[oto] N[IC Resource Query] CR	2h1a
SIGART NEWSLETTERS (sigart,news,1:xm)	2i
USER GUIDES (:tebm)	2j
NIC JOURNAL USER GUIDE (:ebtm)	2j1

## NIC LOCATOR

CONTENTS (userguides, JOURNAL-contents, entry:wmh)	2j1a
INTRODUCTION (userguides, JOURNAL-intro, entry:wmh)	2j1b
THE JOURNAL (userguides, JOURNAL-journal, entry:wmh)	2j1c
IDENTIFICATION SYSTEM (userguides, JOURNAL-idents, 1:xmb)	2j1d
NUMBER SYSTEM (userguides, JOURNAL-numbers, entry:wmh)	2j1e
SUMMARY OF JOURNAL SYSTEM COMMANDS (userguides, JOURNAL-summary, entry:wmh)	2j1f
INDEX (userguides, JOURNAL-index, entry:whm)	2j1g
TNLS BEGINNERS GUIDE (:ebtm)	2j2
PREFACE (userguides, tnls-beginners, 4:wh)	2j2a
TEXT (userguides, tnls-beginners, 6:ebmt)	2j2b
NIC TNLS USER GUIDE (:ebtm)	2j3
PREFACE (userguides, TNLS-contents, 5:wh)	2j3a
SYNTAX CONVENTION (userguides, TNLS-contents, 6:wnh)	2j3b
THE TENEX OPERATING SYSTEM AND EXECUTIVE (userguides, TNLS-tenex, entry:wmh)	2j3c
FILE STRUCTURE, CONTENT & INPUT/OUTPUT OPERATIONS (userguides, TNLS-files, entry:wmh)	2j3d
ADDRESSES IN THE NLS SYSTEM (userguides, TNLS-address, entry:mwh)	2j3e

## NIC LOCATOR

CREATING AND VIEWING TEXT (userguides,TNLS-text,entry:mwh)	2j3f
TEXT EDITING (userguides,TNLS-editing,entry:mhw)	2j3g
DEVICE CHARACTER SETS (userguides,TNLS-charcodes,entry:mwh)	2j3h
OUTPUT PROCESSOR DIRECTIVES (userguides,TNLS-directives,entry:mhw)	2j3i
ERROR MESSAGES (userguides,TNLS-errormessages,entry:wmh)	2j3j
COMMAND SUMMARY (userguides,TNLS-commandsum,entry:mwh)	2j3k
GLOSSARY (userguides,TNLS-glossary,entry:mwh)	2j3l
INDEX (userguides,TNLS-index,entry:wmh)	2j3m
NIC TNLS EXERCISE FILES (:tebm)	2j4
XPARCOP...tutorial file in manipulation of partial copies (kjournal,11263,1:wnh)	2j4a
XVIEW.....tutorial file in use of viewspeccs (kjournal,11262,1:wnh)	2j4b
XPRINT....tutorial file in output processor directives (kjournal,11264,1:wnh)	2j4c
DNLS PRELIMINARY USER GUIDE (:ebtm)	2j5
PREFACE (userguides,dnls-intro,3:wn)	2j5a
SYNTAX CONVENTIONS (userguides,dnls-intro,5:wn)	2j5b
DNLS ENVIRONMENT (userguides,dnls-environment,1:xbm)	2j5c

## NIC LOCATOR

FILES (userguides,dnls-files,1:xbbm)	2J5d
ADDRESSING IN DNLS-JUMPING AND LINKS (userguides,dnls-address,1:xbbm)	2J5e
EDITING AND COMPOSITION (userguides,dnls-editing,1:xbbm)	2J5f
VIEW CCNTROL OPERATIONS (userguides,dnls-viewing,1:xbbm)	2J5g
DNLS/EXEC (userguides,dnls-tenex,1:xbm)	2J5h
COMMAND SUMMARY (userguides,dnls-summary,1:x)	2J5i
DEX USER GUIDE (userguides,dex,1:xm)	2J6
L10 USER GUIDE (:ebtm)	2J7
INTRODUCTION (userguides,l10,3a:mwh)	2J7a
SYNTAX CONVENTIONS (userguides,l10,3b1:mwh)	2J7b
DEFINITIONS (userguides,l10,def:mwh)	2J7c
TEXT (userguides,l10,entry:mwh)	2J7d
OUTPUT PROCESSOR USER GUIDE (:ebtm)	2J8
INTRODUCTION TO USING OUTPUT PROCESSOR (Userguides,op-intro.NLS,3:mwyhG)	2J8a
LIST OF ALL DIRECTIVES (Userguides,op-dirlist.NLS,entry:mwh)	2J8b
EXPLANATION OF ALL DIRECTIVES (Userguides,op-direxp.NLS,entry:mwh)	2J8c

## NIC LOCATOR

VALUE OPTIONS (Userguides,op-valop.NLS,entry:mwh)	2J8d
MEANINGS OF PARAMETERS (Userguides,op-params.NLS,entry:mwh)	2J8e
OUTPUT TO MICROFILM and TYPE SIZE AND FONT (Userguides,op-com.NLS,entry:whm)	2J8f
INDEX (Userguides,op-index.NLS,entry:mhw)	2J8g
USER PROGRAMS USER GUIDE no novice instructions available (USER-PRCGS,-USERGUIDE,1:x)	2J9
USING THE LOCATOR ONLINE (1a:wn)	2J10
FOLKLORE...day to day information on NLS (documentation,folklore,1:xbm)	2J11
USER PROGRAMS (:tebm)	2k
USER PROGRAM USER GUIDE no novice instructions available (USER-PROGS,-USERGUIDE,1:xm)	2k1
LIST OF AVAILABLE USER PROGRAMS no instructions. (USER-progs,-contents,1:xm)	2k2

NIC LOCATOR

(J16089) 2-MAY-73 18:22; Title: Author(s): Kelley, Kirk E. /KIRK;  
Distribution: /sa ; Sub-Collections: SRI-ARC; Clerk: KIRK;  
Origin: <KELLEY>OFFLINELOCATOR.NLS;4, 2-MAY-73 18:17 KIRK ;



TRANSMITTAL TO: Edward Schelonka

TRANSMITTAL TO: Edward Schelonka  
Range Measurements Laboratory  
Headquarters Air Force Eastern Test Range  
Patrick Air Force Base, Florida 32925  
attn: B. Jones

FROM: Marcia Keeney (NIC)  
Station Agent

1

At your request, I am sending the following documents:

1a

- NIC 14698 Aloha Communications System Connects Hawaii to ARPANET
- NIC 14682 LOW COST INTERACTIVE IMAGE PROCESSING

1a1

MLK/kk

1b

16090 Distribution  
Station Agent,

1  
1a

TRANSMITTAL TO: Ralph Alter

TRANSMITTAL TO: Ralph Alter  
Packet Communications Inc.  
176 2nd Avenue  
Waltham, Massachusetts 02154

FROM: Marcia Keeney (NIC)  
Station Agent

1

At your request, I am sending the following documents:

1a

TIPUG # 10

1a1

RFC 369

387 431

391 432

399-401 446

403 447

405 456

408 460

409 461

419-423 500

1a2

MLK/kk

1b

16091 Distribution  
Station Agent,

1  
1a

TRANSMITTAL TO: Michael A. Padlipsky

TRANSMITTAL TO: Michael A. Padlipsky  
Project MAC  
545 Technology Square, Room 508  
Cambridge, Massachusetts 02139

FROM: Marcia Keeney (NIC)  
Station Agent

1

At your request, I am sending 4 TNLS Quick Reference Cards and NIC  
16117.

1a

MLK/kk

1b

16092 Distribution  
Station Agent,

1  
1a

TRANSMITTAL TO: David Hsiao

TRANSMITTAL TO: David Hsiao  
Ohio State University  
2024 Neil Ave.  
Columbus, Ohio 43210

FROM: Marcia Keeney (NIC)  
Station Agent

1

Your name was entered today in the IDENTFILE of the Network Information Center. Enclosed is a copy of that entry. It will appear as such in the next update to the Network Directory (NIC 5150). If anything in the entry is incorrect, please notify Marcia Keeney at the NIC and she will correct it.

1a

MLK/kk

1b

16093 Distribution  
Station Agent,

1  
1a



A reply to your query.

Hello Vint, got your message at MIT-DMCG. Reply to that is in the 0lvgc mailbox at DMCG. I am sending you CALICO scenario by US mail and other documentation.

1

AKB 24-APR-73 10:24 16097

A reply to your query.

(J16097) 24-APR-73 10:24; Title: Author(s): Bhushan, Abhay K. /AKB;  
Distribution: /VGC; Sub-Collections: NIC; Clerk: AKB;

APR 1-7 1973, A Week In Review

WEEKLY ANALYSIS REPORT:

1

WEEK: APR 8-14, 1973 (24 HOURS/DAY)

2  
3

TOTAL SYSTEM CPU: 35.213

4  
5

(ARC)

6  
6a

IDENT	CPU HRS	CON HRS	CPU/CON	% SYS	CON/CPU
-------	---------	---------	---------	-------	---------

6a1

(STAFF)

6a2  
6a3

(MFA)	.005	.041	.122	.014	8:1
-------	------	------	------	------	-----

6a3a

(DCE)	.864	32.429	.027	2.454	37:1
-------	------	--------	------	-------	------

6a3b

(BAH)	.974	27.621	.035	2.766	29:1
-------	------	--------	------	-------	------

6a3c

(SRL)	1.230	21.549	.057	3.493	18:1
-------	-------	--------	------	-------	------

6a3d

(JCN)	1.223	27.271	.045	3.473	22:1
-------	-------	--------	------	-------	------

6a3e

(DVN)	.197	5.290	.037	.559	27:1
-------	------	-------	------	------	------

6a3f

(PR)	.344	14.032	.025	.010	40:1
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6a3g

(RWW)	.112	4.986	.022	.318	45:1
-------	------	-------	------	------	------

6a3h

-----	-----	-----	-----	-----	-----
-------	-------	-------	-------	-------	-------

6a3i

(TOTAL)	4.949	133.219		13.087	
---------	-------	---------	--	--------	--

6a3j

(PSO)

6a3k  
6a4

(KFB)	.067	7.397	.009	.190	111:1
-------	------	-------	------	------	-------

6a4a

(MEJ)	.743	43.100	.017	2.110	59:1
-------	------	--------	------	-------	------

6a4b

## APR 1-7 1973, A Week In Review

(KIRK)	1.807	51.549	.035	5.132	29:1	6a4c
(LLL)	.477	25.530	.019	1.355	53:1	6a4d
(NDM)	1.949	22.260	.088	5.535	11:1	6a4e
	-----	-----		-----		6a4f
(TOTAL)	5.043	149.836		14.322		6a4g
						6a4h
(NIC)						6a5
(EJF)	.158	6.432	.025	.449	40:1	6a5a
(MLK)	.110	9.912	.011	.312	91:1	6a5b
(MDK)	.501	18.558	.027	1.423	37:1	6a5c
(JBN)	.429	15.353	.028	1.218	36:1	6a5d
	-----	-----		-----		6a5e
(TOTAL)	1.198	100.000		3.402		6a5f
						6a5g
(HARDWARE)						6a6
(MEH)	.428	11.634	.037	1.215	27:1	6a6a
	-----	-----		-----		6a6b
(TOTAL)	.428	11.634		1.215		6a6c
						6a6d
(TENEX)						6a7
(DIA)	.456	13.851	.033	1.295	30:1	6a7a
(KEV)	.370	16.916	.022	1.051	45:1	6a7b
(DCW)	.401	13.101	.031	1.139	32:1	6a7c
	-----	-----		-----		6a7d

APR 1-7 1973, A Week In Review

(TOTAL)	1.227	43.868		3.485		6a7e
(NLS)						6a7f 6a8
(WLB)	.045	.799	.056	.128	18:1	6a8a
(CFD)	.658	20.567	.032	1.869	31:1	6a8b
(JDH)	.268	16.608	.016	.761	62:1	6a8c
(CHI)	1.696	22.227	.076	4.816	13:1	6a8d
(DSK)	.790	22.679	.035	2.243	29:1	6a8e
(HGL)	.130	3.371	.049	.369	20:1	6a8f
(EKM)	.478	31.765	.015	1.357	67:1	6a8g
(JFV)	.279	6.108	.046	.792	22:1	6a8h
(JEW)	.370	10.455	.035	1.051	29:1	6a8i
	-----	-----		-----		6a8j
(TOTAL)	4.714	134.579		13.386		6a8k

HIGHEST CPU: NDM 1.949 hrs      LOWEST CPU: MFA  
 .005 hrs  
 6a8l  
 6a9  
 6a10

HIGHEST CON: KIRK 51.549 hrs      LOWEST CON: MFA  
 .041 hrs  
 6a11

HIGHEST CPU/CON: MFA .122      HIGHEST CON/CPU: KFB  
 111:1  
 6a12

(RADC)

6a13  
 6b  
 6b1

## APR 1-7 1973, A Week In Review

NAME DIR	CPU HRS	CON HRS	CPU/CON	% SYS	CON/CPU	
						6b2
(JHB)BAIR 194	.648	29.342	.022	1.840	45:1	6b3 6b4
(DFB)BERGSTRM 63	.185	8.110	.023	.525	43:1	6b5
(WPB)BETHKE 14	.032	1.686	.019	.091	53:1	6b6
(JPC)CAVANO 80	.076	6.446	.012	.216	83:1	6b7
(RFI)IUORNO 28	.060	4.376	.014	.170	71:1	6b8
(EJK)KENNEDY 40	.126	4.822	.026	.358	38:1	6b9
(FSL)LAMONICA 61	.118	8.516	.014	.335	71:1	6b10
(TFL)LAWRENCE 137	.137	5.431	.025	.389	40:1	6b11
(JLM)MCNAMARA 115	.264	13.496	.020	.750	50:1	6b12
(RBP)PANARA 85	.034	1.791	.019	.097	53:1	6b13
(RADC)RADC 95	.167	11.982	.014	.474	71:1	6b14
(WER)RZEPKA 73	.019	.337	.056	.054	18:1	6b15
(FPS)SLIWA 38	.096	3.126	.031	.273	32:1	6b16
(DLS)STONE 196	.582	21.718	.027	1.653	37:1	6b17

APR 1-7 1973, A Week In Review

---	-----	-----	-----	6b18
( TOTAL )	2.544	121.179	7.225	6b19
1219				
( PER CENT TOTAL DISK CAPACITY )				6b20
2.503%				

( XEROX )

						6c1
NAME	CPU HRS	CON HRS	CPU/CON	% SYS	CON/CPU	6c2
( DDC )COWAN	.139	9.632	.014	.395	71:1	6c3
( LPD )DEUTSCH	.144	39.134	.004	.409	250:1	6c4
( CMG )GESCHKE	.001	.341	.003	.003	333:1	6c5
( JGM )MITCHELL	.128	4.411	.029	.364	34:1	6c6
( WHP )	.002	.231	.009	.006	111:1	6c7
( EHS )SAT-WTE	.613	18.560	.033	1.741	30:1	6c8
( RES )SWEET	1.974	36.934	.053	5.606	19:1	6c9
	-----	-----	-----			6c10
( TOTAL )	3.001	109.243	8.524			6c11

( NETUSERS ) TOP FIVE

						6c13
NAME	CPU HRS	CON HRS	CPU/CON	% SYS	CON/CPU	6d
MITRE-TIP	.925	29.354	.032	2.627	31:1	6d1
						6d2
						6d3
						6d4

## APR 1-7 1973, A Week In Review

UCLA-NMC	.701	24.402	.029	1.991	34:1	6d5
UCSB	.675	18.512	.036	1.917	28:1	6d6
BBN-TENEX	.617	11.984	.051	1.752	20:1	6d7
GUEST	.423	14.422	.029	1.201	34:1	6d8
REST OF NET	4.787	161.471	.030	13.594	33:1	6d9
	-----	-----		-----		6d10
(TOTAL)	8.128	260.145		23.082		6d11
						6d12
(OVERHEAD)						6e
(JCP)	1.318	30.571	.043	3.743	23:1	6e1
CAT	3.325	13.782	.241	9.443	4:1	6e2
DOCUMENTATION	1.035	3.582	.289	2.939	3:1	6e3
NETINFO	.146	11.263	.013	.415	77:1	6e4
OPERATOR	.931	13.307	.070	2.644	14:1	6e5
SYSTEM	.010	.085	.118	.028	8:1	6e6
BKGRND	.557	49.041	.011	1.582	91:1	6e7
	-----	-----		-----		6e8
(TOTAL)	7.322	121.631		20.794		6e9



APR 1-7 1973, A Week In Review

(J16098) 23-APR-73 21:43; Title: Author(s): Hardeman, Beauregard A.  
/BAH ; Distribution: /DCE DIA MFA WLB KFB CFD JAKE BAH MEH JDH  
CHI MEJ DSK KIRK MDK SRL EKM JBN JCN JCP PR JFV DVN KEV  
ECW RWW JEW DLS TFL JHE LPD JGM ; Sub-Collections: SRI-ARC RADC  
; Clerk: BAH ;

BAH 23-APR-73 21:54 16099

APR 8-14 1973, A Week In Review

Overlook the journal item that preceded this one--the date is incorrect.

WEEKLY ANALYSIS REPORT:

WEEK: APR 8-14, 1973 (24 HOURS/DAY)

TOTAL SYSTEM CPU: 35.213

(ARC)

IDENT	CPU HRS	CON HRS	CPU/CON	% SYS	CON/CPU
-------	---------	---------	---------	-------	---------

(STAFF)

(MFA)	.005	.041	.122	.014	8:1
(DCE)	.864	32.429	.027	2.454	37:1
(BAH)	.974	27.621	.035	2.766	29:1
(SRL)	1.230	21.549	.057	3.493	18:1
(JCN)	1.223	27.271	.045	3.473	22:1
(DVN)	.197	5.290	.037	.559	27:1
(PR)	.344	14.032	.025	.010	40:1
(RWW)	.112	4.986	.022	.318	45:1
	-----	-----		-----	
(TOTAL)	4.949	133.219		13.087	

(PSO)

(KFB)	.067	7.397	.009	.190	111:1
(MEJ)	.743	43.100	.017	2.110	59:1

## APR 8-14 1973, A Week In Review

(KIRK)	1.807	51.549	.035	5.132	29:1	6a4c
(LLL)	.477	25.530	.019	1.355	53:1	6a4d
(NDM)	1.949	22.260	.088	5.535	11:1	6a4e
	-----	-----		-----		6a4f
(TOTAL)	5.043	149.836		14.322		6a4g
						6a4h
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(EJF)	.158	6.432	.025	.449	40:1	6a5a
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	-----	-----		-----		6a5e
(TOTAL)	1.198	100.000		3.402		6a5f
						6a5g
(HARDWARE)						6a6
(MEH)	.428	11.634	.037	1.215	27:1	6a6a
	-----	-----		-----		6a6b
(TOTAL)	.428	11.634		1.215		6a6c
						6a6d
(TENEX)						6a7
(DIA)	.456	13.851	.033	1.295	30:1	6a7a
(KEV)	.370	16.916	.022	1.051	45:1	6a7b
(DCW)	.401	13.101	.031	1.139	32:1	6a7c
	-----	-----		-----		6a7d

APR 8-14 1973, A Week In Review

(TOTAL) 1.227 43.868 3.485 6a7e

(NLS)

(WLB) .045 .799 .056 .128 18:1 6a7f  
6a8

(CFD) .658 20.567 .032 1.869 31:1 6a8a

(JDH) .268 16.608 .016 .761 62:1 6a8b

(CHI) 1.696 22.227 .076 4.816 13:1 6a8c

(DSK) .790 22.679 .035 2.243 29:1 6a8d

(HGL) .130 3.371 .049 .369 20:1 6a8e

(EKM) .478 31.765 .015 1.357 67:1 6a8f

(JFV) .279 6.108 .046 .792 22:1 6a8g

(JEW) .370 10.455 .035 1.051 29:1 6a8h

----- 6a8i  
----- 6a8j

(TOTAL) 4.714 134.579 13.386 6a8k

6a8l

6a9

HIGHEST CPU: NDM 1.949 hrs LOWEST CPU: MFA  
.005 hrs 6a10

HIGHEST CON: KIRK 51.549 hrs LOWEST CON: MFA  
.041 hrs 6a11

HIGHEST CPU/CON: MFA .122 HIGHEST CON/CPU: KFB  
111:1 6a12

(RADC)

6a13

6b

6b1

APR 8-14 1973, A Week In Review

NAME DIR	CPU HRS	CON HRS	CPU/CON	% SYS	CON/CPU	
						6b2
(JHB)BAIR 194	.648	29.342	.022	1.840	45:1	6b3 6b4
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(EJK)KENNEDY 40	.126	4.822	.026	.358	38:1	6b9
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(JLM)MCNAMARA 115	.264	13.496	.020	.750	50:1	6b12
(RBP)PANARA 85	.034	1.791	.019	.097	53:1	6b13
(RAD)RAD 95	.167	11.982	.014	.474	71:1	6b14
(WER)RZEPKA 73	.019	.337	.056	.054	18:1	6b15
(FPS)SLIWA 38	.096	3.126	.031	.273	32:1	6b16
(DLS)STONE 196	.582	21.718	.027	1.653	37:1	6b17

---	-----	-----	-----	6b18
(TOTAL) 1219	2.544	121.179	7.225	6b19
(PER CENT TOTAL DISK CAPACITY) 2.503%				6b20

(XEROX)

NAME	CPU HRS	CON HRS	CPU/CON	% SYS	CON/CPU	6c1 6c2
(DDC)COWAN	.139	9.632	.014	.395	71:1	6c3 6c4
(LPD)DEUTSCH	.144	39.134	.004	.409	250:1	6c5
(CMG)GESCHKE	.001	.341	.003	.003	333:1	6c6
(JGM)MITCHELL	.128	4.411	.029	.364	34:1	6c7
(WHP)	.002	.231	.009	.006	111:1	6c8
(EHS)SAT-WTE	.613	18.560	.033	1.741	30:1	6c9
(RES)SWEET	1.974	36.934	.053	5.606	19:1	6c10
	-----	-----	-----	-----		6c11
(TOTAL)	3.001	109.243		8.524		6c12

(NETUSERS) TOP FIVE

NAME	CPU HRS	CON HRS	CPU/CON	% SYS	CON/CPU	6d1 6d2
MITRE-TIP	.925	29.354	.032	2.627	31:1	6d3 6d4

## APR 8-14 1973, A Week In Review

UCLA-NMC	.701	24.402	.029	1.991	34:1	6d5
UCSB	.675	18.512	.036	1.917	28:1	6d6
BBN-TENEX	.617	11.984	.051	1.752	20:1	6d7
GUEST	.423	14.422	.029	1.201	34:1	6d8
REST OF NET	4.787	161.471	.030	13.594	33:1	6d9
	-----	-----		-----		6d10
(TOTAL)	8.128	260.145		23.082		6d11
						6d12
(OVERHEAD)						6e
(JCP)	1.318	30.571	.043	3.743	23:1	6e1
CAT	3.325	13.782	.241	9.443	4:1	6e2
DOCUMENTATION	1.035	3.582	.289	2.939	3:1	6e3
NETINFO	.146	11.263	.013	.415	77:1	6e4
OPERATOR	.931	13.307	.070	2.644	14:1	6e5
SYSTEM	.010	.085	.118	.028	8:1	6e6
BKGRND	.557	49.041	.011	1.582	91:1	6e7
	-----	-----		-----		6e8
(TOTAL)	7.322	121.631		20.794		6e9



APR 8-14 1973, A Week In Review

(J16099) 23-APR-73 21:54; Title: Author(s): Hardeman, Beauregard A.  
/BAH ; Distribution: /DCE DIA MFA WLB KFB CFD JAKE BAH MEH JDH  
CHI MEJ DSK KIRK MDK SRL EKM JBN JCN JCP PR JFV DVN KEV  
DCW RWW JEW DLS TFL JHB LPD JGM ; Sub-Collections: SRI-ARC RADC  
; Clerk: BAH ;

Just want to issue a thank you and a tip of the hat to Diane and Elizabeth for the fine work they are doing on the calculator. It REALLY works and it's REALLY REALLY useful ...bah

1

BAH 23-APR-73 22:01 16100

(J16100) 23-APR-73 22:01; Title: Author(s): Hardeman, Beauregard A.  
/BAH; Distribution: /SRI-ARC ; Sub-Collections: SRI-ARC; Clerk: BAH;

go away, directive, you bother me.

As nice as signature information is, on statements, it would be even nicer to have a viewspec/directive to show only the date from that information. The date, of the date, time and ident-of-creator is easily the most useful.

1

DHC 24-APR-73 10:52 16101

go away, directive, you bother me.

(J16101) 24-APR-73 10:52; Title: Author(s): Crocker, David H. /DHC;  
Distribution: /NP; Sub-Collections: NIC NP; Clerk: DHC;

"Command" for date

The insert date command saves the user from remembering and typing any specific date, but requires execution of a separate command. It would be much better to be able to enter the date naturally, while entering text. Perhaps a control character could be reserved for that, and put under the same user control as ↑D, ↑X, etc (echoing, selection of character, etc.)

1

DHC 24-APR-73 10:55 16102

"Command" for date

(J16102) 24-APR-73 10:55; Title: Author(s): Crocker, David H. /DHC;  
Distribution: /NP; Sub-Collections: NIC NP; Clerk: DHC;

DNLS addressing

DNLS should have the same ability to use chained addresses as INLS. Currently I can only enter "journal" when I would like to be able to enter "journal d".

This feature becomes critical if the user is attempting to restrict the i/o to his screen (hello imlacs)

1



DHC 24-APR-73 10:57 16103

DNLS addressing

(J16103) 24-APR-73 10:57; Title: Author(s): Crocker, David H. /DHC;  
Distribution: /BUGS BGS NP; Sub-Collections: NIC BUGS NP; Clerk: DHC;

## Speeding up user interaction in TNLS

The "by literal?" query used for replace commands is irritating at best. How about having ↑B automatically mean that literal text will be entered (or have ↑d mean that and ↑B mean to use text from elsewhere, depending on which is used most). Syntax becomes:

```
Replace Word at .1a 2w ↑D
..enter replacing text..↑D
```

GR:

```
Replace Word at .1a 2w ↑B .2b 5w ↑D
```

1

DHC 24-APR-73 11:01 16104

Speeding up user interaction in TNLS

(J16104) 24-APR-73 11:01; Title: Author(s): Crocker, David H. /DHC;  
Distribution: /NP; Sub-Collections: NIC NP; Clerk: DHC;

## A Multi-Host Journal System -- Initial Thoughts

## AS THE USER SEES IT

1

By 'multi-host journal system' (MHJS), I mean, at least from the user's viewpoint, a system in which a user can reliably, and with good turnaround, send to and receive mail from any other user in the Network, in a host-independent (the recipient's host) way, by means of a front-end with which he feels comfortable (and therefore, probably one implemented in his home host). And this, I think, is really all I mean by MHJS, as far as the user is concerned. All of the other visions usually conjured up by the related term 'distributed journal system' (e.g., distributed catalogs and data bases, and cooperating processes around the Net) are probably important in any implementation (and are discussed briefly in the next section) but shouldn't be visible, I think, to the user.

1a

Some of the features that a MHJS should have are the following:

1b

## LOCAL TEXT PREPARATION

1b1

The distinction that the Journal makes (SNDMSG as well) between short items (messages) and long ones (files) is a good one. The former should be an argument to the submission agent (a string typed by the user, and subject to the usual editing facilities -- backspace, line delete, etc.); the latter should be a file whose pathname the sender gives to the submission agent. Nothing should require that the file reside at the sender's host, although this will be the most frequent case. We should, in general, begin to embrace the notion that the Network is, among other things, a distributed file system.

1b1a

The user should be able to use whatever tools he has at his disposal in creating a document to be mailed. The most often used tool will probably be his text editor, but other cases are possible. Specifically, the MHJS should not require that text be prepared in NLS.

1b1b

## LOCAL SUBMISSION

1b2

The submission process should not be a painful and traumatic one, requiring the user to explicitly connect and log in to some remote host (specifically, the NIC) and converse in a command language foreign to him. Rather, submission should be handled by a subsystem

## A Multi-Host Journal System -- Initial Thoughts

implemented within the user's host. Any Network interchanges required should be handled by the software, not the user.

1b2a

There are, of course, hosts -- TIPS, for example -- that will not provide their users with a local submission subsystem. Users of such hosts can, of course, connect via TELNET to a host which does provide the needed service.

1b2b

NLS should be the submission subsystem for NLS hosts, and an expanded SNDMSG for TENEX hosts.

1b2c

## LOCAL DELIVERY

1b3

Users to whom mail is addressed should receive delivery in their local hosts. Again, the user should not be required to rely upon a host other than his own to receive mail. Many hosts already support internal mail delivery systems, and mail originating within the MHJS should be transmitted to the user via the Net and deposited in his mailbox (whatever that means in his case).

1b3a

## SPEED AND RELIABILITY

1b4

The MHJS should deliver its mail rapidly and reliably. Delivery should take place in real time. It just doesn't make sense to be content with daily deliveries when sender and recipient are continuously linked by wide-band communication facilities. Many people around the Net (myself included) frequently resort to SNDMSG in preference to the Journal because the latter is so slow that dialog is inhibited by it, rather than encouraged.

1b4a

Delivery should also be reliable. The sender should be confident that his mail will reach its destination within some fixed amount of time. Delivery failures should always be called to the sender's attention, and delivery details (such as elapsed time, number of attempts, etc.) should be available to the user if he requests them.

1b4b

The MHJS must, of course, deal with the fact that hosts are occasionally disconnected from the Net and that several delivery attempts may sometimes be required.

1b4c

## RECORDED AND UNRECORDED MAIL

1b5

## A Multi-Host Journal System -- Initial Thoughts

The MHJS should support both recorded and unrecorded mail, and do so within the same framework. The independent functions of recording and distribution are probably best separated both in implementation and in the user's mind. Unrecorded mail, then, requires the distribution function alone, while recorded mail requires both recording and distribution. Secondary distribution becomes simply the distribution function reinvoked, and needn't be special-cased as it is currently.

1b5a

## FLEXIBLE ADDRESSING

1b6

One of the most elegant features of the Journal (in my opinion) is that the sender needn't know the recipient's address, only his name (ident); the system keeps track of each user's whereabouts. The MHJS should preserve and extend this kind of flexibility. The MHJS should have address information on file for each user known to it, and the user should be able to change the data that pertains to him.

1b6a

If a user's on-line address changes (e.g., he changes affiliation), he should be able to inform the MHJS of his new address; or if he changes location temporarily (e.g., he goes to Boston for a three-day meeting), he should be able to post a new, but temporary address if that proves convenient to him. Or if he goes on a month-long vacation, he should be able to leave with the MHJS a U.S. Postal Service mailing address and expect his mail to be delivered to him there in hardcopy form. Of course, the sender should always be left the ability to explicitly identify the recipient's location and have the MHJS respond accordingly.

1b6b

The MHJS might go so far as to determine whether a user for whom mail has arrived is logged on anywhere within the Net, and if so, notify him of the fact. Such a service brings the now independent mail and link facilities a bit closer together.

1b6c

## AVOIDING FORGERY

1b7

In a large and complex communication facility such as the MHJS -- one that's to be used seriously and sometimes in a context where privacy is an issue -- it's important that provisions be made by which forgery can be avoided. Some mechanism has to exist which prevents

## A Multi-Host Journal System -- Initial Thoughts

my sending a treacherous letter to Larry Roberts and signing Doug Engelbart's name to it. Such a mechanism will probably rely upon the association of a password with each ident and the verification of that password before mail is accepted by the MHJS. Proof of identity might be made mandatory, or the system might tag each piece of mail with a note telling the recipient whether or not the author's identity was been verified.

1b7a

## RETRIEVAL OF RECORDED DIALOG

1b8

Any piece of mail recorded by the MHJS should be retrievable through it by catalog number (subject to access control for non-public dialog). The retrieval time can be expected to vary; an item may be on-line or on tertiary storage, at the requestor's host or at another host (the MHJS, of course, is the one who keeps track of the file's location and is responsible for retrieving it).

1b8a

Retrieval time should be minimized whenever possible, of course, and a clever MHJS would store locally, copies of items belonging to dialog, all of whose contributors reside within the requestor's host. Thus, local dialog would be quickly retrievable.

1b8b

## AS THE SYSTEM SEE IT

2

The MHJS, for reasons of efficiency and reliability, is probably best implemented as a number of cooperating processes distributed over several hosts (not necessarily NLS nor TENEX hosts). The interface between components of the system should be clean, and each participating host should have the option of performing distribution or recording functions, or both. The MHJS should be capable of exploiting new distribution and recording processes as they make themselves available around the Net.

2a

It seems to me that one or more hosts need to function as supervisors within the MHJS, assigning distribution tasks, for example, and maintaining master catalogs for recorded dialog and master identification files with address and password information.

2b

A Multi-Host Journal System -- Initial Thoughts

(J16106) 23-APR-73 22:45; Title: Author(s): White, James E. (Jim)  
/JEW; Distribution: /jdh chi dsk rww jcn mdk ; Sub-Collections:  
SRI-ARC; Clerk: JEW;  
Origin: <WHITE>MHJS.NLS;4, 23-APR-73 22:42 JEW ;



Response to (MJOURNAL, 16050, ), re: Journal Service

Duane, You mentioned some changes to the Journal that wafed by you on the wind of rumor, I can't find any substantive info on this. I especially don't understand the questions/requests to ARC in your Journmess to Dirk. I think we should have the oportunity to at least comment on changes to this major subsystem we are trying to get our people to use even more....  
cc: DVN (This is a good addition: add a distribution list to the author copy of Journal items).

1

JHB 24-APR-73 06:22 16107

Response to (MJOURNAL, 16050, ), re: Journal Service

(J16107) 24-APR-73 06:22; Title: Author(s): Bair, James H. /JHB;  
Distribution: /dls dvn ; Sub-Collections: RADC; Clerk: JHB;

Journal Citations from Initials file (JHB) for 1972.

Journalized to release file space; not referenced that much  
online.

Journal Citations from Initials file (JHB) for 1972.

JOURNAL DOCUMENTS RECEIVED IN 1972 JOURNALIZED: APR 73 1

DCE 22-DEC-72 12:37 12446  
 Augmenting the Knowledge Workshop: Abstract  
 Location: (MJOURNAL, 12446, 1:w) 1a

Comments: Abstract (for yet to be written paper) submitted to Wm. Bethke (JHB) as a candidate for presentaion at the National Computer Conference, New York City, June 73. (Historical Note: Bethke, Bair and I reviewed the draft of this abstract, between 1100 and 1140 PST, in a shared-screen, three-way-phone hookup between me at ARC/Tasker and them at RADC/Imlac; also discussed general content/presentation plan for the paper.) 1a1

JRS 7-DEC-72 8:08 13199

Message: i need some more help on text editing (dean). how about it??? 1b

DLS 10-NOV-72 10:41 12703  
 Bill Bethke is Augmented??  
 Message: Bill Bethke is starting to use the system under Bucciero's directory. If you have any messages to send to him use Tom's ident, TJB2. William P Bethke, Information Sciences Division, RADC, Griffiss AFB, New York 13440. Phone 315-330-2204 1c

DVN 8-NOV-72 11:06 12607  
 Visitor Log: John Alderete from Hewlett-Packard  
 Location: (LJOURNAL, 12607, 1:w) 1d

DLS 17-OCT-72 9:34 12251  
 AHI EVALUATION  
 Location: (LJOURNAL, 12251, 1:w) 1e

JCN 13-OCT-72 14:38 12120  
 Hardware System Work During Thanksgiving Week: The ARC System Will be Down  
 Location: (LJOURNAL, 12120, 1:w) 1f

TFL 13-OCT-72 8:56 12206

## Journal Citations from Initials file (JHB) for 1972.

Effort Write-Up - AHI Training Oct 72  
Location: (LJOURNAL, 12206, 1:w)

1g

Comments: FOR YOUR INFORMATION

1g1

TFL 13-OCT-72 8:10 12205  
Effort Write-Up - ARPA Network Task  
Location: (LJOURNAL, 12205, 1:w)

1h

Comments: FOR YOUR INFORMATION

1h1

DVN 5-OCT-72 11:48 12071  
Notice of Information on the Use of Our System  
Message: Paul Rech has written a report on use of the system  
that will probably be of interest to you. (,12058,)

1i

JCN 3-OCT-72 17:16 12045  
Breaking Connections to ARC After Logout  
Location: (LJOURNAL, 12045, 1:w)

1j

DVN 3-OCT-72 15:06 12042  
John Alderete's request for (jjournal,10872,)  
Message: John Alderete of Hewlett Packard was here asking for  
evaluatory information on NLS. I refered him to you among  
other sources and I know he has trid to get in touch with you.  
Do you have any objection to my giving him a copy of  
(jjournal,10872,)...If I don't hear from you I will go ahead  
on Thursday.

1k

JLM 2-OCT-72 8:52 12033  
ahi special topic minutes  
Location: (LJOURNAL, 12033, 1:w)

1l

Comments: this is my cut on the minutes please read and add  
and or delete

1l1

JCN 22-SEP-72 9:11 11906  
RADC File Protection - Some Recent Changes  
Location: (LJOURNAL,11906,1:w)  
\*\*\*\*\*Note: (Secondary Distribution Copy)\*\*\*\*\*

1m

Journal Citations from Initials file (JHB) for 1972.

DVN 28-AUG-72 9:33 11628  
 Bair and Borden's Resaerch Visist to ARC:Notice of Draft Memo  
 to EMC  
 Message: My draft of a memo to EMC is in my file  
 (vannouhuys,bairtrip,). Please look at it and offer any  
 corretions and suggestions, particularly Borden's first name

1n

DLS 27-JUN-72 8:18 10864  
 BASELINE MANAGEMENT SYSTEM PLAN  
 Location: (JJOURNAL, 10864, 1:w)

1o

Comments: Submitting to journal to prevent archive--still  
 in draft form

1o1

DLS 27-JUN-72 7:46 10863  
 AHI TERMINALS  
 Location: (JJOURNAL, 10863, 1:w)

1p

DLS 27-JUN-72 7:08 10862  
 BASELINE M. S. EFFORT WRITEUP  
 Location: (JJOURNAL, 10862, 1:w)

1q

DLS 23-JUN-72 14:10 10819  
 Location: (JJOURNAL, 10819, 1:w)

1r

Comments: This is the narrative of the annual planning  
 document submitted by the branch, which is combined with  
 some 20 other similiar documents from around the Center,  
 and submitted to higher Headquarters for review etc. It  
 should give you some feel for the technical areas covered  
 by the branch.

1r1

DLS 23-JUN-72 14:03 10818  
 AHI GROUP INPUT TO TPO-14  
 Location: (JJOURNAL, 10818, 1:w)

1s

Comments: This is the AHI group's input to the annual RADC  
 planing exercise for the year FY-74---FY-78.

1s1

DLS 21-JUN-72 7:16 10805  
 PENTAGON VISIT--TRIP REPORT

Journal Citations from Initials file (JHB) for 1972.

Location: (JJOURNAL, 10805, 1:w)

1t

Comments: Jim Norton--can you check on action items: 2&3  
and see if they can be straightened out?

1t1

JCN 2-JUN-72 6:44 10621

Questions for Duane Stone on RADC status: TIP, Training, Visit  
Expectations. Note on Memories

Location: (JJOURNAL, 10621, 1:w)

1u

JCN 26-MAY-72 9:24 10458

L10 User Guides for RADC: Transmittal

Location: (JJOURNAL, 10458, 1:w)

1v

JCN 25-MAY-72 15:22 10585

New User Directories for RADC Users Have Been Set Up

Location: (JJOURNAL, 10585, 1:w)

1w

JPC 18-MAY-72 11:22 10543

Sample Journal Session

Message: This is a sample message

1x

JLM 18-MAY-72 11:07 10541

ahi

Message: ahi training is complete

1y

DVN 23-MAY-72 10:01 10565

Training: Delays and Plans

Location: (JJOURNAL, 10565, 1:w)

1z

JCN 12-MAY-72 18:21 10373

Additional Notes on the ARC-RADC Meeting April 25-26 - JCN

Location: (IJOURNAL, 10373, 1:w)

1a@

MDP 11-MAY-72 8:22 10412

RADC Technical Planning Objective #14

Location: (IJOURNAL, 10412, 1:w)

1aa

Comments: I'm journaling this file for a number of reasons:

## Journal Citations from Initials file (JHB) for 1972.

It is last year's TPO prepared for FY-73 and as such represents the branch's thinking at that time concerning the planned technical activity in the branch. It was put into the system by MDP and edited by me in a few hours--indicating that this mode of using NLS can conceivably be used at RADC. It represents a "real use of the system, since we are now starting the writing of the FY-74 TPO, and much of the verbage is repeated from year to year. Finally, I would like to make this one of the "live" documents under BMS rather than the once-a-year exercise that it is now.

1aa1

DVN 11-MAY-72 15:36 10429  
Confirmation of Trips to Rmome  
Location: (IJOURNAL, 10429, 1:w)

1ab

DVN 5-MAY-72 13:37 10341  
File Access Controls in TENEX  
Location: (IJOURNAL, 10341, 0:gw)  
\*\*\*\*\*Note: (Secondary Distribution Copy)\*\*\*\*\*

1ac

DLS 8-MAY-72 6:28 10377  
Initial Meeting Between DCE & DLS on Joint Evaluation Effort  
Location: (IJOURNAL, 10377, 1:w)

1ad

Comments: This is the first record of a meeting between DCE & DLS when we were in the formative stages of how to use/evaluate AHI. It is being entered into the journal for historical purposes--was held 20JUN71.

1ad1

JCN 5-MAY-72 14:53 10362  
Objectives of the RADC visit April 25-26 by ARC -JCN views  
Location: (IJOURNAL, 10362, 1:w)

1ae

DLS 4-MAY-72 15:00 10330  
RADC AHI ACTIVITY  
Location: (IJOURNAL, 10330, 1:w)

1af

Comments: This is the only single document that I have which tries to outline the entire RADC AHI activity. It was written in the fall of 71 and has not been updated since. I do intend to update it soon however--I will try to use the "obsolete" command for the first time when I do.

1af1



## Journal Citations from Initials file (JHB) for 1972.

DLS 4-MAY-72 14:54 10329  
 Background Letters Requesting RADC Help in Applying AHI  
 Location: (IJOURNAL, 10329, 1:w) 1ag

Comments: This file contains a selected number of  
 "official" requests from ARPA and DCS/PEO for RADC to get  
 involved in evaluating/applying AHI technology. Its being  
 entered into the journal for historical purposes. 1ag1

DLS 4-MAY-72 14:47 10328  
 Initial RADC Proposal to SRI for Use of NLS  
 Location: (IJOURNAL, 10328, 1:w) 1ah

Comments: This document was written about a year ago and  
 reflects some of the earlier thinking of RADC. It is being  
 entered into the journal for historical purposes. 1ah1

DLS 4-MAY-72 14:42 10327  
 RADC/SRI KICKOFF MEETING NOTES  
 Location: (IJOURNAL, 10327, 1:w) 1ai

JCN 1-MAY-72 14:35 10295  
 RADC Special Journal Index - by Number to 28 Apr 72  
 Location: (IJOURNAL, 10295, 1:w) 1aj

DLS 28-APR-72 13:47 10256  
 The RADC Planning Activity--Program Call  
 Location: (IJOURNAL, 10256, 1:w) 1ak

Comments: This document was an early attempt to describe  
 programm call at RADC Its somewhat outdated now but is being  
 journalled for historical purposes. 1ak1

DVN 11-AUG-71 11:29 7482  
 NLS with altered entry  
 Location: (Journal, 7482, 1:w) 1al

DVN 30-JUL-71 21:45 7460  
 Late July NLS  
 Location: (Journal, 7460, 1:w) 1am

Journal Citations from Initials file (JHB) for 1972.

(J16108) 24-APR-73 06:33; Title: Author(s): Bair, James H. /JHB;  
Sub-Collections: RADC; Clerk: JHB;

Jeanne,

If you have copies, could you please send a copy of:

- (1) The Augmented Knowledge Workshop NIC 14724
- (2) Toward a model of Children's Story  
Comprehension NIC 13974
- (3) Factors Inhibiting the use of Computers  
in Instruction NIC 13964

Thanks and regards, .....Jean

1

(J16109) 24-APR-73 10:37; Author(s): Iseli, Jean /JI; Distribution:  
/JBN; Sub-Collections: NIC; Clerk: JI;

I'd like to know more on MHJS

I happened to see a document of yours lying on the LPT which dealt with a "multi host Journal system" (MHJS). I'd be interested to know what you're thinking, since I'm trying to explore design alternatives for such a system as a case study in distributed systems. Can you give me pointers to any files you may have produced?

1

LPD 24-APR-73 11:10 16110

I'd like to know more on MHJS

(J16110) 24-APR-73 11:10; Title: Author(s): Deutsch, L. Peter /LPD;  
Distribution: /JEW; Sub-Collections: NIC; Clerk: LPD;

In response to your request

I am not certain what you want NETBUGGER3 to do for you, but I am sending you documentation on the program so you can figure out whether or not it can do it. If you have any questions or desire any help in using the program, I am available.

1

MAK 24-APR-73 15:27 16111

In response to your request

(J16111) 24-APR-73 15:27; Title: Author(s): Kampe, Mark A. /MAK;  
Distribution: /ADO; Sub-Collections: NIC; Clerk: MAK;



## New Members

I have two inquiries from people who want to become members of the Network Graphics Group. They are Peter Kirstein, the Principal Investigator at the University of London Computer Science Dept , and Jim Foley of the Computer Science Dept of University of North Carolina at Chapel Hill. May I add them to the membership list? Please let me know. You may send me a journal message , a sendmessage, or just call on the NIC phone (it's toll-free) at (415) 329-0740. Thanks. Marcia Keeney (MLK).

1

16112 Distribution  
Michener, James C. ,

New Members

(J16112) 24-APR-73 12:23; Title: Author(s): Keeney, Marcia Lynn  
/MLK; Distribution: /JCM; Sub-Collections: SRI-ARC; Clerk: MLK;

Re: (16023,) Journal Header treatment

An additional consideration in designing the treatment of journal headers: one should be able to set up a document that before journalization looks very much like the journal file will look (for proofing). To do so, I was including a HJournal directive, expecting it to be overridden by the HJournal directive inserted at journalization. This could be accomplished by any of the last three alternatives in (16023,). Alternative four would work well if the directives produced a reasonable default if the journal information were not known:

1

the author could be taken as the last to change the file,

1a

the date should be the current date,

1b

the number could be something like "xxxxx" or whatever, just so the format resembled the final copy.

1c

I have found that, in what little publishing I have done, I have not used journal headers in anticipation of back-to-back printing. Perhaps journal header position should be specifiable.

2

When publishing on COM, it may be wise to publish before journalization, then use DELDIR to delete all print directives in the journalized version. Theoretically, if more copies are desired, we can just call DDSI and ask them to reprint a past film. Print directives are annoying for on-line viewing, and there may be no call for them in once-published files. If one doesn't trust DDSI's microfilm archival system, the publishing version could be archived here.

3

Re: (16023,) Journal Header treatment

(J16113) 23-APR-73 20:23; Title: Author(s): Meyer, N. Dean /NDM;  
Distribution: /SRI-ARC PARC-MAXC RADC JI LGR; Sub-Collections: SRI-ARC  
PARC-MAXC RADC; Clerk: NDM;  
Origin: <MEYER>HJOURNAL.NLS;2, 23-APR-73 20:21 NDM ;

TRANSMITTAL TO: John Leung

TRANSMITTAL TO: John Leung  
Stanford Research Institute  
Menlo Park, California 94025

FROM: Marcia Keeney (NIC)  
Station Agent

1

At your request, I am sending Packet Radio note # 19 (NIC 13878).

1a

16119 Distribution  
Station Agent,

1  
1a

Transmittal to Patti Spaght

ARPA Network Information Center  
Stanford Research Institute  
Menlo Park, California 94025

NIC 16121  
7-MAY-73

1

TRANSMITTAL TO: Ms. Patti Spaght  
IBM Corporation  
610 Lincoln Street  
Waltham, Mass. 02154

2

FROM: Marcia Keeney  
Station Agent

3

At the request of Mike Kudlick, I am sending the following documents:

4

NIC 9348 TELNET PROTOCOL

4a

NIC 8246 HOST/HOST PROTOCOL

4b

NIC 7958 IMP SPECIFICATIONS

4c



16121 Distribution  
Station Agent,

Transmittal to Patti Spaght

(J16121) 25-MAY-73 13:55; Title: Author(s): Marcia Lynn Keeney/MLK;  
Distribution: /SA; Sub-Collections: SRI-ARC; Clerk: LLL;  
Origin: <LANE>NIC16121.NLS;3, 25-MAY-73 13:37 LLL ;

Transmittal to Paul Green

ARPA Network Information Center  
Stanford Research Institute  
Menlo Park, California 94025

NIC 16122  
7-MAY-73

TRANSMITTAL TO: Paul Green  
IBM Research Center  
P.O. Box 218  
Yorktown Heights, N.Y. 10598  
Attn: Stella Grodski

FROM: Marcia Keeney  
Station Agent

Enclosed is a copy of the SUR Membership List.

1  
2  
3  
4

16122 Distribution  
Station Agent,

Transmittal to Paul Green

(J16122) 25-MAY-73 13:58; Title: Author(s): Marcia Lynn Keeney/MLK;  
Distribution: /SA; Sub-Collections: SRI-ARC; Clerk: LLL;  
Origin: <LANE>NIC16122.NLS;2, 25-MAY-73 13:57 LLL ;

Transmittal to Steve Crocker

ARPA Network Information Center  
Stanford Research Institute  
Menlo Park, California 94025

NIC 16123  
8-MAY-73

1

TRANSMITTAL TO: Steve Crocker  
Advanced Research Projects Agency  
1400 Wilson Boulevard  
Arlington, Virginia 22209

2

FROM: Marcia Keeney  
Station Agent

3

Enclosed is a copy of a letter Jeanne North received. She is putting them on the distribution list for the ARPANET news. Should they be made an associate?

4

Let me know via sendmsg or journal and I'll send them the appropriate information.

5

16123 Distribution  
Station Agent,

Transmittal to Steve Crocker

(J16123) 25-MAY-73 14:01; Title: Author(s): Marcia Lynn Keeney/MLK;  
Distribution: /SA; Sub-Collections: SRI-ARC; Clerk: LLL;  
Origin: <LANE>NIC16123.NLS;2, 25-MAY-73 14:00 LLL ;



Transmittal to Dave Walden

ARPA Network Information Center  
Stanford Research Institute  
Menlo Park, California 94025

NIC 16124  
8-MAY-73

TRANSMITTAL TO: Dave Walden  
Bolt Beranek and Newman Inc.  
50 Moulton Street  
Cambridge, Massachusetts 02138

FROM: Marcia Keeney  
Station Agent

Enclosed is a letter which we received from Steve Kaisler. Let me know if you would like me to send him any ASS notes.

Thanks.

1  
2  
3  
4  
5

16124 Distribution  
Station Agent,

Transmittal to Dave Walden

(J16124) 25-MAY-73 14:04; Title: Author(s): Marcia Lynn Keeney/MLK;  
Distribution: /SA; Sub-Collections: SRI-ARC; Clerk: LLL;  
Origin: <LANE>NIC16124.NLS;3, 25-MAY-73 14:03 LLL ;