Love and madness


All might be mad, but love can still exist,                                    1

Love and madness

(J23055)    20-MAY-74 17:04;    Title: Author(s): Robert N,
Lieberman/RLL; Distribution: /SLJ( [ INFO-ONLY ] ) ; Sub-Collections:
SRI-ARC; Clerk: RLL;

link stack- failure to update version,

If one updates a file, jumps to a new file, control C's to the exec, deletes old version of first file, continues, and then tries a jump file return (j[ump] ,fr   in TNLS) then one gets the messge 'no such version'. My guess: link stack does not get updated to most recent version.  1

link stack- failure to update version,

(J23058)    20-MAY-74 17:14;    Title: Author(s): Robert N,
Lieberman/RLL; Distribution: /FDBK( [ ACTION ] ) ; Sub-Collections:
SRI-ARC; Clerk: RLL;

link stack - failure to update version.


If one updates affile in new nls (tnls), jumps to a new file, control
c's to the exec, deletes the old version of the first file,
continues, and  tries a j[ump] ,fr in TNLS then one gets the messsage
'no such version'. Link stack appears to not have been updated to
latest version number.                                                        1

link stack - failure to update version,


(J23059)   20-MAY-74 17:23;   Title: Author(s): Robert N,
Lieberman/RLL; Distribution: /FDBK; Sub-Collections: SRI-ARC; Clerk:
RLL;

send-mail,rll partial copy left around

On occasions, not sure at moment exactly whch ones, the file
[send-mail],pc appears in directory with the ,rll extension having
nothing in it besides the statement 0 and message that no content was
specified, this has occurred after a sucddessful journal submission
(I think successful) as well as after no sendmail submissions, A
related bug; after deleting both the ,rll and ,pc versions of
send-mail file, once a got a 'no such version' message after doing
the messge, title, send to,, and done commands in sendmail
subssystem, My guess, system some how thought old send-mail,rll was
around but it was not discovered it was not there until 'done'
commmand,                                                           1

send-mail,rll partial copy left around

(J23060)   20-MAY-74 17:30;   Title:   Author(s): Robert N.
Lieberman/RLL; Distribution: /FDBK; Sub-Collections: SRI-ARC; Clerk:
RLL;

response to Response

Susan, your presentation is really nice,

response to Response

Markers do work in links, thanks, Update Compact (and some other
operations?) still scrambles them, though.                                    1

I think "Force Case" is much nicer than "set Case mode".
(mjournal,23019,1g) How about "show markers",...,"Show File Marker" is
two extra key strokes considering "marker" is a second character name
in expert expert mode.                                                        2

response to Response

(J23062) 20-MAY-74 19:38; Title: Author(s): Dirk H, Van Nouhuys/DVN;
Distribution: /NEWNLS( [ ACTION ] ) ; Sub-Collections: SRI-ARC NEWNLS;
Clerk: DVN;

Call for Contributions to    the Quarterly Management Report

As if you didn't have anything else to do, it is Quartely Managemnt
Report time Again, With contract extension and so on the dates
covered have gotten rather confused, This report should recount
developments between November 9th and May 9th,  Would those who see
their idents by some topic, please write a paragraph or so  and give
me a writen copy or notify me of its address by Friday the 24th,          1

If anyone wishes to suggest other accomplishments or problems, please
feel free to do so,                                                       2

  II  MAJOR ACCOMPLISHMENTS                                               3

    Privacy (JEW)                                                         3a

    Journal System on Two Machines (JEW)                                  3b

    Line Processor (CHI)                                                  3c

    New NLS in Operation at ARC (CHI)                                     3d

    Feedback System (SRL)                                                 3e

    User Developemnt (JHB)                                                3f

  III  PROBLEMS ENCOUNTERED (RWW) (JCN)                                   4

  IV  FISCAL STATUS (JCN)                                                 5

  V  ACTION REQUIRED BY THE GOVERNMENT (JCN)                              6

Call for Contributions to  the Quarterly Management Report


(J23063)  20-MAY-74 21:05;   Title;  Author(s); Dirk H. Van Nouhuys/DVN;
Distribution; /JEW( [ ACTION ] ) CHI( [ ACTION ] ) SRL( [ ACTION ] )
JHB( [ ACTION ] ) JCN( [ ACTION ] ) RWW( [ ACTION ] ) SRI-ARC( [
INFO-ONLY ] ) ; Sub-Collections:  SRI-ARC DPCS; Clerk: DVN;

Journal Item

The journal item of which we were just speaking is (ijournal,14840,)      1

Journal Item

(J23065)    20-MAY-74 22:13;    Title: Author(s): Dirk H, Van
Nouhuys/DVN; Distribution: /JHB( [ INFO-ONLY ] ) ; Sub-Collections:
SRI-ARC; Clerk: DVN;

appl progrs vs syst progrs

Here is a hopefully useful, though of course not rigorous,
distinction between application programs and system programs:                    1

    Application programs build upon system capabilities.  They provide
the means to utilize the system in ways that are appropriate to
particular tasks or problems.  Examples are the Ident System, the
Output Processor, and all User Programs.                                         1a

    System programs provide capabilities in a system that it would be
virtually impossible to provide through application programs.
Examples span the spectrum from the simple capability called
"Insert Statement", to the more complex capabilities called the
"Journal" and the "Calculator".                                                 1b

appl progrs vs syst progrs

(J23069)  21-MAY-74 11:30;   Title:  Author(s): Michael D, Kudlick/MDK;
Distribution: /DCE JCN; Sub-Collections: SRI-ARC; Clerk: MDK;

Problems wit the JOVIAL  Manual, Jammed and Missing Characters; The
Ball is back to DDSI.


After studing more COM tests and Octal dumps Elizabeth has concluded
that the bit stream we sent DDSI called for all the correct
characters and the correct spacing in the test run of the JOVIAL
Manual.                                                                    1

This morning we called Floyd Dozier at DDSI.                               2

    He replied that he believed he understood the problem of the
    missing characters; their font was simply missing a few
    characters. He believes he can easilly round them up.                 2a

    The spacing problem around the transtion between sland and
    non-slant text still puzzles him however. He said he would get to
    work on it "by brute force".                                          2b

I tried to impress upon him that this was a matter of more than
academic interest, that an important customer was waiting with a
large order, and that others are waching.                                 3

Problems wit the JOVIAL  Manual, Jammed and Missing Characters: The
Ball is back to DDSI,


(J23070)  21-MAY-74 11:38;   Title:  Author(s): Dirk H, Van Nouhuys/DVN;
Distribution: /COM( [ INFO-ONLY ] ) NDM( [ INFO-ONLY ] we also sent them
the ocatal dump) EKM( [ INFO-ONLY ] ) JCN( [ INFO-ONLY ] ) DLS( [
INFO-ONLY ] ) ; Sub-Collections:  SRI-ARC COM; Clerk: DVN;

Problems with the JOVIAL Manual, The Ball is Back to DDSI


After studing more COM tests and Octal dumps Elizabeth has concluded
that the bit stream we sent DDSI called for all the correct
characters and the correct spacing in the test run of the JOVIAL
Manual,                                                                    1

This morning we called Floyd Dozier at DDSI,                               2

   He replied that he believed he understood the problem of the
   missing characters: their font was simply missing a few
   characters, He believes he can easilly round them up,                  2a

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   non-slant text still puzzles him however, He said he would get to
   work on it "by brute force",                                           2b

I tried to impress upon him that this was a matter of more than
academic interest, that an important customer was waiting with a
large order, and that others are waching,                                 3

Problems with the JOVIAL Manual, The Ball is Back to DDSI


(J23071)  21-MAY-74 11:41;   Title:  (Unrecorded)  Title:  Author(s):
Dirk H. Van Nouhuys/DVN; Distribution: /DDSI( [ INFO-ONLY ] ) ;
Sub-Collections:  SRI-ARC DDSI; Clerk: DVN;

Line length differences between dnls and output quickprint,

A while back, Susan, you asked if I was still having trouble with
this.  I just noticed output quickprint breaks some lines sooner than
dnls,  That is, the line length in quick print seems to be shorter
than in dnls,                                                          1

Line length differences between dnls and output quickprint.


(J23072)   21-MAY-74 15:34;   Title: Author(s): Kirk E. Kelley/KIRK;
Distribution: /FDBK( [ ACTION ] ) ; Sub-Collections: SRI-ARC; Clerk:
KIRK;

How I handle messages in NLS

Typescript scenario of message handling.

How I handle messages in NLS

1

TELNET typescript file started at WED 22 MAY 74 0559:50                   2

3

#arc (settings loaded) is complete.#                                     4

5

   TENEX 1.31.64, ARC EXEC 1.51.40                                      5a

@meyer                                                                   6

   JOB 16 ON TTY57 22-MAY-74 06:00                                      6a

   TENEX WILL GO DOWN WED 5-22-74 2200 TIL THU 5-23-74 0300             6b

@; at this point it should have said "YOU HAVE A MESSAGE" if we
didn't f                                                                7

**ool around before.                                                    8

@                                                                        9

@; first I rename the message.txt file t( anything                      10

@ren messAGE.txT;1 (TO BE) z [New version]                              11

   [CONFIRM]                                                            11a

@                                                                        12

@;now i enter nls (on arc i type oldnls, you type just nls).            13

@oldnls                                                                  14

15

*; i already have a statement in my initial file called (message)       16

*Print Statement A: .message                                            17

V:                                                                       18

(Message)      MESSAGE.TXT file (ndm,dialog:xbzg)                        19

20

1

How I handle messages in NLS

\*                                                                              21

\*; there is a user program called INMES which copies a sequential
messag                                                                         22

\*\*e file into nls,  i will clear my program area...                           23

\*Goto Programs Reset stack                                                     24

\*                                                                              25

\*; load the user program...                                                    26

\*Goto Programs Get Rel File T: inmes                                           27

                                                                               28

Loading User Program                                                           29

                                                                               30

                                                                               31

\*                                                                              32

\*; now we can use the program like a fancy command, passing control
to i                                                                           33

\*\*t...                                                                         34

\*Goto Programs Execute program T: inmes                                        35

                                                                               36

Insert MESSAGE file <MEYER>MESSAGE,TXT  T: z,txt                                37

   at A: ,message                                                37a

   level L:  d                                                   37b

                                                                               38

                                                                               39

Insert MESSAGE file in Progress                                                40

                                                                               41

                                                                               42

43

*; note that i didn't accept the default file "message,txt" but type
"z,                                                                    44

**txt" at that point,  now we can print the messages, (I will
<control=o                                                             45

**> at some point,)                                                    46

*print Branch A: ,message                                              47

V: my                                                                  48

49

3 (Message)      MESSAGE,TXT file (ndm,dialog:Xbzg)                    50

51

3A 22-MAY-74 0557-PDT  MEYER:  Test Title                          51a

Distribution:  MEYER                                               51a1

Received at:    22-MAY-74 05:57:07                                 51a2

52

3A1 blah blah                                                      52a

53

3A2 next statement                                                53a

54

3A3 paragraph three                                               54a

55

3B 21-MAY-74 0653-PDT  CRAIN at OFFICE-1:  INITIAL PURCHASE OF     55a

DESIGH CENTER TERMINALS                                           55b

Distribution:  MEYER, CRAIN at ISI, CARLSON at ISI, CROCKER at    55b1

ISI, BALZER at ISI,, LLOYD at ISI, MAYHAN at ISI, BAGGIANO at ISI,,  56

WARSHALL at SRI-ARC                                                   57

How I handle messages in NLS

Received at:   21=MAY=74 06:54:00                                              57a

                                                                               58

3B1 TERMINaL REQUIREMENTS                                                      58a

----------------------                                                         58b

                                                                               59

3B2 ------------------------------------                                       59a

                                                                               60

3B3 INTRODUCTION*                                                              60a

This message will outline the identified requirements for the                  60b

initial set of AFDSDC terminals,                                               60c

                                                                               61

3B3A These terminals will be purchased with the $25000                         61a

budgeted in the NSW implementation plan,                                       61b

                                                                               62

3B3B The purpose of this note is to provide preliminary                        62a

guidance as to what we currently think is needed, As such, it                  62b

is to be taken more as a springboard for discussion than as a                  62c

                                                                               63

*                                                                              64

*: so, now we have all the messages in nls as seperate branches!               65

*                                                                              66

*: of course now you can do whatever you like with them,  print them,
de                                                                             67

**lete a branch, etc,                                                          68

*                                                                              69

*; i have a branch called "dialog" where i keep important messages,  70

*Print Branch A; ,dialog  71

V; xbn  72

73

(Dialog)      already read -- for reference  74

75

  (ARC) miscellaneous issues, etc,  75a

76

  (OP) Output Processor  76a

77

  (Messys) Message system  77a

78

  (LP) Line Processor / terminal/ remote DNLS  78a

79

  (DEIS) project  79a

80

  (DEIS-Journal) items  80a

81

  (Journalizations) DEIS project  81a

82

  (ARPA) related stuff  82a

83

  (ETS)  Educational Testing Service  83a

84

  (NSW)  84a

85

*; say the first message was worth keeping and talked about the output p                                      86

**rocessor, i would;                                           87

*Move Branch to follow A; .op                                  88

    from A; .3a                                                 88a

L; d                                                           89

90

*                                                              91

*; then at some point i may want to examine the dialop on the op    92

*Print Branch A; .op                                           93

V; ebt                                                         94

95

(OP) Output Processor                                          95a

96

22-MAY-74 0557-PDT   MEYER;   Test Title                       96a

97

21-MAY-74 1138-P      DVN;   Problems wit the JOVIAL   Manual, Jammed    97a

98

7-MAY-74 1329-P       DHC;   Sweeping Journal Directive         98a

99

26-APR-74 1728-P      DVN;   Output Processor Race              99a

100

8-APR-74 1126-P       DVN;   New Salesman at DDSI; Ken Manire   100a

101

How I handle messages in NLS

    20-FEB-74 0700-PST   MEYER:   COM on Office-1                                    101a

                                                                                    102

    19-FEB-74 1411-PST   MEYER at OFFICE-1:   COM at Office-1                        102a

                                                                                    103

    19-FEB-74 1312-PDT   VANNOUHUYS:   COM for Utility                              103a

                                                                                    104

    19-FEB-74 1017-PDT   BAIR:   Output for Com                                      104a

                                                                                    105

    31-JAN-74 0920-PDT   VANN                                                        105a

*; that's it!                                                                        106

*Execute Logout TERMINATED JOB 16, USER MEYER, ACCT 204, TTY 57, AT
5/2                                                                                  107

**2/74 0615                                                                          108

    USED 0:0:32 IN 0:15:31                                                           108a

                                                                                    109

#quit                                                                                110

How I handle messages in NLS

(J23076)  22-MAY-74 06:32;    Title:  Author(s): N, Dean Meyer/NDM;
Distribution: /WEC EAR LAC(fyi) TO(fyi); Sub-Collections: SRI-ARC;
Clerk: NDM;
Origin: <MEYER>FORBILL,NLS;1, 22-MAY-74 06:29 NDM ;

How I handle messages in NLS

Typescript scenario of message handling,

How I handle messages in NLS

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TELNET typescript file started at WED 22 MAY 74 0559;50                    2

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#arc (settings loaded) is complete.#                                       4

5

   TENEX 1,31,64, ARC EXEC 1,51,40                          5a

@meyer                                                                     6

   JOB 16 ON TTY57 22-MAY-74 06:00                          6a

   TENEX WILL GO DOWN WED 5-22-74 2200 TIL THU 5-23-74 0300  6b

@; at this point it should have said "YOU HAVE A MESSAGE" if we
didn't f                                                                   7

**ool around before,                                                       8

@                                                                          9

@; first I rename the message,txt file t( anything                         10

@ren messAGE,txT;1 (TO BE) z [New version]                                 11

   [CONFIRM]                                                 11a

@                                                                          12

@;now i enter nls (on arc i type oldnls, you type just nls),               13

@oldnls                                                                    14

15

*; i already have a statement in my initial file called (message)          16

*Print Statement A: .message                                               17

V:                                                                         18

(Message)    MESSAGE,TXT file (ndm,dialog:xbzg)                            19

20

How I handle messages in NLS

```
*                                                                    21

*; there is a user program called INMES which copies a sequential
messag                                                               22

**e file into nls,  i will clear my program area,,,                  23

*Goto Programs Reset stack                                           24

*                                                                    25

*; load the user program,,,                                          26

*Goto Programs Get Rel File T: inmes                                 27

                                                                     28

Loading User Program                                                 29

                                                                     30

                                                                     31

*                                                                    32

*; now we can use the program like a fancy command, passing control
to i                                                                 33

**t,,,                                                               34

*Goto Programs Execute program T: inmes                             35

                                                                     36

Insert MESSAGE file <MEYER>MESSAGE,TXT   T: z,txt                    37

   at A: ,message                                                   37a

   level L:  d                                                      37b

                                                                     38

                                                                     39

Insert MESSAGE file in Progress                                     40

                                                                     41

                                                                     42
```

How I handle messages in NLS

43

\*; note that i didn't accept the default file "message,txt" but type "z,

44

\*\*txt" at that point,  now we can print the messages, (I will <control=o

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\*\*> at some point,)

46

\*Print Branch A: ,message

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V: my

48

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3 (Message)      MESSAGE,TXT file (ndm,dialog:xbzg)

50

51

  3A 22=MAY=74 0557=PDT  MEYER:  Test Title

51a

    Distribution:  MEYER

51a1

    Received at:    22=MAY=74 05:57:07

51a2

52

  3A1 blah blah

52a

53

  3A2 next statement

53a

54

  3A3 paragraph three

54a

55

  3B 21=MAY=74 0653=PDT  CRAIN at OFFICE=1:  INITIAL PURCHASE OF

55a

DESIGH CENTER TERMINALS

55b

    Distribution:  MEYER, CRAIN at ISI, CARLSON at ISI, CROCKER at

55b1

ISI, BALZER at ISI,, LLOYD at ISI, MAYHAN at ISI, BAGGIANO at ISI,,

56

WARSHALL at SRI=ARC

57

Received at:    21=MAY=74 06:54:00                  57a

58

3B1 TERMINaL REQUIREMENTS                              58a

======================                                 58b

59

3B2 ==============================                        59a

60

3B3 INTRODUCTION*                                      60a

This message will outline the identified requirements for the      60b

initial set of AFDSDC terminals,                          60c

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3B3A These terminals will be purchased with the $25000         61a

budgeted in the NSW implementation plan,                 61b

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3B3B The purpose of this note is to provide preliminarY       62a

guidance as to what we currently think is needed, As such, it     62b

is to be taken more as a springboard for discussion than as a    62c

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*                                                                 64

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*                                                                 66

*; of course now you can do whatever you like with them,   print them,
de                                                                 67

**lete a branch, etc,                                            68

*                                                                 69

*; i have a branch called "dialog" where i keep important messages,        70

*Print Branch A: .dialog                                                   71

V; xbn                                                                     72

                                                                           73

(Dialog)        already read -- for reference                             74

                                                                           75

  (ARC) miscellaneous issues, etc.                                        75a

                                                                           76

  (OP) Output Processor                                                   76a

                                                                           77

  (Messys) Message system                                                 77a

                                                                           78

  (LP) Line Processor / terminal/ remote DNLS                            78a

                                                                           79

  (DEIS) project                                                          79a

                                                                           80

  (DEIS-Journal) items                                                    80a

                                                                           81

  (Journalizations) DEIS project                                         81a

                                                                           82

  (ARPA) related stuff                                                    82a

                                                                           83

  (ETS)  Educational Testing Service                                     83a

                                                                           84

  (NSW)                                                                   84a

85

*; say the first message was worth keeping and talked about the
output p                                                          86

**rocessor, i would;                                             87

*Move Branch to follow A: .op                                   88

    from A: .3a                                                  88a

L:  d                                                            89

90

*                                                                91

*; then at some point i may want to examine the dialop on the op  92

*Print Branch A: .op                                            93

V: ebt                                                           94

95

   (OP) Output Processor                                         95a

96

   22-MAY-74 0557-PDT  MEYER:  Test Title                        96a

97

   21-MAY-74 1138-P      DVN:  Problems wit the JOVIAL  Manual, Jammed   97a

98

   7-MAY-74 1329-P      DHC:  Sweeping Journal Directive         98a

99

   26-APR-74 1728-P      DVN:  Output Processor Race             99a

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   8-APR-74 1126-P      DVN:  New Salesman at DDSI; Ken Manire   100a

101

        20-FEB-74 0700-PST   MEYER;   COM on Office-1                      101a

                                                                          102

        19-FEB-74 1411-PST   MEYER at OFFICE-1;   COM at Office-1          102a

                                                                          103

        19-FEB-74 1312-PDT   VANNOUHUYS;   COM for Utility                103a

                                                                          104

        19-FEB-74 1017-PDT   BAIR;   Output for Com                       104a

                                                                          105

        31-JAN-74 0920-PDT   VANN                                         105a

*; that's it!                                                             106

*Execute Logout TERMINATED JOB 16, USER MEYER, ACCT 204, TTY 57, AT
5/2                                                                       107

**2/74 0615                                                               108

    USED 0:0:32 IN 0:15:31                                                108a

                                                                          109

#quit                                                                     110

How I handle messages in NLS

(J23077)  22-MAY-74 06:32;   Title: Author(s): N. Dean Meyer/NDM;
Distribution: /WEC EAR LAC(fyi) TO(fyi); Sub-Collections: SRI-ARC;
Clerk: NDM;
Origin: <MEYER>FORBILL.NLS;1, 22-MAY-74 06:29 NDM ;

Control O not working in show dir command

Control O does n ot seem to work while the listing of info from the
show directory protection command, Sincethere  is much printing from
this command it is doubly annoying.                                    1

Control O not working in show dir command

(J23078)   22-MAY-74 07:49;   Title: Author(s): Robert N.
Lieberman/RLL; Distribution: /FDBK( [ ACTION ] ) ; Sub-Collections:
SRI-ARC; Clerk: RLL;

Slash in TNLS bug,

Illegal string designation message appeared after I typed a slash (/)
in TNLS, Dot (.) gave proper address (3a +0) and backslah gave proper
typeout. Tried several times, all with message "illegal s.," 22May
74                                                                       1

Slash in TNLS bug.


(J23079)    22-MAY-74 07:58;    Title: Author(s): Robert N.
Lieberman/RLL; Distribution: /FDBK( [ ACTION ] ) ; Sub-Collections:
SRI-ARC; Clerk: RLL;

Initial Implimented, First Not

I used to be able to set case mode initila upper, I just dicovered
that the command word has changed to "first", which I don't mind,
butit als says "Not Implimented."  Not under tha name maybe,          1

Notice of Outlines fo Final Report

For the Introduction (vannouhuys,outs,2)
For User Training and Developement (vannouhuys,outs,1)
For The Output Processor (vannouhuys,outs,3)                    1

Notice of Outlines fo Final Report

(J23081)   22-MAY-74 15:47;   Title:  Author(s): Dirk H. Van
Nouhuys/DVN; Distribution: /HGL( [ ACTION ] ) DVN( [ ACTION ] ) NDM( [
ACTION ] ) JCN( [ ACTION ] ) RWW( [ ACTION ] ) ; Sub-Collections:
SRI-ARC; Clerk: DVN;

Bug with jump to return in tnls and in dnls using .r

The viewspecs aren't remembered when returninng with .r .　　　　　　1

Bug with deleting the last statement in a file when it is the only
thing on the screen,


Try it,  First it doesn't changed the view on the screen, then
viewspec f results in <NUL> and jumping results in "filenumbers d not
match in storesrring",                                                    1

ILLEGAL INSTRUCTION at OPRINT = 175152 etc.

I just went to print a very ordinary file and got flipped into exec
with the message above.                                                    1

New NLS Bug

Got "NLS system error" when jumping on link typein.  Link was OK,
error if it werent' need to have error msg that's meaningful.  The
link was of the form:  COURSESTRUC,3.  File and staement number were
OK                                                                    1

Line Processor Troubles: Horizontally Split Screen

Screen horizontally split, I delete a statement in top window:
boundary and all bottom window jogs up one line as it erases deleted
line, then STAYS there. Recreate display in bottom window does right
thing but top line of bottom window remains (duplicated as) bottom
line of top window,                                                    1

Bug in User Program SENDMES

I assume this will also be a bug in the new system's equivalent
subsystem,

Bug in User Program SENDMES

The user program SENDMES cannot send messages to Tom O'Sullivan,
possibly because of the apostrophy in his name. I can neither type
it in nor accept the name offered by the ident system. It blows out
the line processor too,                                              1

Ident for McNally of ETS

Marcia: Please let both McNally and me know when ready at both sites; thanks.

Ident for McNally of ETS


Marcia:   Would you p6ease set up an ident for me as follows?
    Brian J McNally
    Educational Testing Service
    Rosedale Road, Princeton, N,J, 08540
    (609) 921-9000
    Network AND Online delivery at: ANASTASIO@Office-1
    Delivery mode: Online
    Member of CBIG group
Thank you,   --Dean

1

Proposed Course of Study for Participation in the SRI Honors
Cooperative Program in Fall 1974


This note contains material in support of my earlier note of 25 March
1974, (22474,),

Proposed Course of Study for Participation in the SRI Honors
Cooperative Program in Fall 1974

This note outlines a proposed course of study for me leading to a PhD
degree in the Engineering-Economic Systems Department at Stanford
beginning in the Fall Quarter of 1974. An earlier note (22474,) sent
on 25 March 1974 was a letter of intent requesting preliminary
authorization to participate in the SRI Honors Cooperative Program;
this note presents material in support of that request.                        1

The courses proposed are, of course, subject to change. I plan to
enroll in approximately 7 units a quarter, a half time program which
would include two regular classes and a one unit seminar.                      2

A MS degree is expected after the first 42 units of work. (The total
may be reduced if credit is granted for earlier graduate work done at
the University of Chicago and the University of California, San
Diego.) It would be received at the end of the second academic year.           3

While Stanford normally requires the equivalent of three full
academic years of residence for a PhD (six years at a half-time
program), acceptable work completed elsewhere as a graduate may be
accepted in lieu of part of this requirement up to a maximum of six
full quarters. Minimum requirements in this case are a minimum of 36
quarter units at Stanford and a minimum of three full quarters (or
the equvalent in part-time registrations as calculated on tuition
payments.) My earlier graduate work will permit me to fulfill the
residency requirement in two years of part time study at 7 units a
quarter. Additional course study and dissertaion preparation will
take approximately two more years. The internship required by the
department wll be done at ARC.                                                 4

Thus my participation will be for approximately four years under the
Honors Cooperative program.                                                    5

Proposed Courses                                                               6

    The following courses will be taken in EES:                               6a

        System Analysis: Modeling                                            6a1

            Introductory System Analysis:   201 A, B, C-- 9 units          6a1a

            Probabilistic Analysis:  221-- 3 units                         6a1b

            Dynamic Probabilistic Analysis:  251 A, B-- 6 units            6a1c

        System Analysis: Optimization                                        6a2

            Introduction to Optimization: 242-- 3 units                    6a2a

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| | |
|---|---|
| System Theory: Optimization: 243-- 3 units | 6a2b |
| Economics and Decision Analysis | 6a3 |
| Introduction to Microeconomics: 210-- 3 units | 6a3a |
| Economics of Public Policy: 211-- 3 units | 6a3b |
| Economic Analysis: 212 A, B-- 6 units | 6a3c |
| Decision Analysis: 231-- 3 units | 6a3d |
| Applications and Research | 6a4 |
| Models, Men, and Machines: 223-- 3 units | 6a4a |
| Telecommunications Systems and Public Policy: 280-- 3 units | 6a4b |
| Seminar in EES: 293-- 1 unit per quarter | 6a4c |
| System Research Seminar: 291-- number of units to be determined | 6a4d |

Approximately 15 units of classes will be taken in other
departments; these will be chosen after discussion with my faculty
advisor. Courses in the Economics, Psychology, and Industrial
Engineering Departments would be most valuable to me and to ARC.          6b

Benefits to ARC and SRI                                                   7

As mentioned in the previous note, I feel the training I will
obtain in the EES program will be of benefit to ARC and SRI. The
techniques I learn may be applied to a wide variety of system
analytic problems which arise in much of the research done at SRI,        7a

I plan to concentrate my research on the analysis for improvement
and transfer of the office automation technology we are currently
developing at ARC and in the refinement of the man-machine
interface in such a system,                                               7b

Possible focal points for research relevant to ARC deal with the
analysis of costs, markets and social effects of the sytems such
as NLS and the problems invloved in introducing the system into
typical user communities-- both the traditional office as well as
the conceptually newer geographically distributed communities of
workers linked together by computer networks,                            7c

The training I receive will also be relevant to the more general

problems involved in the development and release of both large
computer networks and the systems which run on them as well as
other telecommunications systems.  Questions concerning the costs,
markets and social effects of these systems are particularly of
interest to other groups at SRI such as the Telecommunications
group; EES currently has a research program concerned with similar
problems.

7d

identfile maintenance: a new request

Jim ...                                                                      1

There's one improvement to the identfile maintenance procedures
that would be highly desireable:  automatic updating of the Groups
named TIPG USERG SERVERG ASSOCG, in response to action taken by
Marcia on the "Type" field in an organization's identfile record.
(The four groups mentioned contain nothing but organizations as
members.)                                                                    1a

An organization's "Type" field contains one of the four strings
"Tip", "User", "Server", "Associate".  For examples, see UTAH-TIP
[Tip], UCB [User], OFFICE-1 [Server], LOGICA [Associate].                    1b

Marcia currently does maintenance manually by modifying the
membership of the appropriate group TIPG USERG SERVERG ASSOCG
whenever she modifies an orgzn's "Type" field.  This is prone to
errors, of course.  It would be nice if this maintenance were done
automatically.                                                               1c

From a procedural standpoint, the most desireable way for the
maintenance to be automated would be simply to copy Marcia's
manual procedures:                                                           1d

    have the identsystem recognize the "Type" field VALUE that is
    being inserted and then make an addition of that orgzn's IDENT
    to the corresponding TIPG USERG SERVERG or ASSOCG group record.          1d1

    (In some cases the identsystem would have to recognize TWO
    values: a new value that is replacing a previous value in the
    Type field, such as when an organization's type changes say
    from associate to user.  In these cases, there would of course
    have to be an insertion of the orgzn's ident in one group, and
    a deletion of it from another one.  This case seldom occurs in
    practice.)                                                               1d2

Another alternative (second in desireability, from Marcia's
standpoint) would be to do the maintenance similar to the way that
other "group membership" maintenance is accomplished:                        1e

    namely, modification to any one of the four groups TIPG USERG
    SERVERG ASSOCG would cause the appropriate "Type" field entry
    to be made to (or deleted from) the orgzn's record, with the
    proviso that no organization could be of more than one type.            1e1

I'd be happy to get your reactions to this.  Can you do this, or
is there someone else more appropriate for me to ask ??                      1f

    ... Mike                                                                 1g

Call for Contributions to the May '72 - June '74 Final Report


We distributed this file in hard copy at ARC and through the journal,
The journal item went out but due to a malfunction was not delivered
to anyone.  When I discovered that fact this morning I understood why
you had not submitted your outline. Sorry to be pushy when you could
not have know what was happening, Please get your outlines in as soon
as you can,

Call for Contributions to the May '72 - June '74 Final Report


Call for Contribtions to Final Report Covering May '72 thourgh June
'74                                                                          1

Mechanics                                                                    2

    Contract requirements:                                                  2a

        The draft report is due six weeks after the end of the
        contract, that is  on August 15th; but after July first we have
        money only for printing,,,not for writing or editing,,             2a1

        The contract requires an abstract, a summary, a glossary, and
        head-and-tail matter (title page certain, forms, etc,)             2a2

    Writer:                                                                 2b

        In each case we imagine that the first ident will be the pusher
        for the job of writting that part of the report,  She is
        reponsible for the outline and for co-ordination where there is
        more than one author,                                              2b1

    Reviewer:                                                               2c

        Any section that has not aready been through a publication
        process should be reviewd by someone familiar with the work but
        not an author, It would probably be useful for first authors to
        consult reviewers about outlines before they turn them in to
        the central outline,  The idents of suggested reviewers appear
        with an asterisk in the outline below,                             2c1

    Outlines:                                                               2d

        In the case of all papers that have not been published
        previously, we ask the writers for an outline to two levels
        below this one by Wednesday May 22,  We would like the oultines
        in the form of online branches which we will transfer to the
        central file (documentation,final,),                               2d1

    Submission of Drafts:                                                   2e

        On the dates due, please submit outline and finished drafts to
        reviewers or DVN or HGL by telling them they are ready in some
        file,  We will copy them into the appropriate branch in
        (documentation,final), Please submit drafts for review by
        telling DVN or HGL and the reviewer,                               2e1

    Illustrations:                                                          2f

        We encourage illustrations, The rough drafts of illustrations

should reach the SRI art by June 7th; phtographs should be
taken by by June 12th.                                      2f1

Calendar                                                      3

  May                                              3a

    Su 19                                3a1

    M  20                                3a2

    Tu 21                                3a3

    W  22                                3a4

      Outlines to DVN and HGL.   3a4a

    Th 23                                3a5

    F  24                                3a6

      Commented outlines returned to authors.   3a6a

    Sa 25                                3a7

    ----                                 3a8

    Su 26                                3a9

    M  27                                3a10

    Tu 28                                3a11

    W  29                                3a12

    Th 30                                3a13

    F  31                                3a14

  June                                             3b

    Sa 1                                 3b1

    ----                                 3b2

    Su 2                                 3b3

      First drafts to reviewers.   3b3a

| | |
|---|---|
| M  3 | 3b4 |
| Tu 4 | 3b5 |
| W  5 | 3b6 |
| Th 6 | 3b7 |
| Reviewers finish with first drafts, | 3b7a |
| Drawings to SRI Art Department, | 3b7b |
| F  7 | 3b8 |
| Sa 8 | 3b9 |
| ---- | 3b10 |
| Su 9 | 3b11 |
| M  10 | 3b12 |
| Tu 11 | 3b13 |
| W  12 | 3b14 |
| Photos taken, | 3b14a |
| Th 13 | 3b15 |
| F  14 | 3b16 |
| Second drafts to DVN and HGL, | 3b16a |
| Sa 15 | 3b17 |
| ---- | 3b18 |
| Su 16 | 3b19 |
| M  17 | 3b20 |
| Tu 18 | 3b21 |
| W  19 | 3b22 |
| Th 20 | 3b23 |
| F  21 | 3b24 |

Superwatch Average Graphs for Week of 5/5/74

TIME PLOT OF AVERAGE NUMBER OF GO JOBS FOR WEEK OF 5/5/74
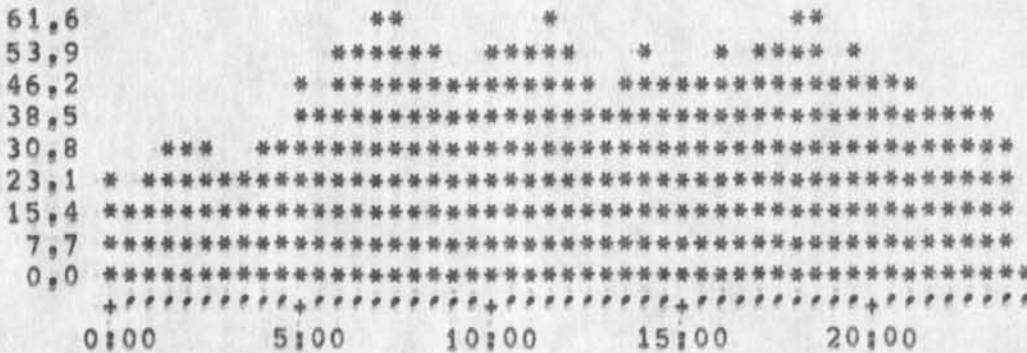x axis labeled in units of hr:min,  xunit = 30 minutes                    1
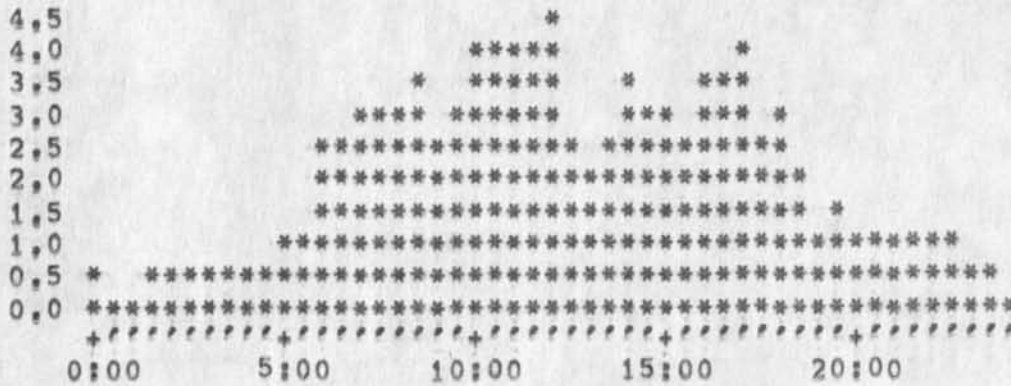
```
    4.5                        *
    4.0                      *****        *
    3.5              *    *****    *    ***
    3.0              **** ******   *** *** *
    2.5          ******************* **********
    2.0          ****************************
    1.5          ***************************** *
    1.0       *********************************************
    0.5 *  ************************************************
    0.0 ***************************************************
        +,,,,,,,,,+,,,,,,,,,+,,,,,,,,,+,,,,,,,,,+,,,,,,,,
        0:00      5:00      10:00     15:00     20:00               1a
```

TIME PLOT OF AVERAGE PER CENT OF CPU TIME CHARGED TO USER ACCOUNTS
FOR WEEK OF 5/5/74
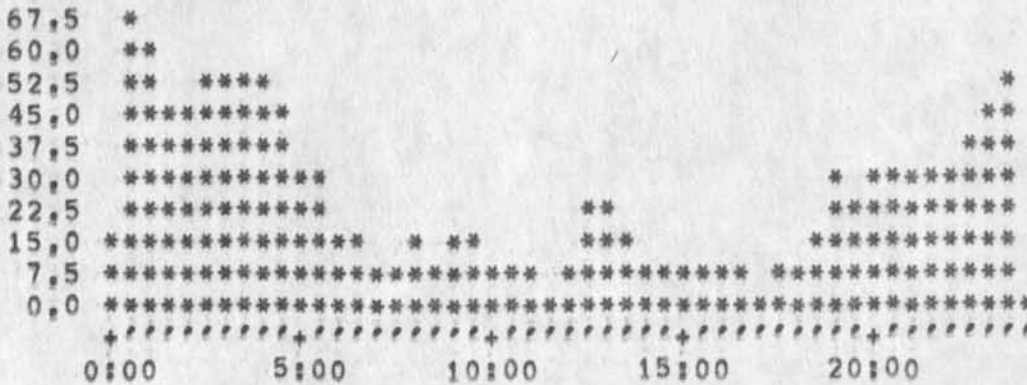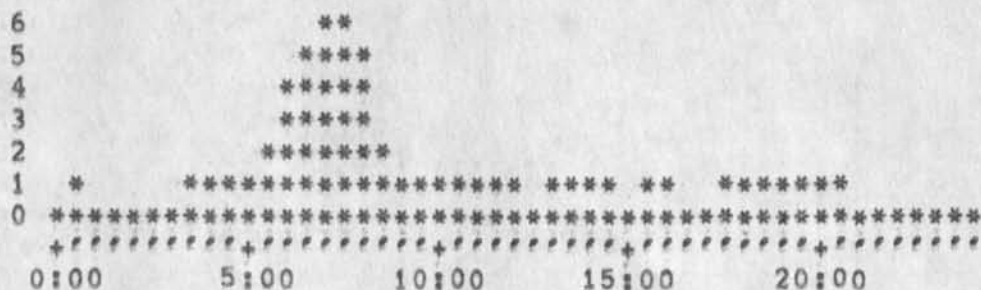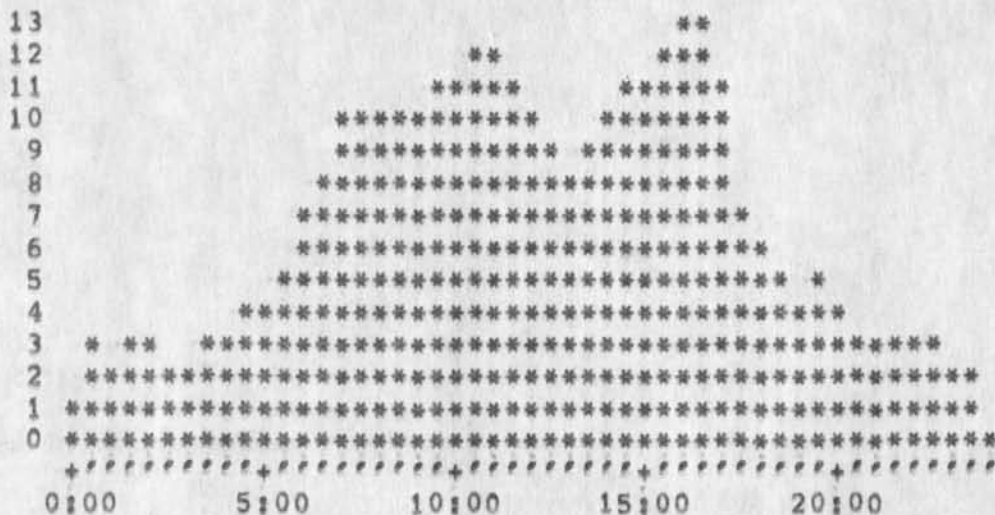x axis labeled in units of hr:min,  xunit = 30 minutes                    2

```
    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               2a
```

TIME PLOT OF AVERAGE IDLE TIME FOR WEEK OF 5/5/74
x axis labeled in units of hr:min,  xunit = 30 minutes                    3

```
    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               3a
```

1

TIME PLOT OF AVERAGE NUMBER OF NETWORK USERS FOR WEEK OF 5/5/74
x axis labeled in units of hr:min,  xunit = 30 minutes                              4
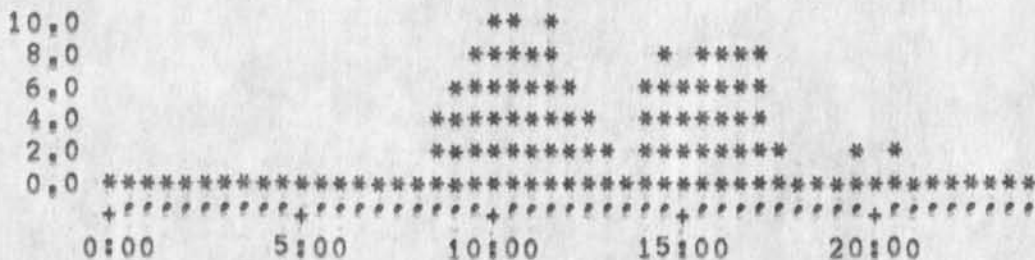
```
    6                   **
    5                   ****
    4                   *****
    3                   *****
    2                   *******
    1   *     ******************* **** **   *******
    0   **********************************************************
        +''''''''+''''''''+''''''''+''''''''+''''''''
      0:00      5:00     10:00     15:00     20:00                               4a
```

TIME PLOT OF AVERAGE NUMBER OF USERS FOR WEEK OF 5/5/74
x axis labeled in units of hr:min,  xunit = 30 minutes                              5

```
   13                                        **
   12                         **             ***
   11                         *****          ******
   10                   ***********          *******
    9                   ************         ********
    8                   ***************************
    7                   ******************************
    6                   *********************************
    5                   *****************************  *
    4                   ***********************************
    3   * **     ************************************************
    2   ***********************************************************
    1   **********************************************************
    0   **********************************************************
        +''''''''+''''''''+''''''''+''''''''+''''''''
      0:00      5:00     10:00     15:00     20:00                               5a
```

TIME PLOT OF AVERAGE PER CENT OF SYSTEM USED IN DNLS FOR WEEK OF
5/5/74
x axis labeled in units of hr:min,  xunit = 30 minutes                              6

```
   10,0                    ** *
    8,0                    *****      * ****
    6,0                    *******    *******
    4,0                    *********  *******
    2,0                    ********** ********   * *
    0,0   ********************************************************
          +''''''''+''''''''+''''''''+''''''''+''''''''
        0:00      5:00     10:00     15:00     20:00                             6a
```

User program documentation in new nls

If a program has a CML interface, documentation for that program can
be located in the help database and accessed via <^Q> while using the
program.  There is a place in the Help database for users' program
documentation.  Any user may document their programs in this place.
Please see me before entering information into the Help database.
There are some simple format conventions that should be followed.  --
KIRK                                                                   1

All-ARC meeting, 1000 Tues 28 May

Meeting to: Catch up on general events; Hear Dick's good news re.
NSW; Discuss new aspects of near-term plans; Have brief, summary
discussion of longer-term planning.                                   1

Codes used in the Master Catalog, November 1972

| | | |
|---|---|---|
| *a1   First Author | *a1 | 1 |
| #1 job title | #1 | 1a |
| #2 corporate affiliation | #2 | 1b |
| #3 suborganization | #3 | 1c |
| #4 street address | #4 | 1d |
| #5 city, state, zip | #5 | |
| | | 1e |
| *a2   Second author | *a2 | 2 |
| #1 job title | #1 | 2a |
| #2 corporate affiliation | #2 | 2b |
| #3 suborganization | #3 | 2c |
| #4 street address | #4 | 2d |
| #5 city, state, zip | #5 | |
| | | 2e |
| *a3   Third author | *a3 | 3 |
| #1 job title | #1 | 3a |
| #2 corporate affiliation | #2 | 3b |
| #3 suborganization | #3 | 3c |
| #4 street address | #4 | 3d |
| #5 city, state, zip | #5 | |
| | | 3e |
| *a4   Fourth author | *a4 | 4 |
| #1 job title | #1 | 4a |
| #2 corporate affiliation | #2 | |
| | | 4b |

[no limit to number of authors]

5

Codes used in the Master Catalog, November 1972

Codes used in the Master Catalog, November 1972

| | | |
|---|---|---|
| *b7 Third addressee | *b7 | 12 |
| *b8 Fourth addressee | *b8 | 13 |
| *b9 ARC number of addressee list | *b9 | 14 |
| *b10 Distribution list in ident form | *b10 | 15 |
| *b11 Second, third editors | *b11, *b13 | |
| | | 16 |
| *c1 Title of item | *c1 | 17 |
| #1 subtitle | #1 | 17a |
| #6 pages | #6 | 17b |
| *c2 Title of more inclusive document | *c2 | 18 |
| #1 subtitle | #1 | 18a |
| #2 volume | #2 | 18b |
| #3 number | #3 | 18c |
| #6 pages | #6 | 18d |
| *c4 Also published in: | *c4 | 19 |
| *c5 Also published as: | *c5 | 20 |
| *c6 Also to be presented at: | *c6 | |
| | | 21 |
| *d1 Day and/or month and/or year issued | *d1 | 22 |
| *d2 Date written or submitted | *d2 | 23 |
| *d3 Period covered | *d3 | 24 |
| *d4 Date of conference or meeting | *d4 | 25 |
| *d5 Date of *c4, *c5 or *c6 | *d5 | |
| | | 26 |
| *f1 Form of item | | 27 |
| a article | ma map | 27a |

Codes used in the Master Catalog, November 1972

| | | |
|---|---|---|
| ad advertisement | mn users' guide or manual | 27b |
| b  book | n  newsletter issue | 27c |
| bi biography | p  paper | 27d |
| bl bibliography | pg program | 27e |
| br brochure | pi picture, photo | 27f |
| ch chapter | pr proposal | 27g |
| d  draft | pt patent | 27h |
| ds dissertation | qu questionnaire | 27i |
| f  film | r  report | 27j |
| g  proceedings | re press release | 27k |
| gr graph or chart | s  slide | 27l |
| i  abstract or review | sp specification, standard | 27m |
| j  ARC or NIC journal item | t  talk | 27n |
| k  periodical, newspaper | th thesis | 27o |
| l  letter | tr translation | 27p |
| lt transmittal letter | u  functional doc | 27q |
| m  memo | z  contents of functional doc | 27r |
| | | 27s |

*f2  Media

|  |  |
|---|---|
| | 28 |
| a  carbon copy | 28a |
| c  copy, not original | 28b |
| f  film | 28c |
| l  microfilm | 28d |
| m  microfiche | 28e |
| ma magnetic tape cassette | 28f |
| o  original | 28g |
| p  photocopy by ARC | 28h |
| pa partial photocopy | 28i |
| r  machine readable | 28j |
| s  slide | 28k |
| t  paper tape | 28l |
| v  videotape | 28m |
| x  reference only | 28n |

| | | |
|---|---|---|
| *f3  Source file name | *f3 | 29 |
| *m1  Sponsor of meeting | *m1 | 30 |
| #1 name of meeting | #1 | 30a |
| #5 city, state of meeting | #5 | |
| | | 30b |
| *n1  Item that includes this item | *n1 | 31 |
| *n2  Item(s) this item includes | *n2 | 32 |

Codes used in the Master Catalog, November 1972

| | | |
|---|---|---|
| *n4  Doc(s) to which this refers | *n4 | 33 |
| *n5  Doc this abstract describes | *n5 | 34 |
| *n6  Doc(s) this one accompanies | *n6 | 35 |
| *n7  Doc(s) this one is related to | *n7 | 36 |
| *p1  Project name assigned by issuer | *p1 | 37 |
| *p2  Project no, assigned by issuer | *p2 | 38 |
| *r1  No,(s) assigned by issuer | *r1 | 39 |
| *r2  No,(s) assigned by govt agency | *r2 | 40 |
| *s1  Sponsoring agency | *s1 | 41 |
| #3 suborganization | #3 | 41a |
| #5 city, state zip | #5 | 41b |
| #6 contract or grant number | #6 | 41c |
| #7 project number | #7 | 41d |
| #8 order number | #8 | 41e |
| #9 other number | #9 | 41f |
| *s2  Second sponsoring agency | *s2 | 42 |
| #3 suborganization | #3 | 42a |
| #5 city, state zip | #5 | 42b |
| #6 contract or grant number | #6 | 42c |
| #7 project number | #7 | 42d |
| #8 order number | #8 | 42e |
| #9 other number | #9 | 42f |

*s3   Third sponsor agency            *s3
                                                              43

*w1   Date received at ARC            *w1                     44

*w2   Date cataloged at ARC           *w2                     45

*w3   Initials of contributor         *w3                     46

*w4   Source if not a1, b2, or w3     *w4                     47

*y1   Brief abstract                  *y1


                                                              48




*y2   Keywords from doc or author     *y2                     49

*y3   Keywords assigned at NIC        *y3
                                                              50

*y8   "Updated by xxxx;"
      "Updates xxxx;" "Obsoletes xxxx;"   *y8                 51

*y9   "Obsoleted by xxxx"             *y9


                                                              52

*z1   NIC holdings                    *z1                     53

*z2   Subcollections                  *z2                     54

NDM 23-MAY-74 13:34   23101

Description of Codes used in Catalog

Augmentation Research Center
Stanford Research Institute
Menlo Park, California                                              1

GENERAL                                                            2

   Abbreviations                                                2a

      Abbreviation is avoided except in copying any actually present
         in proper names and titles,                             2a1

      Exceptions:                                              2a2

         Codes of ARPA network sites may be entered in *a1#2 and
           *b5#2, but only in citations for informal documents,   2a2a

         Code "org" may be entered in *a#2 when information is
           identical to *b2 or *b4,  See *a1 for further
           information,                                         2a2b

   Added information                                            2b

      Information known or very probable and of importance to the
         reference, such as an unstated author, organization, date
         of publication, should be given in brackets [ ],       2b1

      In general, only information actually in the document is to be
         recorded,  Recording presumed information is risky, and is
         poor practice also because copies of the document don't
         carry the information thus supplied,                    2b2

   Proper names                                                 2c

      All proper names will be entered in direct order, omitting only
         "the", beginning corporate names, and any title in personal
         names,                                                  2c1

   Document reference numbers                                   2d

      These numbers will be typed without parentheses; and if there
         are more than one, without commas between them, just a
         space, i,e,, *n1 5891 5892 5893                         2d1

   Distribution limitation                                      2e

      Notice of any limitation on distribution to foreign nationals,
         of client confidential, etc, will be entered as the first

Description of Codes used in Catalog

information in the abstract,   The text [L] will be entered
after the title,                                                          2e1

*a1 FIRST AUTHOR --
   Author's name, as given, in direct order, omitting Dr,, Ph,D,,
   etc, (No limit to number of authors,) Put period and space
   between initials of names,                                             3

   #1 JOB TITLE --
      If given in the document,                                           3a

   #2 CORPORATE AFFILIATION --
      If the author's organization is the publisher of the
      document, enter the letters "org" in #2, as the same
      information can be retrieved from *b2 (see below for multiple
      authors),   For ARPA Network nodes, this may be entered in the
      code: "ARC", "LINC", etc,  If author's organization is not
      the publisher of the document, as in a periodical article,
      meeting proceedings, letter or memo, enter the the
      organization information as given, (Author's organization is
      not considered the publisher of his letter or memo,) When two
      or more consecutive authors of an article have the same org,
      enter the org after the last,  When *b2 is used and two or
      more consecutive authors have the same org, type "org" in #2
      after the last author of these,  For other notes on
      organization names, see notes on *b2,                               3b

   #3 SUBORGANIZATION --
      If more than one subordinate level is given, select one,           3c

   #4 STREET ADDRESS --
      Use this element for building name or number, suite number,
      or other specific of address when practicable, the intent
      being to allow construction of a mailing address from #1-#5,
      When an organization, e,g,, Chemical Abstracts Service, is
      situated at another org, but is not a sub-org, use #4 for the
      site, e,g,, Ohio State University, cf, *b2#2,                       3d

   #5 CITY, STATE, ZIP --
      Spell out, e,g,:  Washington, D,C, 20202; New York, New York
      10036; Menlo Park, California  94025,                               3e

   #7 IDENT --
      Not used for manual input; supplied by journal,                    3f

*a2 SECOND AUTHOR --
   No limit to number of authors, Use separate number for each
   author,                                                                4

Description of Codes used in Catalog

*b1 EDITOR --
    Use for editor or compiler. Use same subordinates #1, #2, etc,
    as for authors. For additional editors use *b11 and *b13      5

*b2 FIRST ORGANIZATION --
    Use for agency preparing or issuing a report, or other case of
    non-commercial publisher. For agencies, such as National
    Library of Medicine, which usually appear independently, enter
    these as *b2, not as subordinate to U.S. HEW. Ambiguous names,
    such as Office of Education, should be entered in #3, with U.S.
    HEW as *b2.      6

  #2 INTERMEDIATE ORGANIZATION --
      Use when essential to completeness, as in some government
      organizations. Always use #3 for significant suborganization,
      inserting #2 when essential.      6a

  #3 SUBORGANIZATION --
      Use for significant suborganization, skipping #2 unless an
      intermediate is important for clarity. Avoid using when an
      organization is a smaller unit, e.g., an Institute, but only
      based physically at the larger, such as a university. Place
      the Institute in *b2, and the university in *b2#4.      6b

  #4 and #5 --
      Use street and city address, use zip code.      6c

*b3 SECOND ORGANIZATION --
    Use for a second agency (not a government sponsor) in case of
    joint effort resulting in a document bearing both names.      7

*b4 PUBLISHER --
    Use for commercial publishers, when documenting books, or noting
    periodicals as entities. Use only #5 city when well known,
    Abbreviate name when well known (McGraw-Hill; Wiley; etc).      8

*b5 FIRST ADDRESSEE OF LETTER OR MEMO --
    To be used, even when addressee list is so lengthy as to cause
    use of *b9. Can be a group or class, even when non-explicit,
    such as [ARPA Network Working Group]. Use ident, in *b10. Use
    form of address in #1, #2, etc, given in the document, do not
    try to standardize (NOTE: 1. No control over outside entries, 2.
    Retrieval may be by entry as given, as often as not). When a
    memo or letter but no addressee given: [unaddressed].      9

*b6 through *b8 additional addressees      10

*b9 ARC DOCUMENT NUMBER OF ADDRESSEE LIST --
    When an addressee list is attached, or when list of addressees

exceeds 4, a separate document should be indicated or created,
and referenced here.                                                    11

*b10 DISTRIBUTION LIST IN IDENT FORM --
For group ident, when addressed to Network Working Group or
other recognized group whose membership is given in its ident
file, Journal system uses this.                                         12

*b11 SECOND EDITOR                                                      13

*b12 Used by journal for additional addressees, after *b10             14

*b13 THIRD EDITOR                                                       15

*c1 TITLE OF ITEM --
Title of report, article, book or journal considered as a whole.
When a memo contains the line "Subject: ..." or "Re: ...," this
text, including "Subject:" or "Re:", is entered as the title.
Title is essential; letters with no explicit title should have
descriptive title in brackets. Example: [Transmittal Letter].
When the item referenced is a review or abstract of another work
of the same title, add [Review] or [Abstract].
Limitation on use of a document should be indicated by [L]
following the title, with an elaboration in *y1.                        16

  #1 SUBTITLE --
  Include any subordinate phrase in the title rather than as
  subtitle, as a rule.
  Use subtitle only for lengthy title strings or for alternate
  titles, and for series notes.
  Vol. 1 etc. of books goes into subtitle when subtitle is
  title of vol. only.                                                   16a

  #6 PAGES --
  Use for page data when *c2 is not present or when *c1 is
  independently paginated. Examples: 263p. [for book with 263
  pages]. When document is not paged : [unpaged]. When document
  is numbered by sections: [separately paged].                          16b

*c2 TITLE OF MORE INCLUSIVE DOCUMENT --
Use for name of journal when *c1 is an article from it.
Use for name of book when *c1 is a chapter from it.
Use for Proceedings when *c1 is a paper published in it.
Use for encyclopedic work or series when *c1 is a volume from
it.
Use for functional document name when *c1 is a part or section
of contents. Example: Section 3, Network User Guide.                    17

#1 SUBTITLE --
    Use only when inclusion in *c2 is awkward,                                17a

    Examples:  *c2 MICRODOC #1 Journal of the Microfilm Association
       of Great Britain -or- *c2 Bulletin de Documentation
       Bibliographique  #1 Pt, 2 of Bulletin des Bibliotheques de
       France,                                                              17a1

#2 VOLUME --
    Examples: Vol, 35, for volume of periodical,  Vol, 35 for
    volume of encyclopedia or a series, Vol, 1, etc, of books
    goes into subtitle when subtitle is title of vol, only,             17b

#3 NUMBER --
    Use for issue number of periodical,
    Examples: No, 10
    No, 106 when no volume number exists,                                17c

#6 PAGES --
    Use for articles or other parts of documents,  Include p,
    Example:    p,256-275,  When pages are not numbered, use
    [Unpaged], When sections are separately paged, use
    [Separately paged],                                                  17d

*c4 ALSO PUBLISHED IN: --
    When such information is given, Use *d5 for date,                    18

*c5 ALSO PUBLISHED AS: --
    When such information is given, Use *d5 for date,                    19

*c6 ALSO TO BE PRESENTED AT: --
    For reports or articles which contain such a statement,  Code as
    *f1 p after *f1 r or *f1 a, Use *d5 for date,                        20

*d1 DAY AND/OR MONTH AND/OR YEAR ISSUED --
    Use for all types of items,  Use for date of publication of
    published items, for date of letter or memo,  If approximate
    date is known, use [Undated] and put info in *y1,  Use *d2 if an
    earlier date of preparation is given, Use *d4 for a meeting date
    or dates whether the same as or different from *d1, Use form: 12
    November 1969, [Spring 1970], This field should never be left
    blank,                                                               21

*d2 DATE WRITTEN OR SUBMITTED --
    Use in addition to *d1 when an earlier date of preparation or
    submission is shown, Use form: 12 November 1970, Use for patent
    filing date,                                                         22

*d3 PERIOD COVERED --

Use for progress reports, etc,, when indicated by cover, title
or abstract, Use forms: 1 July 1969 - 30 June 1970; 1 July - 30
September 1970,                                                    23

*d4 DATE OF CONFERENCE OR MEETING --
Use in addition to *d1 whether or not *d1 gives date of
published proceedings, Use forms: 12-15 November 1970; 30
November - 2 December 1970,                                        24

*d5 DATE OF *c4, *c5 or *c6                                        25

*d6 DATE OF FILE REVISION -- (used by Journal system)
Example: 1/20/72                                                   26

*d7 TIME OF FILE REVISION -- (used by Journal system)
Example: 1920:32                                                   27

*f1 FORM OF ITEM --                                                28

NOTE: MULTIPLE CODES MAY BE USED, e,g,, r p - numbered report to be
given at a meeting; a tr - translation of an article, FIRST
CODE DETERMINES FORMAT, This element has two uses: formatting
for the printed catalog, and search keys for online retrieval,    29

a - ARTICLE --
article in journal                                             29a

ad - ADVERTISEMENT --
advertisement, from newspaper, periodical (compare br -
brochure; pg - meeting program),                               29b

b - BOOK --
for commercially published work, usually hardbound,            29c

bi - BIOGRAPHY --
a resume or a biographical note in a journal, program, etc,    29d

bl - BIBLIOGRAPHY --
may be a separate, or a part of a larger work primarily coded
ch                                                             29e

br - BROCHURE --
for separate promotional material, even 1 page,                29f

ch - CHAPTER --
chapter or portion of book not a proceedings volume,           29g

d - DRAFT --

use when stated or known to be a draft, not a finished
product                                                                                  29h

ds - DISSERTATION                                                                         29i

f - FILM --
Use for movie or sound, Not for microfiche                                               29j

g - PROCEEDINGS --
use when *c1 is a proceedings volume,
When a paper *c1 from a proceedings is indicated, use p,                                 29k

gr - GRAPH OR CHART --                                                                   29l

i - ABSTRACT OR REVIEW --
Use when the item catalogued is an abstract or review, as
well as bracketing the word following the title in *c1,                                  29m

j - ARC OR NIC JOURNAL ITEM                                                              29n

k - PERIODICAL, NEWSPAPER --
periodical, newsletter, journal, use When journal, etc, in
its entirety is meant, For an article use a, for a newsletter
issue use n,                                                                             29o

l - LETTER --
Use for a personal letter or where the term appears,
For an unspecified letter to several addressees, usually use
m,                                                                                       29p

lt - TRANSMITTAL LETTER                                                                  29q

m - MEMO --
Use when the term appears, and when a group of addressees are
indicated,                                                                               29r

ma - MAP                                                                                 29s

mn - USER's GUIDE OR MANUAL                                                              29t

n - NEWSLETTER ISSUE --
A newsletter as an entity, not a specific issue, should be
indicated j,                                                                             29u

p - PAPER --
Use for an individually issued preprint or reprint of a
presentation, as well as for a paper,                                                   29v

pg - PROGRAM --

Program of meeting, including first announcements,  When ARC
member is speaker, etc,, indicate in abstract, and note in
keywords: e.g,, DCE speaker,                                      29w

pi - PICTURE, PHOTO --
Use for references to photographs or pictures when separately
cataloged in *c1,                                                29x

pr - PROPOSAL                                                     29y

   Use *b5 for addressee, and note "Proposal to ,,," in *y1,     29y1

pt - PATENT                                                       29z

qu - QUESTIONNAIRE                                               29a@

r - REPORT --
Use for technical reports and short publications not known to
be articles, papers, etc, Use for RFC's,                        29aa

re - PRESS RELEASE --
Intended for announcements so labelled, and other
announcements not meeting programs, advertisements, or
brochures,                                                       29ab

s - SLIDE                                                        29ac

sp - SPECIFICATION, STANDARD                                     29ad

t - TALK --
Use for an oral presentation recorded on audio or video tape,
and for a written version of an oral presentation not
expected to be published,                                       29ae

th - THESIS                                                      29af

tr - TRANSLATION --
May be accompanied by original or original may be separately
cataloged, e,g,, an original in Japanese may be attached to a
translation, rather than separated,                             29ag

u - FUNCTIONAL DOCUMENT --
Use when major content of the document is subject to
addition, deletion or substitution, as in looseleaf changes,    29ah

z - CONTENTS OF FUNCTIONAL DOC --
Use as primary code for any document made a part of a
functional document,  In conjunction, use *c2 to contain the
name of the functional document, Examples: *c2 Part, ARPA

Description of Codes used in Catalog

> Network Resource Notebook, *c2 Section 3, Network Information
> Center User Guide,                                                  29ai

*f2 MEDIA                                                             30

a - CARBON COPY --
Use if copy in hand is a carbon copy,                                30a

c - COPY, NOT ORIGINAL --
If photocopy received at ARC is obviously a copy made of an
existing document such as a periodical article,                      30b

f  FILM --
Use for movie and/or sound film,  Not for microfiche,                30c

l - MICROFILM --
Use for roll microform,                                              30d

m - MICROFICHE --
Use for items on sheet film,                                         30e

ma - MAGNETIC TAPE CASSETTE                                          30f

o - ORIGINAL --
Original as first issued,  Use c if photocopy received at ARC
is obviously a copy made of an existing document e,g,, a
periodical article,  Use p if copy is a photocopy made at
ARC, Use a if copy in hand is a carbon copy,                         30g

p - PHOTOCOPY BY ARC --
Use for photocopy made at ARC,  Compare pa,                          30h

pa - PARTIAL PHOTOCOPY
Use for photocopy of cover, title page, etc, sometimes made
to capture part of a document when the whole is not
obtainable or retainable,                                            30i

r - MACHINE READABLE --
Use to indicate existence of item in machine readable form,
May be used in addition to o, etc,                                   30j

s - SLIDE --
Use to indicate a chart, photograph etc, is in form of slide,        30k

t - PAPER TAPE --
Use to indicate existence on paper tape,                             30l

v - VIDEOTAPE                                                         30m

Description of Codes used in Catalog

   x = REFERENCE ==
      Used to indicate ARC has recorded the reference but does not
      have the full document.                                             30n

*f3 SOURCE FILE NAME == (used by Journal system)
      Use for name of machine file if document is machine-readable.       31

*m1 SPONSOR OF MEETING ==
      Name of sponsor of conference or meeting.  Use for name of
      organization holding or sponsoring meeting.                         32

   #1 NAME OF MEETING ==
      examples: Conference On Image Transmission,  Annual meeting.     32a

   #5 CITY, STATE OF MEETING                                             32b

*n1 ITEM THAT INCLUDES THIS ITEM ==
      ARC number of item that includes this item.  Use to record ARC
      number of book, proceedings, etc,, where item in hand is a part,
      or attachment.  Example: 5606                                       33

*n2 ITEMS(S) THIS ITEM INCLUDES ==
      ARC number(s) of item(s) this item includes.  Use to record ARC
      numbers of subordinate parts or enclosures, etc, of item in
      hand, Example: 5603 5604                                            34

*n3 Not presently used.                                                  35

*n4 DOC(S) TO WHICH THIS REFERS ==
      ARC number(s) of ARC document(s) to which this refers.  Use to
      record explicit reference by document in hand to other ARC
      documents.                                                          36

*n5 DOC THIS ABSTRACT DESCRIBES ==
      ARC number of document this abstract describes. Use to record
      number of complete document when a condensation is in hand.         37

*n6 DOC(S) THIS ONE ACCOMPANIES ==
      ARC number(s) of documents this one accompanies. Use to record
      transmittal letter for doc, and such.                               38

*n7 DOC(S) TO WHICH THIS ONE IS RELATED ==
      Use for related documents not necessarily received or filed
      together.                                                           39

*p1 PROJECT NAME ASSIGNED BY ISSUER ==
      Use when explicit; use for code names. Examples: Project MAC;
      MEDLARS                                                             40

*p2 PROJECT NUMBER ASSIGNED BY ISSUER --
    Use when organization assigns a project number, often in
    addition to a sponsoring agency's number.                    41

*r1 NUMBER(S) ASSIGNED BY ISSUER --
    Serial or or code number(s) assigned by issuer.  Use for serial
    or codes assigned to the individual title by the agency issuing
    it.  Examples: TM 42; Report 17; SBN 13-165969-3          42

*r2 NUMBER(S) ASSIGNED BY GOVT AGENCY --
    Serial or code number(s) assigned by government. Use for numbers
    assigned to individual report titles. Examples: AD 651 730; PB
    117 190; LC 70-79429                           43

*s1 SPONSORING AGENCY --
    Use for funding agency, private or governmental.           44

  #3 SUBORGANIZATION --
      Use for most significant subdivision of relevant sponsor,
      skipping #2 unless an intermediate is important for clarity.  44a

  #5 CITY, STATE, ZIP --
      Use in full.                         44b

  #6 CONTRACT OR GRANT NUMBER --
      Use as given, excluding "No." or "#".           44c

  #7 PROJECT NUMBER --
      Use for sponsor's project number if any         44d

  #8 ORDER NUMBER --
      Use for sponsor number so designated          44e

  #9 OTHER NUMBER --
      Use for any other number(s) attached by the sponsor   44f

*s2 SECOND SPONSORING AGENCY --
    Use for second sponsor with same subelements as *s1   45

*w1 DATE RECEIVED AT ARC --
    Use form: 12-27-70                      46

*w2 DATE CATALOGED AT ARC --
    Use form: 12-28-70                      47

*w3 INITIALS OF CONTRIBUTOR --
    Use for attribution to ARC source when desired. Use form: dce  48

*w4 SOURCE IF NOT *a1, *b2, or *w3 --

Use as credit to donor or as indication of future source.
Examples: John F. Bennett, IBM Los Gatos; CFSTI; ERIC CLIS; NTIS      49

*w5 CLERK SUBMITTING FOR AUTHOR --
Ident of person creating online file for author                      50

*w6 DATE LAST EDITED --
Use when changing a statement                                        51

*w7 IDENT OF PERSON CHANGING --
Used with *w6 when changing a statement                              52

*y1 BRIEF ABSTRACT --
Use abstract in report, if brief and informative. Use modified
abstract from copyrighted publication. Use for clarification
when title is not informative. Use (with [L] in title) for
statement of any limitation imposed on the contents or citation.
Example: LIMITATION: This document not to be cited. Indicate
valuable bibliographies.                                             53

*y2 KEYWORDS FROM DOC OR AUTHOR --
Keys to subject content. For keywords assigned by report
producer or NTIS, etc. Separate with semicolons and end with
semicolon.                                                           54

*y3 KEYWORDS ASSIGNED AT NIC --
Keys to subject content. For keywords assigned by NIC in absence
of ones given in the document or index. Separeate with
semicolons and end with semicolon.                                   55

*y4 KEYWORDS ASSIGNED AT NIC --
For use in special cases.                                            56

*y8 "UPDATED BY xxxx;" "UPDATES xxxx;" "OBSOLETES xxxx;" --
Documents updated or obsoleted.                                      57

*y9 "OBSOLETED BY xxxx" --
Notice of document which obsoletes                                   58

*z1 NIC HOLDINGS --
Use when transmission or general distribution is made. Examples:
All; MAC, SDC, UCSB                                                  59

*z2 SUBCOLLECTION --
Use to indicate status of an item as a part of one or more
subcollections. Examples: NIC, NAS, NIC SHE, NIC NWG, CBI, SUR,
NMN, PODAC,                                                          60

*z3 ARC CATALOG MANAGEMENT CODES --

ARC master catalog management descriptions, Use for notation of
data management, such as form of entry, examples: old, Walt 1;
new, Present coding uses: new                                     61

*z4 ARC HOLDINGS --                                              62

*z5 LOCATION(S) OF COPY --
    e.g., original DCE; partial photo ARC.                       63

All statements terminate with: space *                          64

First Final Report Bulletin

Title                                                                    1

    We propose "Knowledge Workshop Development".                         1a

References                                                               2

    To Journal items,                                                    2a

        Please put in links to journal where you cite them; we will run
        the user program makereff to create references later,            2a1

    To the Rest of the World,                                            2b

        Please put offline refernces as a branch at the end of your
        submission in the format makeref creates:                        2b1

            (XDOC NUMBER IF AVAILABLE)A, A, Author, Title, Publisher,
            City, State # Month 19??, #p,                                2b1a

Authorship in the Sense of Intellectual Credit                           3

    The lists of writers in (documentation,final,outline) are not
    congruent with the list of people who will appear on the report to
    get credit for the intellectual work, Most obviously several
    people wh o now work elsewhere will recieve credit; in some case
    the reviewers will as well, in other cases not, when we are sure
    that the outline will hold, we will issue for comment a scheme for
    allocating intellectual credit,                                      3a

Publication                                                              4

    We hope that some parts of this report can be published later in
    journals,                                                            4a

Unreadablity                                                             5

    Several important people have found ARC publications unreadable,
    There are many reasons, but we have one basic suggeestion: as you
    write please try to imagine a reader, You might also find
    something useful in (1journal,17799,2:xb)                            5a

Acronyms                                                                 6

    The contract calls for us to use acronyms sparingly and to define
    them carefully at first use when we do use them,                     6a

Driven Over Alloocation by Mystery Files

some of you may recall that last Friday and Monday I tried to send a
journal item which was never delivered because of a confusing
accumulation in the distribution field following several attemps to
distribute,                                                              1

An sther problem seems to have arisen from that evil journal
submission, Today the system began to tell me I was out of pages
although Show Disc asserted that I had 25 or so pages to spare, Jeff
discovered that the culpable pages were in the partial copy of my
sendmail file, invisible to me,  Presumably they had accumulated
during th various submission attemps,                                   2

This seems only one way in which a user could accumulate pages which
the monitor counts against him but which neither show directory nor
show disc status will reveal, It's a pretty frustrating feeling, I
suggest making those files visisble,                                    3

copy, move, delete, and transpose with filter

I am confused as to how copy, delete, move, and transpose structure
with filter should work.                                            1

Assume that a plex with the following structure exists:             2

   A                                                  2a

      B                                2a1

         C              2a1a

         D              2a1b

      E                                2a2

Now assume you do a copy plex with filter that selects all statements
but statement B.                                                    3

Then the following are the possible results:                        4

   method 1:                                          4a

      A                                4a1

         C              4a1a

           D    4a1a1

         E              4a1b

   method 2:                                          4b

      A                                4b1

         C              4b1a

         D              4b1b

         E              4b1c

   method 3:                                          4c

      A                                4c1

         C              4c1a

         D              4c1b

      E                                4c2

copy, move, delete, and transpose with filter

method 4:                                              4d

  A                                               4d1

    DUMMY STATEMENT                              4d1a

      C                                     4d1a1

      D                                     4d1a2

    E                                         4d1b

Old NLS, and the current implementation on the new NLS both use
method 1. I am in the process of implementing delete, move, and
transpose with filter.  I will use method 1 to get something running.
However, please cast your vote for your preferred method to Susan via
the feedback mechanism.                                    5

CML Backspaces

There is a inconsistancy in the CML interpreter.                                    1

    In expert/expert recognition mode when the user types the sequence
    <Space><Letter><Backspace>   the backspace is executed as a double
    backspace and the interpreter considers the next letter input as a
    LEVEL1 Command.                                                             1a

    It would seem more consistent to have one backspace leave the
    interpreter in a state expecting a second level command sequence,
    and require the user two type two backspaces (or a command delete)
    to get to the top of the parse tree.                                        1b

DCE/JCN/RWW:  Both JUDY COOKE and CAROL GUILBAULT have informed me
they are resigning from SRI-ARC.  For each, the last day is May 31,
Carol has submitted a resignation letter to Wing; Judy will do so
next week,  We of course have no plans to replace either of them, but
may occasionally during the next month need to hire temporary
(one-day) help with the Arpanet Directory and Resource Notebook, ...
Mike                                                                    1

Inquiry to COMARCO about Word Processing Systems for SRI Text
Handling Study

Stanford Research Inst   itute
Augmentation Research Center
333 Ravenswood Avenue
Menlo Park, California   94025
24 MAY 74

John F. Cogger
Manager Computer Systems
COMARCO Inc.
P.O. Box 519
Port Hueneme, Calif.    93041

Dear Mr. Cogger:

1

I inclose a couple of recent ARC papers that may be of interest to
you. As you can see we are making an effort to make NLS avialable
through cheaper and more generally avialable terminal systems.

2

Another matter prompts this letter however. I am enaged with other
(non-ARC) members of the SRI Staff in a study looking to propose an
insitute-wide, computer-based text handling system. We are not
considering NLS or any system as all-embracing as NLS at the first
step. In fact your system, which I recall you were just beinging to
offer for sale as a hardware-software package when I visisted, seems
to me an attractive candidate.

3

The SRI study has not really reached the point of comparing candidate
word-processing systems. But I would now welcome any writen
description you have which I could circulate to the people working
with me.

4

Sincerely,


Dirk van Nouhuys
Research Analyst
Augmentation Research Center

kfb

Bug with Filename recognition in Load Program command


Maybe this is an NP,  Altmode should cause filename recognition for a
file in PROGRAMS directory without typing programs, first,                    1

copy move etc with filters

re Victor's copy etc with filter:

It seems to me that if you look at the text as a document (not as L10
program statements, for example) then what one is looking for in
using such a command is an excerpt of the document.

The excerpt is to be controlled by the occurrence of certain strings
in a chapter, paragraph, section, or subsection of the document.

The extract would be most useful, in my opinion, if alternative three
in Victor's write up were used: namely, copy, move, etc ALL the
parent statements of any statement that passed the filter, and
indicate where appropriate that those parent statements were "empty",
i.e. did not themselves contain the filters.                              1

Filter Restructure Default Vote

I vote for method 1

Great Filter Restructure Default Election

I am confused as to how copy, delete, move, and transpose structure
with filter should work.                                                    1

Assume that a plex with the following structure exists:                     2

  A                                                               2a

    B                                                   2a1

      C                                       2a1a

      D                                       2a1b

    E                                                   2a2

Now assume you do a copy plex with filter that selects all statements
but statement B.                                                            3

Then the following are the possible results:                                4

  method 1:                                                        4a

    A                                                   4a1

      C                                       4a1a

        D                           4a1a1

      E                                       4a1b

  method 2:                                                        4b

    A                                                   4b1

      C                                       4b1a

      D                                       4b1b

      E                                       4b1c

  method 3:                                                        4c

    A                                                   4c1

      C                                       4c1a

      D                                       4c1b

    E                                                   4c2

method 4:                                                              4d

  A                                                          4d1

    DUMMY STATEMENT                                4d1a

      C                                   4d1a1

      D                                   4d1a2

    E                                               4d1b

Old NLS, and the current implementation on the new NLS both use
method 1. I am in the process of implementing delete, move, and
transpose with filter.  I will use method 1 to get something running.
However, please cast your vote for your preferred method to Susan via
the feedback mechanism.                                                5

Proposal for Research                          SRI-ARC 23114
SRI NO. ISU 74-106                                                    1

CONSULTING SERVICES                                                   2

Mr. Gerald L. Askevold
United States Geological Survey
345 Middlefield Road
Menlo Park, California
24 May 1974                                                          3

Dear Gerald:                                                         4

This letter is a formal proposal for personnel at the Augmentation
Research Center of the Stanford Research Institute to provide
consulting services to the U. S. G. S. in the area of information
processing of geological field data.                                5

The consulting services will include assistance to U. S. G. S. staff
in an evaluation of available computer services for immediate
processing of field data collected in Alaska. The evaluation and
recommendations will take into consideration immediate availability
of services, processing costs, ease of use, compatibility with
(present and planned for) U.S.G.S. computing hardware and software,
and evolution of the system to take advantage of improved
technology.                                                         6

We propose that this study be conducted in four phases at a total
price of $1,500 as follows:                                         7

Study and Discussion of                                             8

    Problems, Alternatives and Plan            240.00        8a

    Program Development and Testing             540.00        8b

    Procedure for Handling Summer, 1974 Data    360.00        8c

    Long Range Planning and Implications        360.00        8d

    TOTAL                                      1500.00        8e

Each successive phase will be initiated in coordination with the
U.S.G.S.                                                            9

Based on the U.S.G.S. choice of editing and data management systems,
ARC consultants will also analyse alternative Sycor file and data
structures and make recommendations on the optimum structure for the
system chosen.                                                      10

SRI NO. ISU 74-106 U, S, G, S Consulting Contract

Due to the nature of this consulting effort, no formal reports will
be provided by the Institute.                                          11

The project will be headed by Dr. Richard Watson who has considerable
experience in the design of data entry and information management
systems. Dr. Watson's biography is attached together with the
biographies of selected ARC staff members whose experience and
expertise are relevant to this study.                                  12

This proposal can be accepted by a purchase order initiated by the U.
S, G, S, that contains provisions acceptable to S, R, I. The
Institute agrees not to exceed the established amount without prior
authorization of the U, S, G, S.                                       13

This proposal will remain in effect until June 15, 1974. If
consideration of the proposal requires a longer period, the
Insititute will be glad to consider a request for an extension in
time.                                                                  14

The Augmentation Research Center agrees to begin work on the study
immediately on acceptance of the proposal by the U.S.G.S.             15

                              Yours truly,

                                                                       16

                              Douglas C. Engelbart, Director
                              Augmentation Research Center             17

                                                                       18

                                                                       19

Approved:                                                              20

                                                                       21

                                                                       22

Bonnar Cox, Executive Director
Information Scince and Engineering Division                            23

1

BUG with move boundary and character size 0

It's still annoyingly here in case everyone's forgotten,                    1

Some Comments on the New NLS Command Language, as seen by a DNLS User

Some Comments on New NLS Command Language, as seen by a DNLS User    1

1. The question mark facility has several inadequacies:    2

    a. some of the "current alternatives" are not implemented,    2a

    That is, of course, most frustrating when you're trying to
    learn a language that's not documented.  I STRONGLY RECOMMEND
    THAT NO ALTERNATIVE BE LISTED UNDER QUESTION MARK UNLESS IT HAS
    BEEN IMPLEMENTED.    2a1

    A side effect (a nuisance, really) is that some commands (like
    "append link") are not implemented, but the user doesn't find
    that out until he gives the terminating <CA> after typing the
    command's full syntax expression.  At the least, the user
    should immediately get a "command unrecognized" response ---
    i.e., a "?" just as if he had typed, say, "x" for a command
    word.    2a2

    b. the alternative <space> is never indicated,    2b

    It shouldn't be indiscriminately indicated, but should
    definitely be shown when in fact it's a bona fide alternative,
    That is, when there are command words for the command that
    REQUIRE <space> to be typed if you are in expert mode,    2b1

    c. the alternatives are not in alphabetical order,    2c

    They definitely should be.  Alphabetic conflicts are so
    fundamental to parsing and the recognition modes that the user
    ought to be assisted (through alphabetization of the
    alternatives) in seeing what the potential conflicts are,    2c1

    d. the valid alternatives are not always described in the HELP
    system data base,    2d

    The valid alternatives should be available in the HELP data
    base EXACTLY as shown in the question-mark response,    2d1

    When they're not there, or listed differently, this leads of
    course to utter frustration for a new NEW NLS user:  he can't
    easily find out what to do in a given situation.  I personally
    find this to be one of the most significant reasons that I
    don't use NEW NLS very much.    2d2

2. The Sendmail subsystem was not adequately debugged, in my
opinion, before the new system was brought up,    3

    The main reason I don't use NEW NLS very often is that I can't

depend on being able to send Journal mail. There always seems to be a new bug: comments resulted in "illegal string designation"; titles resulted in "fst entry nonexistant [sic]"; etc. I don't want to find these errors; frankly, I expected that there would have been extra effort spent to debug Sendmail before bringing the system up, since it is such a fundamental aspect of the use of NLS.                                                                                     3a

3. The Editor subsystem contains far too many commands, resulting in unecessary alphabetic conflicts.                                                      4

In reality the presently implemented Editor subsystem seems to me to encompass AT LEAST three subsystems: an EDITOR, a FILE-handler, a TERMINAL-handler; and possibly also (depending on your viewpoint) a TELECONFERENCING handler, and a HARDCOPY-OUTPUT handler.                                                                                   4a

I suggest the present editor subsystem be subdivided as shown below (I hope I haven't missed any commands; if so, I hope it will be obvious where they would go in this scheme).                                       4b

Note that a few commands are common to more than one of the subdivisions, for ease of use. (I feel no esthetic or philosophical conflict in that approach.)                                            4b1

Editor:                                                                        4c

    append string / structure
    break      "  "
    copy       "  "
    delete     "  "
    insert     "  "                                                            4c1

    move       string / structure
    replace       "  "
    substitute    "  "
    transpose     "  "                                                          4c2

    freeze     statement / branch / group / plex
    release    statement / branch / group / plex / all                          4c3

    jump (as presently implemented)
    load file
    renumber sid's
    update                                                                      4c4

    set   case / filter / name-delimiters / viewspecs
    reset    "  "
    show     "  "                                                               4c5

2

```
        sort
        merge                                                           4c6

        print
        output quickprint                                               4c7

        execute
        goto
        help
        quit                                                            4c8

    File Handler:                                                       4d

        archive file
        copy    file / directory / sequential / archive
        create file
        delete  file / modifications
        expunge  directory / archive                                    4d1

        load file
        move file
        protect file
        retrieve file
        trim directory                                                  4d2

        connect directory                                               4d3

        set     archive / link-default / name-delimiters / temporary
        reset   " "
        show    " " / directory / file-status / disk-space              4d4

        set   private / public                                          4d5

        sort
        merge                                                           4d6

        undelete  file / modifications
        verify file                                                     4d7

        freeze   statement / branch / group / plex
        release  statement / branch / group / plex / all
        renumber sid's                                                  4d8

        jump
        execute
        goto
        help
        quit                                                            4d9
```

Some Comments on the New NLS Command Language, as seen by a DNLS User

Terminal Handler:                                                          4e

    clear window
    split window
    simulate terminal
    move boundary                                                          4e1

    set   tty-window / char-size
    reset  " "                                                             4e2

    execute
    goto
    help
    quit                                                                   4e3

Hardcopy Output Handler (or, possibly a part of the File-Handler):         4f

    output assembler / COM / journal / printer /
           quickprint / remote / sequential / terminal
    print                                                                  4f1

    set     viewspecs / name-delimiters
    reset    " "
    show     " "                                                           4f2

    jump
    execute
    goto
    help
    quit                                                                   4f3

Teleconference Handler:                                                    4g

    start recording session
    stop recording session
    playback recording session                                            4g1

    accept connection
    connect terminals
    disconnect terminals                                                   4g2

    link terminals  (not presently implemented in NLS)
    break links          " "                                              4g3

Universal commands                                                        4h

    help  ( getting you to a relevant place in the HELP data base )        4h1

    set   ( with operands appropriate to the subsystem )

```
    show       " "
    reset      " "                                                      4h2

    execute
    logout
    quit                                                                4h3
```

4.  Miscellaneous difficulties in using NEW (D)NLS,                     5

    - the command feedback window and the literal feedback window
    should be merged, in practically all instances, so that the total
    expression that a user composes --- command words, command
    noisewords, literal typeins, etc --- is displayed in the
    appropriate order for the user to reflect upon,                     5a

        The major difficulty in doing this would seem to be how to
        handle bugs,                                                    5a1

        I think this depends on the situation,                         5a2

        If the user is bugging a word or character or filename then
        that string can just be displayed; if the user is bugging a
        structure, then the statement number(s) of that structure could
        be displayed, or perhaps just the symbol "<bug>" could be
        displayed; other cases would have to be thought out, of course,
        but the net effect would be an eminently more readable command
        feedback line,                                                  5a3

    - I am personally not satisfied with the automatic return to
    "command reset" mode after every command terminator,               5b

        The use of "RPT" is not a satisfactory mechanism, especially
        since it usurps the <control-b> that was previously used for
        the old center-dot function --- an annoying need to relearn an
        old habit,                                                      5b1

        I don't have an obviously winning solution; but my own
     /  preference is simply to type "command delete"  ---  very simple
        with the mouse, not so simple with a TI --- when I know I want
        to start a new command,  Perhaps this is one place where the
        old difference between TNLS and DNLS syntaxes should prevail,   5b2

    - "p" is not recognized in expert mode, yet two command words
    (playback and protect) are certainly candidates,  I know "p" is
    "print" in TNLS, but why make DNLS users suffer?                    5c

    - "execute command in HELP" shouldn't drag up HELP's long
    explanatory text,  It should just let you do "SHOW X" for any X,    5d

- "TI" shouldn't be an alternative in the "simulate terminal" command if you're already in TI mode; similarly, "tasker" shouldn't be an alternative if you're already in tasker mode. Fixing those would remove an annoying letter conflict.                5e

- you can of course "goto tenex", but you can't "execute command in Tenex" --- so tenex is not a true subsystem !                5f

- since you can "undelete archive file", why can't you "delete archive file" (or can you, with another command?)                5g

- "all" is not a satisfactory alternative command word (in the "delete all markers" command).  Here and wherever the second command "word" is really a phrase, I would prefer seeing the alternative listed as a hyphenated expression, such as "all-markers".  This will of course require coordination between the question mark responses and the help data base statement names.                5h

- "freeze" and "release" have long suffered (in my opinion) from not letting you set viewspecs "o" and "p" before completing the command.  I wish that would be implemented.                5i

    Note also in my proposed categorization of current editor commands given above, that I've recommended expanding the freeze and release commands to include branch, group, and plex as legitimate objects.  In addition, I would recommend that "release all" automatically result in viewspec "p" being set.                5i1

- you can "reset prompt" but you can't "set" or "show" prompt. Should be consistent and allow all three.                5j

    As a matter of fact, there is considerable inconsistency between the question mark responses and the HELP data base on the "prompt" stuff.                5j1

    Question mark lists "reset prompt" within the Editor subsystem, but omits "set prompt" in that subsyst; HELP says that set and reset prompt are in USEROPTIONS.                5j2

    HELP also says that set and reset RECOGNITION MODE are in USEROPTIONS, but it lists them under the "SHOW SET" command anyway, implying (to me) that these are editor subsystem commands.                5j3

- HELP data base says nothing that I could find about "set private" and "set public".                5k

— you should be able to "show" link-default-directory, as a
supplement to the ability to set and reset it.                                    5l

— you should be able to do a Tenex "link" and "break links" from
within NLS, with the text of the conversation appearing in the
literal feedback window (with suitable push-down and roll-up ).
This would remove yet one more visible reminder of Tenex's
presence.                                                                          5m

— the command "record session" would (in my opinion) be better
named as "start recording-session" to complement "stop
recording-session"                                                                 5n

5. Suggestions for minor additions to NEW NLS.                                      6

— I would like to see a modification to the "Output File" command
that allows the output to be "filtered"  That is, the command
should at least optionally obey viewspecs "i"  and  "k".  This
would make it MUCH easier to do a content search and save the
results without having to split the screen, create a new file,
copy filtered, etc,                                                                6a

— I would like to see the L10 compiler pass on to the Loader the
required information about the size of a compiled program, and
correspondingly I would like to see the "Load Program" mechanism
be smart enough to obtain the required buffer size from the
Compiler's passed data, and AUTOMATICALLY SET THE BUFFER SIZE just
before loading the user program.                                                   6b

    It is abominably annoying to have to know or guess and then set
    the buffer size of a user program.  And certainly it is
    entirely unnecessary, given a slight change to the Loader.                      6b1

— I would like to see Output Quickprint REFRAIN from putting its
single-line, top-of-the-page identifier on any but the first page
of an output quickprint listing. (Continuing to print the page
number at the top or bottom of each page is an o.k. thing,
however.  I recommend adding the word "Page".)                                      6c

    The result would be an eminently more useable draft, in my
    opinion, and would open the door to allow some simple user
    programs to do quick, clean, simple formatting jobs for
    particular user needs without having to invoke the cumbersome
    Output Processor.                                                               6c1

— I would still like to see the sort and merge commands upgraded,
as defined by me last year ( see -- jjournal, 17234,1;wy).                          6d

CML Backspace implementation

There is a inconsistancy in the CML interpreter.                                                1

   In expert/expert recognition mode when the user types the sequence
   <Space><Letter><Backspace>    the backspace is executed as a double
   backspace and the interpreter considers the next letter input as a
   LEVEL1 Command, Example <space>S<backspace>C    recognizes copy
   command                                                                                       1a

   It would seem more consistent to have one backspace leave the
   interpreter in a state expecting a second level command sequence,
   and require the user two type two backspaces (or a command delete)
   to get to the top of the parse tree,                                                          1b