I'm really sorry the ARPANEWS had to fold, I wish there were
something we could do, I just hope all the other nice projects
aren't forced to fold as well,
Nancy   1

(J30645) 7-MAY-74 09:12; Title: Author(s): Nancy J. Neigus/NJN;
Distribution: /JI MEJ MAP; Sub-Collections: NIC; Clerk: NJN;

Test of Journal System and new Directories

Please let me know if you get this. Either by Journal to EJK or
sndmsg to Kennedy,

Test of Journal System and new Directories

You can send and receive journal mail, if everything is working
properly. Your Ident is: DTC for Dav Craig, FND for Fred Di Maggio,
DLH for Dave Hyde, For your information, Kenyon is RJK, Dick Nelson
is RN2, McNamara is JLM, Tomaini is FJT, Barnum is ARB,   1

Test of Journal System and new Directories

(J30646)   7-MAY-74 10:07;   Title: Author(s): Edmund J, Kennedy/EJK;
Distribution: /DTC FND DLH RJK(info); Sub-Collections: RADC; Clerk: EJK;

Pfeffer's use of Uk 360

To Dave Healy,
This is Sylvia Kenney, liaison for London-tip
We were wondering what had happened to Pfeffer's application
ro arpa to use our 360 for his work,   Has he heard
anything from them yet?
(network mail to Kirstein at ISI,
marked 'attn, SK')

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Pfeffer's use of Uk 360

(J30647)   7-MAY-74 10:10;   Title;   Author(s): Guest D, ARC/ARCG;
Distribution: /DCH; Sub-Collections: SRI-ARC; Clerk: ARCG;

Some thoughts for Mac's pitch   1

  General: 1a

      The thrust of NLS development (for the past 10 years) has been
      to develop tools, procedures, organizations, methods, training
      to support "human communication". The first and largest set of
      people that this technology has been applied to are
      programmers,..system development teams.   1a1

      Documentation, coding, debugging, maintenance, monitoring, and
      management are done within the same integrated system; i.e.,
      the basic command language, file structure, procedures,
      training, etc. are the same for everyone involved in the
      software development process.   1a2

      THE RESULT IS THE MOST ADVANCED SYSTEM FOR SUPPORTING COMPUTER
      SYSTEM DEVELOPMENT THAT WE KNOW ABOUT IN THE COUNTRY TODAY.   1a3

  Specific: 1b

  Code production   1b1

      The NLS file structure is hierarchical, with the ability to
      get special overviews, truncated views, in depth views,
      etc. of code contained in one or more files. Statements are
      automatically numbered, tagged with the date and initials of
      the last person changing them, indented, etc. These
      capabilities support the visibility/readability of the code
      for programmer and management purposes,   1b1a

      A complete set of editing commands are available for use on
      code and text alike. These include copy, assimilate,
      replace etc. which can be done accoss files. This process
      is particualarily effective using the display, where the
      screen can be split up to 8 different ways,..with a
      different file loaded in each display segment,   1b1b

      There are a number of commands, content analyzer programs
      and user programs that allow the searching and cross
      indexing of procedures that have the same parameters or call
      or are called by the same procedures,   1b1c

      New code modules can be linked into the running system for
      debugging purposes, With breakpoints set, the values of
      various registers can be viewed on one side of the screen
      with the code on the other, The code can be changed, the
      program backed up, restarted etc. all in a dynamic mode
      without risk of crashing the running system. Debugged code

is automatically assimilated into the system each night, by
placing a link to it in a special file,   1b1d

Programming support libraries   1b2

Through the use of user created "links" it is possible to
have a "infinite" number of levels in a programming library,
Links can also be used to tie together functional
requirements documents, design spec documents, programming
spec documents, coding, user documents, training documents
and maintenance documents, A SUPER=DOCUMENT is created
where the structure dynamically reflects the structure of
the system being built, while the content of the modules is
changing,   1b2a

Documentation   1b3

NIS contains a complete set of commands to support the
creation, editing, disemmination, storage and retrieval of
documentation, In addition there is an interface to a COM
device, which allows one to obtain high=quality,
publications with control over type fonts, page format, etc,   1b3a

    A Journal system automatically catalogues, indexes and
    distributes messages and documentation submited to it,
    Using the Journal and links, one can support recorded
    dialogue between members of a software production team,
    as they seek to resolve complex programming problems,   1b3a1

Thoughts for Mac's Pitch,,,NLS-SP

Request to Fix Some Idents

The following people should receive online delivery to the
directories in their names at Office-1:   1

    William E Carlson (WEC)   1a

    Lawrence A Crain (LAC)   1b

    Douglas R Weeks (DRW)   1c

    Elizabeth A Riddle (EAR)   1d

    Elizabeth F Finney (EFF)   1e

    Robert M Sheppard (RMS2)   1f

    Richard T LaCoss (RTL)   1g

The directories and idents already exist; the "Network Addresses" and
""Online(NLS)" addresses are wrong.   2

Additionally, the following should be changed so that all of the
above list get "Online" delivery (the delivery mode is also wrong):   3

    LAC   3a

    RMS2   3b

    RTL   3c

Thanks, NDM JCN   4

Request to Fix Some Idents

(J30701) 7-MAY-74 11:32;   Title: Author(s): N, Dean Meyer/NDM;
Distribution: /MLK JCN JHB; Sub-Collections: SRI-ARC; Clerk: NDM;

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Case Study in Interactive Graphics Programming: A Circuit Drawing   5

and Editing Program for use with a Storage-Tube Display Terminal   6

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John W. Brackett, Michael Hammer, Daniel E. Thornhill   12

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A_B_S_T_R_A_C_T_   23a

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The concepts involved in building and manipulating a data
structure through graphical interaction are presented, using the
drawing and editing of electrical circuits as a vehicle.   The
circuit drawing program was designed to operate on an ARDS
storage-tube display terminal attached to the M.I.T. project MAC
IBM 7094 Compatible Time-Sharing System. The graphics software
system (GRAPHSYS) developed by the M.I.T. Computer-Aid Design
Project was used for dealing with all graphical input and output,
and the AED Language of the Project was used in programming. AED
System packages for building and manipulating complex data
structures are described and their use is illustrated in detail.
The report includes flow diagrams and complete listings of the
sample circuit drawing and editing system.

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Abstract - TR 60 thru 63

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EPS: An Interactive System for Solving Elliptic Boundary-Value   62

Problems   with   Facilities   for   Data   Manipulation   and   63

General-Purpose Computation--User's Guide   64

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    Tillman, Coyt C., Jr,   69a

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Abstract - TR 60 thru 63

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June 1969 MAC-TR-62 AD-692-462   74a

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A_B_S_T_R_A_C_T_   79a

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A user's guide for EPS is presented, EPS solves   83
two-dimensional boundary-value problems for elliptic systems of   84
second-order partial differential equations, It also has   85
general-purpose capabilities which permit the on-line definition   86
and execution of arbitrary numerical procedures,   87

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The guide is concerned primarily with using EPS to solve   89
boundary-value problems, Linear problems of this type that have   90
no free surfaces or undefined parameters can be solved on a   91
one-pass basis, Nonlinearities and othe complications can be   92
accomodated by iteration, Solutions are obtained by a   93
finite-difference method which permits the use of irregular   94
lattices, hence the crowding of nodes in sensitive regions,   95

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Abstract - TR 60 thru 63

EPS operates on the IBM 7094 computer of the M,I,T,   97
Compatible Time-Sharing System (CTSS), and exploits to an unusual   98
degree the potential for interactive problem solving the CTSS   99
affords, Input commands resemble statements in various algebraic   100
compiler languages, and can be combined and abbreviated by means   101
of macros, Improper input and other error conditions are handed   102
so as to minimize user inconvenience, Common syntax erros, for   103
example, are corrected automatically by the machine, Output is   104
available in either numerical or graphical form,   105
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Interactive Computer-Mediated Animation   118
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Abstract - TR 60 thru 63

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Baecker, Ronald M,   123a

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June 1969 MAC-TR-61 AD-690-887   128a

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A_B_S_T_R_A_C_T_   133a

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The use of interactive computer graphics in the construction   137
of   animated   visual   displays   is   investigated,   In   138
_i_n_t_e_r_a_c_t_i_v_e__c_o_m_p_u_t_e_r-_m_i_n_a_t_e_d
_a_n_i_m_a_t_i_o_n, movies are formed from   139
direct console commands, algorithms, free-hand sketches, and   140
real-time actions (such as mimicking a movement or rhythm with a   141
stylus or a push-button). The resulting   movies   can   be   142

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immediately viewed and altered.   143

                                                                     144

In _p_i_c_t_u_r_e=__d_r_i_v_e_n__a_n_i_m_a_t_i_o_n, the animator
may sketch and   145

refine (1) static images to be used as components of individual   146

frames of the movies, and (2) static and dynamic images that   147

represent movement and rhythm, These latter pictures drive   148

algorithms to generate dynamic displays, since each such picture   149

determines critical parameters of a sequence of frames, a single   150

sketch or action controls the dynamic behavoir of an entire   151

interval of the movie,   152

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The   dissertation   also   outlines   the   design   of   a   154

multi=purpose, open=ended, interactive Animation and Picture   155

Processing Language, APPL is a conversational language which   156

accepts free=hand sketches, real=time actions, and algorithms   157

that control interactive dynamic displays,   158

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Abstract - TR 60 thru 63

A Formal System for Defining the Syntax and Semantics of Computer   174

Languages   175

Ledgard, Henry F,

April 1969 MAC TR-60 AD-689-305

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A_B_S_T_R_A_C_T_   191a

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The thesis of this dissertation is that formal definitions   195

of the syntax and semantics of computer languages are needed,   196

This   dissertation investigates two condidates for formally   197

defining computer languages: 198

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(1) the formalism of canonical systems for defining the   200

syntax of a computer language and its translation into a target   201

language, and (2) the formalisms of the -calculus and extended   202

Markov algorithms as a combined formalism used as the basis of a   203

target language for defining the semantics of a computer   204

language,   205

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Formal definitions of the syntax and semantics of SNOBOL/1   207

and ALGOL/60 are included as examples of the approach,   208

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Abstract - TR 60 thru 63

(J30702) 7-MAY-74 12:04;   Title: Author(s): Herb S. Hughes/HSH;
Distribution: /HSH ; Sub-Collections: NIC; Clerk: HSH;

Abstract - TR 56 thru 59

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Computer Recognition of Three-Dimensional Objects in a Visual Scene   5

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Guzman, Adolfo   10a

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March 1969 MAC-TR-59 AD-692-200   15a

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A_B_S_T_R_A_C_T_   20a

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Abstract = TR 56 thru 59

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Methods are presented: 1) to partition or decompose a visual   24

scene into the bodies forming it; 2) to position these bodies in   25

three=dimensional space, by combining two scenes that make a   26

stereoscopic pair; 3) to find the regions or zones of a visual   27

scene that belong to its background; 4) to carry out the   28

isolation of objects in 1) when the input has inaccuracies,   29

Running computer programs implement the methods, and may examples   30

illustrate their behavior, The input is a two=dimensional   31

line=drawing of the scene, assumed to contain three=dimensional   32

bodies possessing flat faces (polyhedra); some of them may be   33

partially occluded, Suggestions are made for extending the work   34

to curved objects, Some comparisons are made with human visual   35

preceptions,   36

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The main conclusion is that it is possible to separate a   38

picture or scene into the constituent objects exclusively on the   39

basis of monocular geometric properties (on the basis of pure   40

from); in fact, successful methods are shown,   41

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Abstract - TR 56 thru 59

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A Simulator of Multiple Interactive Users to Drive a Time-Shared
Computer System   60

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Greenbaum, Howard J.   65a

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Abstract = TR 56 thru 59

January 1969 MAC=TR=58 AD=686=988   70a

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A_B_S_T_R_A_C_T_   75a

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Constructing and maintaining a Time=Shared Computer system   78
requires a controlled, repeatable environment for making   79
performance measurements, This thesis describes the use of a   80
small second computer to simulate the actions of multiple   81
interactive users over individual communication lines, Each   82
simulated user exhibits responses similar to those of a "normal"   83
interaactive user; these are recognized and verified by the   84
"Simulator", The Simulator also emulates a "think time"   85
corresponding to a normal user's think time between typing lines   86
on the console, Text corresponding to a user's console input, as   87
well as control information regarding think time simulation and   88
verification of responses from the system being tested, are   89
retrieved from prepared scripts which have been pre=stored on the   90
small computer's magnetic disc unit,   91

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Although the programming package is capable of simulating up   93

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to 12 users, only four are simulated here. The simulator system   94

is intended to be used to test the M,I,T, CTSS and MULTICS   95

(Time-Shared Computer Systems), However, it is designed to be   96

adaptable for testing most time-shared computer systems having   97

serial character oriented input/output over communications lines   98

interfacing with 103A compatible data sets,   99

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Lambda-Calculus Models of Programming Languages   116

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Abstract = TR 56 thru 59

Morris, James H,

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December 1968 MAC=TR=57 AD=683=394

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A_B_S_T_R_A_C_T_

Two aspects of programming languages, recursive definitions   135
and type declarations are analyzed in detail, using Church's   136
calculus as the programming language model,   137

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The main result on recursion is an analogue to Kleen's first   139
recursion theorem: If A = FA for any =expressions A and F, then   140
A is an extension YF in the sense that if E|YF|, any expression   141

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containing YF, has a normal form then E|YF| = E|A|. Y is Curry's   142

paradoxical combinator, The result is shown to be invariant for   143

many different varsions of Y,   144

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A system of types and type declarations is developed for the   146

-calculus and its semantic assumptions are identified, The   147

system is shown to be adequate in the sense that it permits a   148

preprocessor to check formulae prior to evaluation to prevent   149

type errors, It is shown that any formula with a valid   150

assignment of types to all its subexpressions must have a normal   151

form,   152

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Abstract = TR 56 thru 59

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An Integrated Hardware=Software System for Computer Graphics in   173

Time=Sharing   174

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Thornhill, Daniel E,, R, H, Stotz, D, T, Ross, and J, E, Ward   180

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November 1968 MAC=TR=56 AD=685=202   186

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A_B_S_T_R_A_C_T_   191a

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This report describes the ESL Display Console and its   194

associated user-oriented software systems developed by the M.I.T.   195

Computer-Aid Design Project with Project MAC. Console facilities   196

include hardware projection of three-dimensional line drawings,   197

automatic light pen tacking, and a flexible set of knob, switch,   198

and push-button inputs. The console is attached to the Project   199

MAC IBM 7094 Compatible Time-Sharing System either directly or   200

through a PDP-7 Computer. Programs of the Display Controller   201

software provide the real-time actions essential to running the   202

displays, and communication with the time-sharing supervisor. A   203

companion graphics software system (GRAPHSYS) provides a   204

convenient, high-level, and nearly display-independent interface   205

between the user and the Display Controller. GRAPHYSYS   206

procedures allow the user to work with element "picture parts" as   207

well as "subpictures" to which "names are assigned for   208

identification between user and controller programs. Software is   209

written mostly in the machine-independent AED-0 Language of the   210

Project and many of the techniques described are applicable in   211

other contexts.   212

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Abstract - TR 56 thru 59

(J30703) 7-MAY-74 12:26; Title: Author(s): Herb S, Hughes/HSH;
Distribution: /HSH ; Sub-Collections: NIC; Clerk: HSH;

Abstract - TR 56 thru 59

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Abstract - TR 56 thru 59

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Abstract - TR 56 thru 59

January 1969 MAC-TR-58 AD-686-988   70a

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A_B_S_T_R_A_C_T_   75a

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interfacing with 103A compatible data sets.

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Lambda-Calculus Models of Programming Languages

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Abstract = TR 56 thru 59

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Morris, James H,   121a

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December 1968 MAC=TR=57 AD=683=394   127

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A_B_S_T_R_A_C_T_   132a

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Abstract = TR 56 thru 59

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Abstract - TR 56 thru 59

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An Integrated Hardware-Software System for Computer Graphics in   173
Time-Sharing   174

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Thornhill, Daniel E., R. H. Stotz, D. T. Ross, and J. E. Ward   180

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November 1968 MAC-TR-56 AD-685-202   186

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A_B_S_T_R_A_C_T_   191a

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Abstract = TR 56 thru 59

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Abstract - TR 56 thru 59

(J30704) 7-MAY-74 12:54;   Title: Author(s): Herb S, Hughes/HSH;
Distribution: /HSH ; Sub-Collections: NIC; Clerk: HSH;

Sweeping Journal Directive

Haven't sent any suggestions for a while, so I thought I'd submit the
following:

for several years, I have suggested a number of changes/additions to
directives, the thrust of which was to make them level-specific,
(e,g,, ,Grab[2]=5; would execute a Grab=5 for every statement on
level 2),

Since each of the changes requires a fair amount of work to change,
how about simply adding ONE directive? This directive will contain
any directive to executed at a given level,

E,g,: Level[2]="",Level[3]="";
would apply Grab=5 to every level 2 statement, and set it overflow
    indentation to zero, Level 3 statments would have overflow
    indentation set to 3,

This is a fairly expensive solution computationally, but would be the
    easiest to implement,

Whatcha tink?   1

Sweeping Journal Directive

(J30705)   7-MAY-74 13:29;   Title: Author(s): David H, Crocker/DHC;
Distribution; /NP NPS DVN NDM RWW; Sub-Collections: NIC NP; Clerk: DHC;

Personal Note [ARPANews/USING]

Nancy,

Thank you for your kind note relative to the ARPANews; we too were
very disappointed to have to let it fold - just when real progress
was beginning to come into evidence. I sincerely hope that it will
not be a harbinger of things to come since I believe that iseful and
worthwhile user oriented capabilities are beginning to accrue to the
net. Especially, I hope that USING's efforts will accrue some support
which has yet to become apparent officially,

There appears to be a possibility that Kirk Kelley's whole
Universe/ARPANET Catalogue may evolve to a replacement of the News -
maybe active support would help although his working in relative
isolation may indicate otherwise,

Are there any firm plans for:

    a, A USING meeting this summer,
    b, Any official support or feedback from the submitted
committee reports, or
    c, Any possible support for the experimental mechanisms that
have evolved as a consequence of USING efforts, like the Feedback,sav
mechanism that Rosy and Calvin developed to enable feedback to be
sent to the two NLS USING files: ncmt and ngrp?

Warmest regards,   1
        ...Jean

Personal Note [ARPANews/USING]

(J30706)   8-MAY-74 06:21;   Title: Author(s): Jean Iseli/JI;
Distribution: /NJN; Keywords: arpanews USING Personal-correspondence;
Sub-Collections: NEWS MITRE-TIP; Clerk: JI;

Tickler for the Month of April 1974

(am1) 1 April = Monday   1

  0830 hrs, Branch Chief's Meeting   1a

  Frank J, Tomaini = JURY DUTY = ALL WEEK   1b

  Due Date = ISI/Tom = TUMSE Letter in regards to Electronic Pocket
  Size Calculators = Completed   1c

  News Brief items due into Becky Today,(KJOURNAL,19533,1;W)   1d

  PMP requested in Form 56 = Forward to ESD for Coordination   1e

  Due Date = ISI/Tom = Forward Financing = Qrtly Report Input Due
  ISM = Completed   1f

  Bobbie; Personnel Strength Rpt, due,   1g

(at1) 2 April = Tuesday   2

(aw1) 3 April = Wednesday   3

  Due Date = ISI/Tom = Due 3 Apr ISM = Coordination of AFSCR
  11=3/RADC Sup 1 = Re; Management of Trip Report = Completed   3a

  Due Date = ISI/Tom = Contract Maintenance Reports = FY=75 Office
  Machine & Appliances = Completed   3b

  ISC Confessions 0830 hrs,   3c

(ath1) 4 April = Thursday   4

  0830 hrs, Branch Chief's Meeting   4a

  Laboratory Activity Reports due today; Bucciero must have them by
  1000, ISM must have them by 1100, and DOT must have them by 1600,   4b

  Due Date = ISIM/W, Rzepka = PR=B=4=3250 = Secure Data Mgt Sys =
  Completed   4c

(af1) 5 April = Friday   5

  Bobbie; Travel figures due by noon,   5a

(am2) 8 April = Monday   6

  Frank J, Tomaini = JURY DUTY = ALL WEEK   6a

  0830 hrs, Branch Chief's Meeting   6b

1

Tickler for the Month of April 1974

Col Thayer = TDY   6c

(at2) 9 April = Tuesday   7

   1330 hrs, = Meeting A, Barnum/R, Panara = Project 5550   7a

   Col Thayer = TDY   7b

(aw2) 10 April = Wednesday   8

   ISF Confessions 0830 hrs,   8a

   Due Date = ISI/Tom Bucciero = Reply to IS Safety & Housekeeping
   Inspection = Completed   8b

   Col Thayer = TDY   8c

(ath2) 11 April = Thursday   9

   0830 hrs, Branch Chief's Meeting   9a

   Due Date = ISIS = IR&D (IBM)   9b

   Laboratory Activity Reports due today; Bucciero must have them by
   1000, ISM must have them by 1100, and DOT must have them by 1600,   9c

   Due Date = ISI/FJT & Tom = Info for Compliance w/Completing IG   9d

   MUST SUBMIT FY=75 NEW STARTS TO ISI/BUCCIERO BY TODAY!!!!!(FORM
   77s)   9e

   Col Thayer = TDY   9f

(af2) 12 April = Friday   10

   Due Date = ISI/Tom = Financial Forecasting FY=74 & Prior Year
   Balances = Due in ISM   10a

   Timecards due today   10b

   Due Date = ISIM/R, Iuorno(?)OER   10c

   Bobbie; Travel figures due by noon,   .   10d

   Due Date = ISIS/McLean & ISIM/Calicchia = Mgt Supv Eval of Trng
   over 40 hours = Completed   10e

   Due Date = ISIM/ISIS = Information Summary of Support to PAR/CAR
   Programs (Memo from DOT/Mr, Richards)   10f

Tickler for the Month of April 1974

Col Thayer = TDY   10g

(am3) 15 April = Monday   11

   Col Thayer = Leave   11a

   0830 hrs, Branch Chief's Meeting   11b

   PMP requested in Form 56 must be forwarded to DO for coordination
with 3 cys of AF 725 and RADC Form 7 for repro & distribution   11c

   Due Date = ISIM/LaForge/Liuzzi = Review of System Development
Notifications (SDNs = 427M) = Completed   11d

(at3) 16 April = Tuesday   12

   Col Thayer = Leave   12a

(aw3) 17 April = Wednesday   13

   Col Thayer = Leave   13a

   R & T Selection of the Month is due in ISI, (KJOURNAL,19531,1:W)   13b

   Due Date = ISIM/McNamara & ISIS/S, DiNitto = IR&D (GE)   13c

(ath3) 18 April = Thursday   14

   Col Thayer = Leave   14a

   0830 hrs, Branch Chief's Meeting   14b

   Laboratory Activity Reports due today; Bucciero must have them by
1000, ISM must have them by 1100, and DOT must have them by 1600,   14c

   Due ISIS/ISIM = Nominations for Splized Short=Term Courses fo
emaind of FY=74,   14d

(af3) 19 April = Friday   15

   Col Thayer = Leave   15a

   Bobbie: Travel figures due by noon,   15b

(am4) 22 April = Monday   16

   Col Thayer = Leave   16a

   IR&D = Due Date = Control Data Corp, = ISIS/S, DiNitto & ISC   16b

Tickler for the Month of April 1974

0830 hrs, Branch Chief's Meeting   16c

(at4) 23 April - Tuesday   17

Col Thayer - Leave   17a

Training on Maintaining R&D Case Files - 1330 hrs, - Conference
Room 1 - MANDATORY that all Administrative personnel and
engineering personnel who are involved in R&D projects attend,   17b

Collect topic write-ups today by noon for confessions,   17c

Due Date - ISIM/ISIS - Per Memo From: Office of the Chief
Scientist, Dated: 15 April 74 - Request a list of thesis topics
You consider appropriate for graduate student research at the
Naval Postgraduate School in Monterey, Calif,   17d

(aw4) 24 April - Wednesday   18

Col Thayer - Leave   18a

Officers Commander's Call - 1600 hrs, - Officer's Cu   18b

ISI Confessions 0830 hrs,   18c

((ath4) 25 April - Thursday   19

IBM - Contextual Word Recognition Post Processing -Bldg, 24 -
Conf, "A" - 0930 - 1130 hrs,   19a

A briefing on Small Business Procurements will be presented by Mr,
John Vella in Conference Room 1 on today at 1000 hrs,,,ALL IS
TECHNICAL PERSONNEL ARE REQUESTED TO ATTEND,   19b

Col Thayer - Leave   19c

0830 hrs, Branch Chief's Meeting   19d

Laboratory Activity Reports due today: Bucciero must have them by
1000, ISM must have them by 1100, and DOT must have them by 1600,
(JJOURNAL,30511,1:w)   19e

Congressman Mitchell will be speaking on recent legistation of
interest to engineers. A question and answer period will follow
his talk, This will be at Trinkaus Manor at 8 PM, sponsored by
ASME, All interested are welcomed, A dinner is available at 7 PM
at $4,25, For further information please contact Mr, Dick White,
Ext, 2151,   19f

Tickler for the Month of April 1974

(af4) 26 April = Friday   20

   Due Date = ISI/ISIM/ISIS = OPSEC = REPLY TO ISM   20a

   Col Thayer = Leave   20b

   Timecards due today   20c

   Bobbie: Travel figures due by noon,   20d

(am5) 29 April = Monday   21

   Due Date = ISI/Tom = Quarterly Report = Mandatory Review of
   Security Classification Guidance,   COMPLETED   21a

   Due Date = ISIM/E, Kennedy = Suggestion Evaluation GRF=74=975
   Integration of Computer Operations to Mgt Procedures, COMPLETED   21b

   Col Thayer = Leave   21c

   Due Date = ISIM/Capt Daughtry = Allocation of Trng Quotas = 1
   officer for course 105C5144=011, Advance Sys Software, WWMCCS,
   PDS=P9U, Trans NR: 2654, Keesler AFB, MS,   21d

   Nelson = TDY   21e

   Tomaini = Annual Leave   21f

(at5) 30 April = Tuesday   22

   Col Thayer = Leave   22a

   Form 2's (employee time expenditures) are due today,   COMPLETED   22b

   Due Date = ISI/Tom = FY=76 Mobile Depot Maintenance (MDM)   22c

   1300 hrs, Branch Chief's Meeting   22d

   Tomaini & Nelson = TDY   22e

   Aetna Representative = call x4246 for Appointment = Bldg 14 = 2nd
   Floor   22f

Tickler for the Month of April 1974

(J30707) 8=MAY=74 06:59;   Title: Author(s): Roberta J. Carrier/RJC;
Distribution: /RJC; Sub=Collections: NIC; Clerk: RJC;

Test Message for the WWMCCS People

Thhis is being sent to the address wwmccs, If it goes at all it
should go to the people in the WWMCCS sub-group that we asked SRI to
set up, Please let me know if you receive this, If this is
successfully working it will be a way to distribute materal to the
WWMCCS people on the system using a singele address, pardon the
spelling   1

                                    1

Test Message for the WWMCCS People

(J30708)   8=MAY=74 07:45;   Title;   Author(s); Edmund J, Kennedy/EJK;
Distribution; /WWMCCS; Sub=Collections; RADC WWMCCS; Clerk; EJK;

Luncheon

Luncheon for =Grant Strength = Holiday Inn = 1200 hrs; = $3.00 =   1
Contact Marilyn Rossi or Dick VanDresar by Noon = 9 May 74,

Timecards due today   2

Bobbie: Travel figures due by noon,   3

Ed LaForge = Jury Duty   4

Luncheon

(J30709) 8-MAY-74 09:09; Title: Author(s): Roberta J. Carrier/RJC;
Distribution: /RADC; Sub-Collections: NIC RADC; Clerk: RJC;

luncheon

Luncheon for -Grant Strength - Holiday Inn - 1200 hrs, - $3,00 -
Contact Marilyn Rossi or Dick VanDresar by Noon - 9 May 74,   1

1

luncheon

(J30710)   8-MAY-74 10:19;   Title: Author(s): Roberta J, Carrier/RJC;
Distribution: /RADC; Sub-Collections: NIC RADC; Clerk: RJC;

1152s

Due Date - AF Form 1152s for Summer Term MVCC Courses submitted to
ISM NLT by today,   1

1152s

1152s

(J30711) 8=MAY=74 10:21; Title: Author(s): Roberta J. Carrier/RJC;
Distribution: /RADC; Sub=Collections; NIC RADC; Clerk: RJC;

International Conference

1975 International Conference on Reliable Software to be held 22-25
April 1975 - CALL FOR PAPERS - Abstract Deadline of 15 July - Expect
minimum of two (2) papers in ISI to be submitted per Col Thayer,   1

(J30712)   8-MAY-74 10:29;   Title: Author(s): Roberta J, Carrier/RJC;
Distribution: /RADC; Sub-Collections: NIC RADC; Clerk: RJC;

<TOMAINI>SYMP.NLS;1, 2=MAY=74 11:11 FJT ;   1

From AFAL/CA letter dated 8 April 1974 subjected Fall Meeting of
the Avionics Section = ADPA, point Mugu, CA 20=21 Nov 1974,   1a

The Air Force is being asked for presentations to be made during
the Fall Meeting of the Avionics Section of the American Defense
Preparedness Association (ADPA), formerly the American Ordinance
Association, The Army and Navy organizations, as well as
industry, are also being asked for presentations in order that a
comprehensive look at Avionics requirements and developments may
be provided,   1b

The purpose of this letter is to inform interested Air Force
organizations of the forthcoming meeting and also to request
candidate presentations which will provide an overview of the Air
Force requirements and developments in this important technology
area,   1c

The attached symposium outline describes the conference
objectives, scope and the categories of the program agenda for
which papers are being solicited,   1d

It is requested that unclassified summaries, as described in the
attached outline, be furnished to the undersigned by 15 May 1974,
The authors will be advised of the papers selected for inclusion
in the program by 17 June 1974,   1e

                                                                      1f

                                                                      1g

                                                                      1h

                                                                      1i

ROBERT J, DORAN   1j

Acting Chief Scientist   1k

Air Force Avionics Laboratory   1l

Symposium Technical Program   1m

  Coordinator = Air Force   1n

                                                                      1o

1p

1q

AMERICAN DEFENSE PREPAREDNESS ASSOCIATION   1r

AVIONICS SECTION FALL SYMPOSIUM   1s

POINT MUGU, CALIFORNIA   1t

20 and 21 NOVEMBER 1974   1u

The objective of this symposium is to provide a comprehensive look
at the avionic system developments that meet current and evolving,
manned and unmanned air mission objectives, Government attendees
will provide summaries of Navy, Air Force and Army requirements
for some of their specific missions, i,e,, ASW, close air support,
air superiority, electronic warfare, electronic intelligence,
reconnaissance, interdiction, battlefield surveillance, etc, The
industrial and laboratory groups will identify research,
technology and equipment developments directed to meeting these
requirements,   1v

The symposium will be classified SECRET, and is planned
specifically to be of general interest to the full spectrum of DOD
and industrial avionics system engineering, advance system
planners, research groups, system development, engineering and
design, and to those concerned with the formulation of long range
objectives,   1w

Those who wish to present papers are requested to submit ten
copies of a one page (250-300 words), unclassified summary of the
paper with complete title, the authors name, rank/position,
military organization/company affiliation, and complete address by
15 May 1974, The papers should be structured to fit within these
four categories,   1x

    System/Equipment requirements   1x1

        Air Force   1x1a

        Army   1x1b

        Navy   1x1c

        Current Operational Experience (Arab/Israeli war)   1x1d

    Sensors   1x2

Target Acquisition/Fire Control/Weapon Delivery	1x2a
Intelligence	1x2b
Reconnaissance	1x2c
Electronics Warfare - Active/Passive	1x2d
Data Processors	1x3
Impact of Digital Revolution/LSI on Avionics Systems	1x3a
Distributed vs. Centralized Airborne Computers	1x3b
Computer Software - Design and Maintenance	1x3c
Man/Machine Interface	1x4
Display	1x4a
Flight Control	1x4b
Communications	1x4c
Navigation	1x4d
Logistic Support	1x4e

The paper should be suitable for a 25 minute presentation with an
additional five minutes of questions. The summary should include
a description and the principal results of, the investigation or
development activity, a summary of importance conclusions, the
status and extent of the work.   1y

The summaries and related correspondence should be addressed to: 1z

Mr. Robert J. Doran	1a0
Acting Chief Scientist	1aa
Technical Program Coordinator - AF	1ab
Air Force Avionics Laboratory	
(AFAL/CA)	1ac
Wright-Patterson AFB, OH 45433	1ad

3

symposium

(J30713) 8-MAY-74 11:52;   Title: Author(s): Frank J, Tomaini/FJT;
Distribution: /RADC; Sub-Collections: RADC; Clerk: FJT;

Preliminary draft of revised Standard Data Specification document

I have finally finished the second draft of the Net Standard Data
Pathname syntax, tho now it is called the net Standard Data
Specification syntax. The document resides in <UCLA=NMC>DHCNSDS,NLS
(ucla=nmc,dhcnsds,1). And yes, that is the correct filename.

Some significant modifications have been made, tho the original spec
is still recognizable. Please let me know what you think.

There are some issues that need to be resolved before the document
can be released as an RFC:

1) Pathname keywords (semi=structured mode) have non=alphabetics in
them. That makes parsing <h=fields> difficult, since an <l=delim>
might be a back=arrow (underscore). What solution seems best to you?

2) Should the alternate forms of the peripheral reserved words be
kept? Should the contents of the <data> subfields in general be more
defined? (e.g., requiring partial name recongition, a la Tenex, at
least for reserved words.)

3) Does the differentiation between human and machine - oriented
syntaxes (syntaces?) seem reasonable/useful?

4) Anything else you notice or think of.

I'd appreciate comments any of you might have.
Thanks, Dave.   1

Preliminary draft of revised Standard Data Specification document

(J30714)   8-MAY-74 15:05;   Title: Author(s): David H, Crocker/DHC;
Distribution: /CSK JBP JEW ADO GJP VGC NJN; Sub-Collections: NIC; Clerk:
DHC;

Additional note on NETHELP

Folks,
        The issuance of the NETHELP paper to USING was supposed to
have been prefixed with a note asking for comments on the paper. I
am sorry that it got lost in the works but I hope also that this
message will suffice to stir up any helpful information which USING
might have to offer.

                              Alan   1

Additional note on NETHELP

SDC response to ELF User Questionnaire

15

ADDITIONAL 16K DEC CORE (48K TOTAL + 8K DUAL=PORT)   15a

SDC "HSI=11" LOCAL IMP INTERFACE   15b

RJS04=BA FIXED=HEAD DISC AND CONTROLLER (512K WORDS)   15c

SDC=DESIGNED 12=BIT ADC/DAC SYSTEM BASED ON DEC=PACKAGED   15d

   ANALOGIC ADC/DAC AND DEC DR11=B DMA HARDWARE   15d1

   TEKTRONIX 4014=1 TERMINAL AND 4610/2 HARD COPIER   15d2

   DA11=BD UNIBUS LINK TO THE PDP 11/05 WHICH CONNECTS TO SDC'S   15d3

   IBM 370/145 AND THE ARPANET   15d4

16

IV,   17

A, NONE   18

B, NONE   19

C, NONE   20

D, DEVICE DRIVERS FOR HSI=11,DA11=BD,RJS04=BA,ADC/DAC, ETC,   21

SPS=41 PROGRAMS   21a

SPEECH UNDERSTANDING SYSTEM COMPONENTS   21b

E, FOR DEVICE DRIVERS AND SYSTEM SOFTWARE IN (D)   21c

22

V,   23

A, NONE; WE WILL HAVE FULL DEC MAINTENANCE CONTRACT   24

B, ANY ELF CHANGES/FIXES AND REVISION CONTROL   25

C, COMMUNITY=SHARED SPS=41 PROGRAMS (E,G, SPS=PROVIDED LIBRARY)   26

D, ANY AND ALL THAT'S AVAILABLE ON ANY ASPECT OF ELF   27

28

SDC response to ELF User Questionnaire

Attn: John Wakerly

- - - -   1

What online Network mailbox do you want used for ELF   2

interactions?   3

                                                                                     4

Either, both, or none of the above, or some other one?   5

Dave,   6

=======   7

                                                                                     8

Attn: John Wakerly

Two tickler items

In regards to two particular items sent to you by way of journal
message, 1) AF Form 1152 are due 17 May; and 2) The luncheon for
Grant Strength is 10 May...sorry about that...Bobbie   1

1

Two tickler items

(J30718)   9-MAY-74 05:08;   Title: Author(s): Frank J, Tomaini/FJT;
Distribution: /RADC; Sub-Collections: RADC; Clerk: FJT;

Test for di maggio directory

This is a test message being sent to craig, hyde and dimaggio,   1

Test for di maggio directory

(J30721)   9=MAY=74 14:05;   Title: Author(s): Edmund J, Kennedy/EJK;
Distribution: /JWH FND DTC; Sub=Collections: RADC; Clerk: EJK;

Possible slide for pitch,

A slide made up around tthis, coupled with one sshoeing a page
printed on our printer and the same page using the
multi-fonts/sizes/styles could be impressive,

Possible slide for pitch,

Possible slide to sex up your pitch to Heilmeier,   1

Preparing the Jovial J=73 Language Specification for printing costs
$50 per/page, The reason for this high cost is that the
specification includes English, Metalanguage, and Example words, It
is necessary to make clear distinctions in the text among these three
classes of words, These classes of words change frequently in the
sequence of the text and there is nothing unusual about having as
many as two fonts and three character sizes on a single line,   2

The report includes: 3

   Headers   3a

   Footers   3b

   Margins   3c

   Indentations   3d

   Numbering   3e

In order to provide these necessary items, and in order to
differentiate among the three classes of words in the specification
it is necessary to use: 4

   Two Fonts   4a

   Four Sizes   4b

   Five Styles   4c

   = OR a TOTAL of: 40 DIFFERENT SELECTIONS   4d

Using the Advanced Computer and Photographic techniques available,
the plates for preparing the printing can be provided at a cost of $5
a page,   5

This is especially important in considering that the specification
will need to be updated periodically, Updates can be made easily,
speedily and inexpensively after the first specification is completed
in this manner,   6

Possible slide for pitch,

(J30722) 9-MAY-74 14:54;   Title: Author(s): Edmund J, Kennedy/EJK;
Distribution: /JLM DLS(Any serious errors?); Sub-Collections: RADC;
Clerk: EJK;

Line Processor Troubles: Blanked Screen

While in this state, the distribution list on this journal submission
remains at the bottom of the screen,

Line Processor Troubles: Blanked Screen

I ran a user content analyzer program which failed with the error
message "Bad Statement Identifier". The screen was left blank and
<control-f> Jump to File Return, Quit then continue, and finally
another <control-f> did not put up anything (screen remains blank).   1

Line Processor Troubles: Blanked Screen

Marcia --
Please remove the Harcopy address (USING) from ident JEAN. That
should leave a delivery of Online(NLS) to using. Please change its
Name to "Using Repository".

Also, make the following changes to ident NETHELP:
Change Name to Network Help Repository; and change its delivery from
Hardcopy USING to Online(NLS) User: USING.

Sorry for the confusion. Some people created the two dients without
checking with me (and for that matter, witht thinking). Please let
me know when you finish.

Mil Gracias (no relation to Jernigan). Dave.   1

(J30726)   10-MAY-74 14:34;   Title: Author(s): David H, Crocker/DHC;
Distribution: /MLK; Sub-Collections: NIC; Clerk: DHC;

Date: 10-MAY-74 17:29:04   1

From: Geoffrey S, Goodfellow   2

Subject: ARPANET NEW   3

Type of comment: Gripe   4

Network online address: GEOFF@SRI-AI   5

Phone: -   6

Degree of urgency: Intermediate priority   7

Type of response desired: Response is requested   8

                                                               9

Text: 10

IT IS ALREADY THE 10TH OF THE MONTH, AND SRI-AI HAS NOT GOTTEN   11

THIS MONTHS COPY OF THE ARPANET NEWS PUT IN <ARPANEWS>, COULD SOME- 12

ONE JUST HAVE FORGOTTEN TO PUT IT OVER HERE?   13

                                                               14

                                                               15

(J30727) 10-MAY-74 17:31;   Title; Author(s): NET GRIPE/NGRP ;
Distribution; / NGRP; Sub-Collections: NIC; Clerk: NGRP;

Tickler for month of April 1974

(am1) 1 April - Monday   1

    0830 hrs, Branch Chief's Meeting   1a

    Frank J. Tomaini - JURY DUTY - ALL WEEK   1b

    Due Date - ISI/Tom - TUMSE Letter in regards to Electronic Pocket
    Size Calculators - Completed   1c

    News Brief items due into Becky Today, (KJOURNAL,19533,1:w)   1d

    PMP requested in Form 56 - Forward to ESD for Coordination   1e

    Due Date - ISI/Tom - Forward Financing - Qrtly Report Input Due
    ISM - Completed   1f

    Bobbie: Personnel Strength Rpt. due.   1g

Tickler for month of April 1974

(J30728) 13-MAY-74 05:36;   Title: Author(s): Roberta J. Carrier/RJC;
Distribution: /; Sub-Collections: NIC; Clerk: RJC;

Scheduled Software Maintenance

This is a reminder that Network Software Maintenance is scheduled
between the hours of 0700 and 0900 (Eastern Time) on Tuesday, 14 May
1974. Although software releases are checked out as much as possible
in the BBN test cell, there are sometimes problems of scale which are
not detected until after a release; hence there is a small but finite
possibility that the software will be troublesome for a few hours
after the scheduled release,
Sincerely,
Alex McKenzie (for the Network Control Center)

1

NOTE: A number of people have complained that these reminders are
delivered to them by US mail a week or more after the event being
announced has taken place. I send the note through the NIC
Journal to all "Technical Liaisons" (and a few other groups); the
Journal will deliver the text (or a pointer) into the "computer
mailbox" for anyone who has listed their mailbox with the NIC,
while individuals without computer mailbox listings receive the
documents by US mail. If you get US mail but want to get things
delivered on line, communicate with Marcia Keeney at SRI=ARC. In
any case, please remember that EVERY Tuesday from 0700 to 0900
Eastern Time is reserved for Network Software Maintenance (see,
for example, RFC #638).

1a

Scheduled Software Maintenance

(J30729) 13=MAY=74 06:46;   Title: Author(s): Alex A. McKenzie/AAM;
Distribution: /NLG RADC MLK; Sub=Collections: NIC NLG RADC; Clerk: AAM;

Movie

OPSEC Film - 1:30 - Tuesday - Conference Room. Those who didn't
attend should!

Movie

(J30730)   13-MAY-74 11:20;   Title: Author(s): Roberta J. Carrier/RJC;
Distribution: /RADC; Sub-Collections: NIC RADC; Clerk: RJC;

Review I promised to send you

<NBS-TIP>GRAPHICS-REVIEW-COTTON,NLS;1, 8-APR-74 12:49 IWC ;   1

Review I promised to send you

PRINCIPLES OF INTERACTIVE COMPUTER GRAPHICS
Reviewed by Ira W. Cotton   1a

A full-scale textbook for a course in computer graphics has
been long in coming. Display equipment was connected to Whirlwind
as long ago as 1950, though the discipline generally traces its
origins to Ivan Sutherland's SKETCHPAD which was first published
in 1963 [1]. The authors of this text were both associates of
Sutherland, and the general approach of the book might be termed
the "Utah" approach to graphics.   1b

This is an important and timely book, but it is not without
serious defects. The coverage in the book is admirably broad, but
there are still important topics which are not even mentioned.
Most explanations are clear enough for the novice and in enough
depth for the journeyman, but both sides of an issue are often not
presented. The book reflects too strongly a particular school of
thought, rather than exposing the student to conflicting views on
a subject. What may be entirely proper in a monograph is
objectionable in a textbook. The authors fail to meet their
responsibility to students when they present only their point of
view on controversial issues.   1c

The book consists of seventeen chapters in five parts, with a
bibliography and extensive appendices. Part one covers display
devices in four chapters. The first chapter provides a very low
level description of cathode ray tube technology. The importance
of this material is asserted, but never demonstrated. A number of

formulae for electro-physical phenomena are presented, but never
referenced nor used again, The point is made that phosphors are
identified by number, but the meaning of the numbers is never
explained. Finally, a number of alternative technologies are
discussed, but no mention is made of raster scan devices,   1d

Chapter 2 provides a good low level introduction to
programming the display refresh loop. Flow charts would be
desirable, however, even for simple programs, The section on D/A
conversion techniques adds nothing to the thrust of the chapter,   1e

Chapter 3 seems entirely unnecessary, except as a plug for
Evans and Sutherland Computer Corporation hardware,   1f

Chapter 4 contains a good description of the development of
display processors, However, towards the end of the chapter a
major flaw in the book becomes apparent -- the authors' opinions
are presented as fact (e,g,, with respect to the instruction set
required for a display processor),   1g

Part two contains four chapters on the subject of display
files, Chapter 5 begins with a good discussion of the distinction
between segmented and structured display files, This distinction
will doubtless become one of the fundamental concepts of
interactive comuter graphics,   1h

Chapter 6 contains an introduction to the authors' main area
of expertise -- matrix transformation techniques and applications,
The only suggestion to be made here is that more explanatory

material be included in the body of the chapter, rather than be
relegated to an appendix.   1i

Chapter 7 contains an important and well done discussion of
clipping. A purely mechanical flaw should be noted in this
chapter, however. Computer output should be typeset so that it is
legible, especially in a book of this quality (cf. p. 124).   1j

Chapter 8 concludes the treatment of display files with a
particularly well done discussion of transformation systems, based
on the framework introduced in chapter 5.   1k

Part three (chapters 9 through 11) contains good discussions
on input devices, interrupt handling and a variety of useful
techniques. This reviewer agrees strongly with the point that
input is separate from output. Much of the material in chapter 10
has not appeared previously in any single, widely available
source.   1l

Part four (chapters 12-14) presents material on techniques for
3-dimensional graphics. These chapters are the best and most
valuable part of the book. Here the authors write from original
research and may be permitted an authoritative tone.   1m

In contrast, the material in part five on graphic systems is
much too controversial to appear in a textbook in its present
form. The authors are entitled to their opinions, but they should
be presented as such, and other points of view should be explained
as well. Chapter 15, for example, places undue emphasis on a
single system which the authors had implemented. (Descriptions of

other approaches may be found in [2],) Such statements as "The
ability to construct a good dialogue between the user and the
program can generally be gained only with experience" seem to
reflect ignorance of excellent books by Meadow [3] and Martin [4],
The discussion in this volume is limited to such platitudes as "It
is particularly important to keep the user in mind when designing
an interactive dialogue,"   1n

The coverage in chapter 16 (on programming languages for
computer graphics) is much too brief, This reviewer has not
noticed any "lack of interest in the development of programming
languages ,,,[for] graphics," The discussion on page 363
regarding the use of FORTRAN is more of a diatrabe than anything
else, Relative to the concern on page 383 that a particular
feature might "confuse a novice programmer", this reviewer can
only ask for whom graphics programming systems are intended,   1o

It is the final chapter on graphics system design, however,
with which this reviewer must take most issue, The authors
suggest that their approach to graphic system design is the
correct approach and the only approach, Students would be better
served by a more even=handed discussion of alternatives,   1p

For example, on page 391 they speak of drawing dividing lines
between functions which are to reside in different hardware
components (e,g,, in the central system or in the terminal), The
discussion fails to note those systems in which the dividing line
can be changed [5,6], Similarly, on the next page it is suggested

as feasible to "take all the essential components ... and group
them in a single inexpensive processor." This is certainly a
fruitful approach in many situations, but fairness demands a
discussion of the view that their are functions which belong and
are most efficiently performed in a large host machine. The
statement that "there is relatively little disagreement these
days" with such an approach cannot be substantiated by merely
citing successful systems employing the approach.   iq

Actually, the authors start once more around the "wheel of
reincarnation" [7] in the remainder of the chapter. By page 402
the small system is already being augmented with floating point
hardware and a paging capability, and when the system is connected
to a network as the authors suggest on page 410, they are back to
the system with which they began -- satellite processor connected
to a large host.   ir

This is not to suggest that the authors should break out of
the cycle by arbitrarily selecting a processor size, as Myer and
Sutherland suggested. Rather, they must accept the fact that
optimal system design is application-dependent and then design
each system to be most cost-effective for its intended use. They
are limited in their ability to do this, perhaps, by their
near-total misunderstanding of the application of economic
concepts to computer system design. This is evidenced by the
discussion on page 401 which suggests that users will restrict
their use of central processor time because it is "expensive."

That argument can be made for any resource -- and it is equally
false for all of them when it is stated out of context as it is
here. A resource will be used to the extent that it is
cost-beneficial to do so. The primary effect of moving functions
to a display processor from the host system is to convert variable
costs to fixed costs (since the display processor is generally
dedicated to graphics while the host is generally shared and
charges only for time actually used). Casting the economic
argumement in these terms clarifies the situation and provides a
framework for analysis with more general application.   is

The lack of coverage of economic factors relating to the use
of graphics is one shortcoming of the book. Other areas which are
not covered are human factors, which the authors suggest are
important but do not discuss, and microprogramming for graphics
which is strictly ignored. In contrast, some sections of the
extensive appendices seem unnecessary, such as the description of
the SAIL language (particularly when the material is printed
sideways). Other incidental criticisms pertain to the lack of
titles for any of the figures in the volume, and the lack of a
glossary. The use of terms in context with italics for the first
use was not sufficient in all cases to define the terms for
novices.   it

Despite the preceeding criticisms, it has not been the
reviewer's intent to discourage purchase of the book. Quite the
contrary; it belongs on the bookshelf of every serious student of

computer graphics, if only for the material in chapters 12-14.
However, it is hoped that such commercial success will permit
revisions in which the authors may modify the coverage somewhat
(with both additions and deletions) and present the more
evenhanded treatment of controversial topics which should be
expected in a textbook.   1u

References   1v

1. Sutherland, I. E. "Sketchpad: a man-machine graphical
communication system." <Proc.> SJCC, 1963, pp. 329-346.   1v1

2. Cotton, I. W. "Languages for graphic attention-handling."
Computer Graphics 70 Symposium, Brunel University, 1970
(Proceedings published by Plenum Press).   1v2

3. Meadow, C. T. Man-Machine Communication. New York: John
Wiley & Sons, 1970.   1v3

4. Martin, J. Design of Man-Computer Dialogues. Englewood
Cliffs, N.J.: Prentice-Hall, 1973.   1v4

5. Cotton, I. W. and F. S. Greatorex, Jr. "Data structures
and techniques for remote computer graphics." Proc. FJCC, 1968,
pp. 533-544.   1v5

6. van Dam, A. and G. Stabler. "Microprogrammed intelligent
satellites for interactive graphics." Proc. NCC 1973, pp.
229-238.   1v6

7. Myer, T. H. and I. E. Sutherland. "On the design of
display processors." Comm. ACM, 11:6 (June 1968), pp. 410-414. 1v7

Review I promised to send you

(J30731) 13-MAY-74 12:06;   Title: Author(s): Ira W, Cotton/IWC;
Distribution: /DJF; Sub-Collections: NIC; Clerk: IWC;

status report on MIKE work in L-10 to date. Request for examples of
programs

I've been a little tardy in responding to the sudden flurry of
interest in or L-10 progress. What have I been up to, you ask ?   1

I've written a few simple programs for reformatting statements,
They're in my directory as movegrp.nls and addgrp.nls.   2

I've been able to compile the into REL files, and they work.   3

Generally, I'm quite pleased with myself (if I do say so). What I
thought was going to be a real grind has been really fun....this
stuff is really catching.....   4

I haven't tried the SEND construct yet, having just gotten jim's
message on it.   5

Dean, I'd like to see some programs with examples of some of the
LOOP-tyoe constructions (LOOP, CASE, DO...UNTIL, etc.)   6

    One of the programs I wrote (addgrp) is just atrocious, in that it
    has 6 consecutive IF statements, all asking just about the same
    thing. I tried the CASE construction, but it didn't work, for
    some reason. I think a few examples of each would help. Is this
    a problem ?   6a

Another area that I think I'd better catch on to in a hurry (ie, I'm
interested in trying it out) is that of addressing variables. I'm
not too sure what I mean by this, unfortunately. I'd like to be able
to do loop type operations which are dependent on the value of a
variable, say [i], with i set before you get into the loop.   7

    A specific application i have in mind is modifying a group of
    statements up to the point where, say, the first printing
    characters are MAY, rather than APRIL; that's not a good example
    , because there are simpler ways of handling it, but I'd like to
    be able to initialize a variable [i] and then use it is loop type
    operation. Where do I stand on this now ? I don't even now what
    I would do to intialize something, much less what I would call
    that thing that I am trying to initialize.   7a

        I found this in jform1;
        i _ 40;
        WHILE *title*[i] # SP AND i # 1 DO BUMP DOWN i;   7a1

        I think that the [i] refers to the i-th position is the string
        named "title"; but I don't know exactly what that means.
        Could I use it to refer to the i-th visible, rather than the
        i-th character?   7a2

1

status report on MIKE work in L-10 to date, Request for examples of
programs

As far as my progress into more complicated things, I don't know how
well I'm doing, The programs I've written so far are all teribly
simple, even to me, Yet the copy of jform1 that Jim left with me
looks sort of complicated,   8

status report on MIKE work in L-10 to date, Request for examples of
programs

(J30732) 13-MAY-74 13:38; Title; Author(s): Michael T, Bedford/MIKE;
Distribution: /JCN MIKE NDM; Sub-Collections: NIC; Clerk: MIKE;

resend of document that I sent to meyer ad Norton re our work in L=10

for your info,

resend of document that I sent to meyer ad Norton re our work in L-10

I've been a little tardy in responding to the sudden flurry of
interest in or L-10 progress. What have I been up to, you ask ?   1

I've written a few simple programs for reformatting statements,
They're in my directory as movegrp.nls and addgrp.nls,   2

I've been able to compile the into REL files, and they work,   3

Generally, I'm quite pleased with myself (if I do say so), what I
thought was going to be a real grind has been really fun,,,,this
stuff is really catching,,,,,   4

I haven't tried the SEND construct yet, having just gotten jim's
message on it,   5

Dean, I'd like to see some programs with examples of some of the
LOOP-tyoe constructions (LOOP, CASE, DO,,,UNTIL, etc,)   6

   One of the programs I wrote (addgrp) is just atrocious, in that it
   has 6 consecutive IF statements, all asking just about the same
   thing, I tried the CASE construction, but it didn't work, for
   some reason, I think a few examples of each would help, Is this
   a problem ?   6a

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interested in trying it out) is that of addressing variables, I'm
not too sure what I mean by this, unfortunately, I'd like to be able
to do loop type operations which are dependent on the value of a
variable, say [i], with i set before you get into the loop,   7

   A specific application i have in mind is modifying a group of
   statements up to the point where, say, the first printing
   characters are MAY, rather than APRIL; that's not a good example
   , because there are simpler ways of handling it, but I'd like to
   be able to initialize a variable [i] and then use it is loop type
   operation, where do I stand on this now ? I don't even now what
   I would do to intialize something, much less what I would call
   that thing that I am trying to initialize,   7a

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      i _ 40;
      WHILE *title*[i] # SP AND i # 1 DO BUMP DOWN i;   7a1

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      Could I use it to refer to the i-th visible, rather than the
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As far as my progress into more complicated things, I don't know how

resend of document that I sent to meyer ad Norton re our work in L=10

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simple, even to me. Yet the copy of jformi that Jim left with me
looks sort of complicated,   8

2

resend of document that I sent to meyer ad Norton re our work in L-10

(J30733) 13-MAY-74 13:41;   Title: Author(s): Michael T, Bedford/MIKE;
Distribution: /PAN IMM; Sub-Collections: NIC; Clerk: MIKE;

Telephone Conversation

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- - - -                                                          1

Larry,                                                           2

I have inquired around campus regarding available job openings and   3

the prospects don't look very good.  However, it wouldn't hurt to    4

send a resume to the following people in case a position should be=  5

come available:                                                 6

                                                                7

Mr. Roland F. Bryan                                             8

Computer Systems Laboratory                                     9

MDC 8094                                                        10

University of California at Santa Barbara                       11

Santa Barbara, California 93106                                 12

                                                               13

Mr. Charles R. Loepkey                                         14

Computer Center                                                15

MDC 8044                                                       16

University of California at Santa Barbara                      17

Santa Barbara, California 93106                                18

                                                               19

Mr. Robert J. Kroes                                           20

Information Systems Office                                     21

MDC 8052                                                      22

University of California at Santa Barbara                     23

Santa Barbara, California 93106                               24

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Telephone Conversation

Mr, Earl Jensen   26

Employment Office, Personnel   27

MDC 8065   28

University of California at Santa Barbara   29

Santa Barbara, California 93106   30

                                                                            31

I will keep my eyes and ears open and if something becomes available   32

in the near future, I'll be sure to let you know, I hope you are   33

successful in this endeavor, == Ron Stoughton   34

=======   35

                                                                            36

Telephone Conversation

(J30734) 13-MAY-74 13:53;   Title: Author(s): Ronald M. Stoughton/RMS;
Distribution: /LM; Sub-Collections: NIC; Clerk: RMS;

Telephone Conversation

- - - -   1

                                                                           2

Larry,   3

I have inquired around campus regarding available job openings and   4

the prospects don't look very good. However, it wouldn't hurt to   5

send a resume to the following people in case a position should be-   6

come available;   7

                                                                           8

Mr, Roland F, Bryan   9

Computer Systems Laboratory   10

MDC 8094   11

University of California at Santa Barbara   12

Santa Barbara, California 93106   13

                                                                          14

Mr, Charles R, Loepkey   15

Computer Center   16

MDC 8044   17

University of California at Santa Barbara   18

Santa Barbara, California 93106   19

                                                                          20

Mr, Robert J, Kroes   21

Information Systems Office   22

MDC 8052   23

University of California at Santa Barbara   24

Santa Barbara, California 93106   25

Telephone Conversation

26

Mr. Earl Jensen   27

Employment Office, Personnel   28

MDC 8065   29

University of California at Santa Barbara   30

Santa Barbara, California 93106   31

32

I will keep my eyes and ears open and if something becomes available   33

in the near future, I'll be sure to let you know, I hope you are   34

successful in this endeavor,   -- Ron Stoughton   35

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37

Telephone Conversation

(J30735) 13-MAY-74 13:54;   Title: Author(s): Larry McDaniel/LM;
Distribution: /RMS; Sub-Collections: NIC; Clerk: LM;

Jim White wants me to respond to (22898,) for the USING directory,
Should I just tell him to addd all USING members to the list? Dave,   1

(J30736)   13=MAY=74 14:10;   Title: Author(s): David H, Crocker/DHC;
Distribution: /NJN; Sub=Collections: NIC; Clerk: DHC;

Fouled-up idents

Marcia -- Thanks for the info about JEAN and NETHELP, They were
apparently created by Jean Iseli (JI) and Alan Hill, respectively, I
am sending them a copy of this note, in order to ask them to talk to
you about fixing the two idents, For their reference, the two Journal
notes leading up to this one are: (30726,) and (22982,),

I agree with you that the two idents are seriously goofed up,

Will all of you let me know when this is cleared up, I hope it will
not take more than a week, Thanks, Dave,   1

Fouled=up idents

(J30737)   14=MAY=74 10:46;   Title: Author(s): David H, Crocker/DHC;
Distribution: /MLK JI ARH; Sub=Collections: NIC; Clerk; DHC;

July USING Meeting

Dear USING--   1

It is time to make preliminary arrangements for our next scheduled
meeting, At the last USING meeting (Jan 3-4 in Menlo Park) it was
decided that we would reconvene in the middle of July in Boulder,
Colorado, We have found it quite difficult to make arrangements for
Boulder, so when Roland Bryan graciously offered his facilities in
Santa Barbara we decided to pursue his suggestion,   2

At the last meeting July 11-12 were selected as the meeting dates,
We don't see any reason to change this except to extend the meeting
to a third day (July 10-12) in order to move at a more leisurely pace
and maybe even get some time on the Santa Barbara beaches,   3

The temporary agenda concentrates on review of the many reports that
have been written this Spring; a full agenda will be forthcoming
(closer to meeting time) for which we solicit suggestions,   4

If you plan to attend or if you have any strong objections to the
date or the place, please let one of us know soon, so we can give
Roland a definite answer,
Nancy and Dave   5

July USING Meeting

(J30738) 14-MAY-74 12:44;   Title: Author(s): Nancy J, Neigus/NJN;
Distribution: /USING RFB(Sorry we haven't been able to get you an answer
sooner, hope the offer is still good,); hope the offer is still good,);
Sub-Collections: NIC USING; Clerk: NJN;

Problems on May 14

Please accept our apologies for the almost unusable condition of the
Network between 0900 and 1400 Eastern time on Tuesday, May 14, The
software maintenance period on May 14 was used to release a new
version of the IMP software; this software had been checked
extensively in our small test cell but, as sometimes happens,
problems (presumably of scale) began to show themselves soon after
the end of the release period, By 1230 we had decided that the
problems could not be solved and began to reinstall the earlier
version of the software, This was completed for most sites by 1400,
Again, our apologies,
Alex McKenzie (for the NCC)   1

Problems on May 14

(J30739) 14-MAY-74 13:38;   Title: Author(s): Alex A, McKenzie/AAM;
Distribution: /NLG; Sub-Collections: NIC NLG; Clerk: AAM;

Login idents for USING

Dave--
I guess all the USINNG members is the best and easiest way. (Though
technically one should be able to conect from one's login directory,)
The thing that concerns me is disk space, If allowing all those
idents as login idents means tying up alot of disk space with initial
files then I am against any idents being included, Maybe youshould
pursue this is more detail with Jim,
--N,

1

Login idents for USING

(J30745)   15-MAY-74 06:48;   Title: Author(s): Nancy J, Neigus/NJN;
Distribution: /DHC; Sub-Collections: NIC; Clerk: NJN;