Reply To NLS Forms System Interface with Data Computer

The picture as best I can determine it. All comments welcome. Every firm stand contained herein is assailable by the slighest bit of logic.

Reply To NLS Forms System Interface with Data Computer

Historical Perspective   1

   The forms system and related interfaces to data management
   packages have been on my mind for some time. My first attempts to
   construct forms on NLS were in late 71 and early 72. I was at
   that time a real novice in NLS, and tried to duplicate an image of
   the form using ---'s and   's for the boundries of preprinted
   boxes. I did it, but the result was obviously of no practical
   use. I began to think of ways that one could insert statements
   into a regular NLS file structure and make them be printed out in
   the proper place on a piece of paper.   1a

   My first attempt to specify what I felt needed to be done, was in
   Jul of 72. Unfortunately, I did the writing on a Termicette
   cassette, and DEX was a long time in coming (at least to the
   network), so it never made it into NLS. Tom Lawrence help me a
   lot in the early days, when we were still fumbling around in the
   dark.   1b

   The first evidence of what we were thinking about appeared in: 1c

      DLS 12-JAN-73 10:58   13779
      FORMS GENERATOR PACKAGE
      Location: (MJOURNAL, 13779, 1:w)   1c1

   We were just completing the first contract (between RADC and SRI)
   under which EKM revived the Calculator. A follow-on contract was
   in the works and in our mind it was to result in a Forms Package.
   The workstatments were written in a very general way, at the
   insistence of JCN. We were agreeable, because everything was in a
   state of flux. We were also seeking special consideration from
   SRI, in terms of people support in the training and application
   areas and in terms of access to the PDP-10X.   1d

   About Mar of 73, there was some question in the minds of EKM and
   others at the ARC, whether it would be better to add an interface
   to BASIC and improve the Calculator Package, or to leave it as it
   was and concentrate on the Forms Package. The decision was made
   in favor of the later. Responses to some of DVN's questions in
   this area are contained in: 1e

      DLS 10-APR-73 14:01   15660
      Calculator, forms gen, terminals, etc
      Location: (MJOURNAL, 15660, 1:w)   1e1

   EKM prepared a design document, which was reviewed by all the
   members of the AKW group here at RADC. Questions about the design
   document and preferences are indicated in: 1f

Reply To NLS Forms System Interface with Data Computer

DLS 11-JUN-73 14:25   17112
Review of (michael,forms)
Location: (JJOURNAL, 17112, 1:w)   1f1

In Jul, EKM and others made a trip to RADC, primarily to gain an
appreciation for the environment within which a forms system would
have to operate. Existing forms were reviewed in detail. The
patterns of movement of various forms within the Branch were
discussed. They were also introduced to IDS. I presumed when
they left, that they were going back to begin serious coding of
the forms package. Her trip report is contained in: 1g

EKM 30-JUL-73 14:37   18121
RADC Visit
Location: (LJOURNAL, 18121, 1:w)   1g1

My first indication that work was not proceeding directly on the
Forms System came by way of DVN in his note: 1h

DVN 24-SEP-73 09:20   19265
State of Forms Generator
Location: (JJOURNAL, 19265, 1:w)   1h1

During the next 2 months, the AKW team at RADC was engaged almost
full time in preparing proposals for an RADC MIS and for an AFSC
MIS. These proposals considered NLS as the primary working medium
of engineers, administrators, secretaries and managers; with a
link to a data management system specifically for the storage and
retrieval of management data. The initially proposed data
management system was IDS (at Frank Tomaini's insistence). Within
the proposal, however, provision was made for consideration of
another DMS in two years. The proposal talks as though the Forms
System were in existence, and it is assumed as the data collection
vehicle for input of data into the data management system. The
proposal is contained in: 1i

DLS 19-DEC-73 06:28   20969
The Initial RADC MIS Proposal
Location: (MJOURNAL, 20969, 1:w)   1i1

In Dec EKM sent me a restatement of the requirements of the Forms
Package, indicating that redesign of the Package was being
contmplated, in light of changes in NLS editor, journal and query
systems (MJOURNAL,20728,1:w).   1j

My trip in Jan to the ARC, reveled that plans were being made to
include the Data Computer as an integral part of the Forms
Package. The emphasis had shifted from a Forms Package per se to

an integrated Management Information System, with attendent
increases in development time and costs.   1k

My purpose in reiterating the background leading up to the present
is simply to say that the need for a Forms Package has been on our
minds for a long time. That I saw it finally becoming a reality
under the current contract. That I was disappointed to find out
that it was not yet to be. That the ARC view of the
implementation of the package has changed as NLS and the network
have changed. That there should have been closer coordination
between ARC and RADC people as these changes became visible.   1l

The proposed Forms System, as documented in (michael,formedit,) has
been reviewed by D Stone, J Cavano and others who are in the data
management business here at RADC. Subsequently, discussions were
held with Frank Tomaini. The following is a summary of RADC's
position with regard to Forms Package and the proposed connection to
the data Computer.   2

1. The incorporation of a forms description, preperation and
printing capability with in NLS is neither a trivial job nor will
it result in a "toy" system. A truly general purpose Forms
Package has wide application throughout government organizations.
The utility of such a package lies in the fact that NLS users have
to (and will have to for some time to come) interface with the
"outside" world. That is, information readily created and edited
within NLS, must be communicated outside the NLS community in a
conventional manner, which in many cases means a preprinted form.
The ability for a nonprogrammer to specify formatted files easily
and for the disinterested user to be assisted in filling out these
files is of great value in many organizations within and without
the government. The ability for a nonprogrammer to easily specify
the format of the printed version of a formatted file would be a
major advance over conventional "RPG's", where one must be a
programmer to specify the printed format.   2a

2. The utility of any forms system will be greatly increased if it
can also be used as a data collection device for input to
Management Information Systems (MIS). Much of the management type
information within the AF is first created on some form.   In
almost all instances now, it is transcribed onto coding sheets for
input to various MIS's, because the forms themselves were never
designed for computer input. This process leads to errors and
inconsistencies in the data base, untimley data in the MIS files
and consequently, less than usfeful MIS's.   2b

3. The question is not whether or not to interface an NLS forms
system with a data management system, but which, when, how and
who. There are a number of pragmatic reasons why we would prefer

3

to have the interface made to IDS; due to our role of support to
user organizations within the AF.   2c

   The IS Division at RADC is heavily committed (for better or
   worse) to supporting the World Wide Military Command & Control
   System (WWMCCS) community. We have people developing, testing
   and applying Executive systems, Data Management systems,
   Networking systems, and Job programs at several sites
   throughout the WWMCCS community. The current machines in use
   within WWMCCS are the H-6000 series. The initial WWMCCS Data
   Management System (WWDMS) will be essentially COBOL-IDS.
   Honeywell is supporting IDS, and its capability will be
   increased in several phases. In our support of DMS and MIS
   development efforts then, we must be constantly thinking of the
   ultimate users of our development efforts; which at the present
   time are largely WWMCCS people.   2c1

   In preparation for support to WWMCCS, we are acquiring a H-6100
   machine and have invested substantial manpower in understanding
   and using IDS. We are aware of its limitations, but are
   committed to making it work, since our "customers" are buying
   it. The AF (at least the part we support) does not own or
   control any PDP-10 machines. Therefore, we have to consider
   the problems associated with transfering any software developed
   on machines other than the H-6000.   2c2

   Any data bases generated for experimental or operational use
   are better controlled if they reside on our machine. They are
   accessable locally if the network or remote hosts are down. If
   response times are poor, local steps can be taken to improve
   them. There is always the political question to be faced; "How
   many machines around the network should we scatter our
   management data across?"   2c3

The other role that ISI plays is one of Exploratory Development.
This allows us to check out the practical feasibility of
technology developed under more basic research projects.
Arguments favoring interconnection with the Data Computer
generally fall into this category.   2d

   It appears that the initial interface of the NLS forms system
   can be made easier and more quickly with the Data Computer.
   Other than the MIT machine running the MULTICS executive, there
   are no H-6000 machines currently on the ARPANET. Although
   there are a number of internal AF organizations which are
   forcing things in this direction, the first AF machines on the
   ARPANET will be CDC-6600's. The RADC H-6100 may be the 4th
   machine, but this will not happen for a year. Therefore, if
   RADC wishes to demonstrate the basic concept of interfacing NLS

with a data management system in an INTERACTIVE manner in the
near future, there is really no viable alternative outside the
Data Computer.   2d1

I emphasize the word interactive, because it is possible to
dump files to our 8090, which puts them on tape. The 8090
is currently used for local printing of files received from
the network. However, another printer is being procured
with a direct connection to the TIP. In an operational
sence then, it should soon be possible to dump management
data collected from forms filled out in NLS to the 8090 tape
and transfer the tape to the Honeywell machine for update of
the IDS data bases. The data base would then be queryed via
one of the local IDS query systems.   2d1a

The Data Computer design offers easy interface to other
processes on the ARPANET in a highly interactive manner. As
such, it is a prototype candidate for future AF DMS's and
should be explored by people in IS. IS personnel will have to
become familiar with the Data Computer, before intelligent file
designs can be set up on it. The Data Computer query language
must also be learned, since it is not geared to inexperienced
users.   2d2

Use of the Data Computer is consistent with the general IS
policy of attempting to apply technology sponsored by ARPA.   2d3

With the above discussions in mind, I will try to answer the
questions posed in (GJOURNAL,21389,1c).   2e

Do the working levels and appropriate management understand the
implications of operating a full blown system and the cost of
achieving such a system?   2e1

The cost and manpower commitment necccessary to develop and
implement an operational MIS are only too well understood by
Tomaini and the workers within his Branch. This is one of
the reasons that Tomaini cannot make a commitment to the
Data Computer based MIS at this time. His resources (both
dollars and internal manpower) are severely limited.   2e1a

How are other plans in the Air Force going and is there any
probability that what we are proposing can ever connect to it
or what is required to achieve a connection?   2e2

Any relationship between your proposed connection of NLS and
the Data computer and Air Force plans is in the distant
future, at least in terms of WWMCCS and their commitment to
Honeywell machines. If there is a connection to be made, it

will probably be made through the IS Division. In its role
as advisor to WWMCCS, it can exert influence on the future
upgrades of the WWMCCS system.   2e2a

If we were to produce a stage 1 system exactly what purpose
would it be for, demo for RADC management of the frontend
concept, real operational use by some small group etc. and what
exactly does RADC think would have to be in Stage 1 to fullfil
this goal? Is what we are proposing for Stae 1 the right
things?   2e3

The proposed Stage 1 could only be used to demonstrate the
possibility of using NLS as a front end for a MIS. It could
not be used operationally. The numbers and types of forms
handled would have to be increased significantly, before a
pilot operational system could be set up, even for the
Branch.   2e3a

The principle role of the ISI Branch in seeking to apply NLS
to its daily job is to evaluate the possibility of doing
that; its costs and its benefits. With just a couple of
forms handled by the Forms Package, it cannot be applied in
any real sence to augmenting that part of the Branch's job
which calls for communicating with the outside world via
forms.   This seems to most people, especially managers and
administrators of the government type, to be a most straight
forward job for a system like NLS to do. Probably, because
they have seen other system which do it. If we cannot show
its usefulness at the Branch level, then it is more
difficult to obtain support from the Division and higher
levels of management in the Center. If we can't make it
work in the Center, we have even less chance of selling it
to AFSC or Hq USAF.   2e3b

Assuming Stage 1 is successfull what are the implications for
follow on funding and work, would ARC be the right group or
should some other group do the work in collaboration with us
etc.?   2e4

I cannot see at this time how we could support the ARC at
any greater level than we have in the past ...$75K per year,
simply because of our limitations in available funds. The
effort should be persued, since I believe that it is of
general interest to any large organization using NLS and the
ARPANET. I suspect that ARPA would be more than willing to
support this effort, since they are already supporting
efforts in common query languages for DMS's and have
supported the development of the Data Computer itself.   2e4a

Reply To NLS Forms System Interface with Data Computer

In short, the effort should be undertaken, RADC cannot
afford it at this time, its within the scope of the
general ARPA workstatement under which you are now
operating, ARC is the most logical group to undertake the
interface.   2e4a1

Who in the RADC management is asking for this work? My feeling
is that to be worthwhile the answers to the above questions
need to be agreed upon by and supported by fairly high RADC
management (at least to Tomani?)   2e5

As the project engineer for all contracts between RADC and
the ARC, I have the responsibility to see that the ARC
delivers what is contracted for. We contracted for so many
hours of time, which I understand from Norton are expended.
In the sence that we do not have a useable general purpose
Forms Package, I have failed to communicate the necessary
quidance to you to assure a visible useful product.   2e5a

I personally (as does the rest of the AKW group) support the
interface work with the Data Computer, but unfortunately I
must get money from Frank Tomaini. Frank cannot see his way
clear to embark on a new development effort at this time.
If we were to get money from another source, which is always
a possibility, then the effort would be reconsidered.   2e5b

I do not think ARC should proceed beyond Stage 0 until above
questions or equivalents are answered and until we have
assurance of RADC management support.   2e6

I think that the ARC should spend the next 4-5 months trying
to create a general purpose Forms Package within NLS,
independent of an interface to any Data Management system at
this time. There are a lot of problems just in making the
NLS part of the Forms Package work smoothly. Meanwhile, I
will be seeking support for the larger problem of
interfacing it with the Data Computer.   2e6a

I realize that some of the work might have to be redone in
the event that the interface with the Data Computer is
persued, but if it is not, then at least we will have
something which is useful, even if in a marginal sence.   2e6b

Reply To NLS Forms System Interface with Data Computer

(J30043) 4-FEB-74 14:57;   Title: Author(s): Duane L. Stone/DLS;
Distribution: /RWW JCN DCE JHB DVN EKM HGL EJK RFI JLM FJT RHT2 ARB;
Sub-Collections: RADC; Clerk: DLS;
Origin: <STONE>FORM.NLS;7, 4-FEB-74 14:50 DLS ;

Program notive ...please read immediately and let me know if date is bad

RADC/ISIM   5 February 1974   1

                                                                                      2

Imbedded Software Monitors and Data Collection   3

                                                                                      4

ISIM   5

                                                                                      6

On February 21, 1974 Mr. Aaron Navarro of the Planning Research
Corporation (PRC), Rome, N. Y. will give a summary briefing of the
work accomplished under contract F30602-73-c-0198. The effort
invlved imbedding software monitors in user I-D-S programs (problem
program monitoring) to collect CPU and I/O timings, and frequency o
I-D-S module uses. the results of this monitoring technique would
supposedly provide statistics so that systems people could asses the
performance, and fine-tune the O/S or the DMS being used.   7

                                                                                      8

The meeting time is 1330 hours, 21 February. The place is building
3, conference room 1a. All interested personnel are welcome.   9

                                                                                     10

                                                                                     11

David L. Daughtry   12

Info Mgt Section   13

Info Processing Branch   14

(J30045) 5-FEB-74 06:59;   Title: Author(s): David L. Daughtry/DLD2;
Distribution: /RADC MAW DVA FPS; Sub-Collections: NIC RADC; Clerk: DLD2;
Origin: <DAUGHTRY>FEB-PRC-BRIEFING.NLS;1, 5-FEB-74 06:47 DLD2 ;

Request for Titles in Journal messages

Dave, would you please use a title when you send a message using the
journal. It makes it so much easier for the receivers to keep track
of your messages, and it will make it easier for you to maintain a
record of what you have sent. After insertin the text of your
message and using the <cr>, you will get a &&. At this point if you
type an "i" the machine will finish the word so that it reads
INTERROGATE - then type a <cr> and it will lead you through the rest
of the procedure. The first thing it will ask for is a title.   1

Request for Titles in Journal messages

(J30046)   5-FEB-74 09:30;   Title: Author(s): Edmund J. Kennedy/EJK;
Distribution: /DLD2; Sub-Collections: RADC; Clerk: EJK;

test msg for Kesselman or Luther

This is a message for Murray Kesselman or Dave Luther. Will the
recipient please let me know who gets it? You can send me a message
via tenex address "kennedy@Office-1" or via the journal system to
"ejk". If neither of you get this then don't bother to reply.   1

test msg for Kesselman or Luther

(J30047)   5-FEB-74 09:35;   Title: Author(s): Edmund J. Kennedy/EJK;
Distribution: /DAL; Sub-Collections: RADC; Clerk: EJK;

Evaluation of ROC 17-73 Project ADMIN

Is the proposed capability within the state of the art?   1

   As described in the ROC, an Administration Management Information
   System, which provides an enhanced capability for the preparation,
   timely transmission, and recall (cyclic or on demand) of
   documentary communications within the air Foce and which takes
   advantage of the technological developments in automatic data
   processing and communications is within the state of the art.
   Such a system is in daily use at the Stanford Research Institute's
   Augmentaion Research Center and at AFSC's Rome Air Development
   Center in the Information Sciences Division. At the Rome Air
   development Center studies are ongoing in studying the application
   of the technology to specific Air Force requirements and study of
   how such a system must be designed so that equipments obtained
   and procedures developed can be phased into Air Force
   organizations without detrimental interruptions to the
   organizations' primary mission.   1a

   A relatively high degree of automation may be achieved based on
   existing technology. The introduction of interactive terminals,
   word processing routines and a centralized microform or microfiche
   high density data storage and retrieval system when combined with
   revamped administrative procedures offers a potential for large
   cost savings.   1b

Currently available equipments/techniques which could satisfy the
requirement.   2

   ADP   2a

      There are many text-editing systems available which can be
      addressed from remote terminals. One of the most sophisticated
      of these is imbedded in the On-Line System(NLS) developed by
      the Augmentation Research Center at Stanford Research
      Institute. This capability has been in daily use at RADC in
      one Section in the Information Sciences Division for over one
      year.   2a1

   Terminals   2a2

      There are a large number of terminals of many diverse types
      that could be applied to the solution of this problem.
      Redactron and IBM are two notable examples. There are many
      terminals that have their own built in memory and
      text-editing capability, such as the IBM MTST or the MCST.
      Most valuable for this application are the terminals that
      access a central computer. In a simplified typewriter-like
      device these need cost no more than about $3000 each.   2a2a

Evaluation of ROC 17-73 Project ADMIN

Interface To Central Processor   2a3

If the central processor is to be located physically in
proximity to the USAF Director of Administation, then there
are no real problems, however much of the capability sought,
such as remote access to central files will be lost.   Access
to a central store by means of a communications network is
essential if the full potential of PROJECT ADMIN is to be
realized.   2a3a

Communications   2b

The communications system required to effect the administrative
information transfer would be a function of the speed, accuracy
and anticipated traffic density requirements for a given air
base.   However, it is believed that this would not be a stand
alone system.   The total on-base information transfer should be
considered, i.e.,administration, supply inter-office and record
communications.   2b1

At this time, there has been a large body of information
collected on the ARPA net which has been active and growing for
several years.   RADC has been on the net and is a daily net
user.   The knowledge and capability gained appears to be
directly in line with the goal of this ROC.   There exists
through the use of such a net the capability, to access remote
central processors, to look at many thousand of documents that
are stored in remote locations, and to prepare, edit and to
distribute others using the net.   2b2

Study is beginning, at RADC, on methods of automatically
distributing information using the net.   2b3

Microfiche   2c

A pilot system is being completed for the Air Force Military
Personnel Center.   By the end of this year some 35 Million
pages of records will have been converted into over 2 million
microfiche in the Air Force Master Personnel Record System.
The system has the capability for storing, retrieving and
displaying the records by means of televison viewers.   2c1

Cost considerations.   3

Obviously automation will not be introduced into an information
transfer system unless it can be demonstrated to be
cost-effective.   The suggestion of implementing a pilot base to
establish an information transfer system configuration is a
reasonable approach and necessary step towards establishing a

Evaluation of ROC 17-73 Project ADMIN

quantitive foundation for determining cost effectiveness.   This
approach has also been suggested by the Air Force Base Information
Transfer System (AFBITS) Program Manager.   3a

Current Costs   3b

   The costs stated in the ROC itself are quite impressive and
   need no elaboration.   3b1

Possible short range cost savings   3c

   The short range cost savings would lie in the ease and speed
   with which the body of regulations, manuals, and pamphlets
   comprising over one-million printed pages can be developed and
   maintained.   The ease of preparation and of editing will mean
   immediately that fewer personnel will be required for these
   odious chores.   3c1

Long range cost savings   3d

   The most impressive cost savings will come when the need for
   maintaining and storing these millions of pages in hard copy is
   eliminated.   When the central file of the AF regulations and
   manuals and pamphlets are stored in electromagnetic form, and
   are readily available in current version, without the need to
   print and distribute many thousands of copies, the savings will
   be enormous.   Just consider the number of pages involved and
   the work involved in preparing, editing, approving,
   printing,distributing, storing, finding and reading a million
   pages of documents.   3d1

Method Of Approach.   4

   The proposed capbility is within the state of the art.   What is
   needed is the will to proceed, some hard-core engineering and
   undoubtedly large sums of money.   4a

   Taking these in order: 4b

   The first thing to be determined, as a precursor of the others,
   is just what is involved in terms of cost and effectiveness.
   As our experience develops, more and more information is
   obtained on the usefulness and the cost of remote terminals and
   communications networks accesssing remote computers.   4b1

   The willingness to proceed must be based on specific cost
   effectiveness studies of the various technologies proposed for
   Project ADMIN.   Some information is becoming available as RADC

continues its various programs, more will emerge as these
efforts continue.   4b2

Hard-core engineering will be needed primarily after a decision
to proceed with a system. Much of what is needed for a
test-bed is already available.   4b3

Cost determination will only be possible after cost
effectiveness studies and the configuration of a test-bed.   4b4

Applicable RADC programs and/or techniques (with availability dates)
which could lead to satisfying the requirement.   5

RADC (DC) has proposed, in support of the AFBITS Program, to
undertake the task of defining communications processor
requirements for on-base information transfer.   Initial
concentration will be upon determining the size and type of
communications processor required for satisfying diverse automatic
message processing and distribution needs, the objective being to
reduce the number of people involved in the processes.   The
Network Processing Supervisor/355 (NPS/355) software package in
conjunction with the DATANET-355 hardware will provide a test bed
capability at RADC.   It is anticipated that the information gained
on the RADC test bed could be directly scaled to the total
information transfer requirements of an air base.   Outputs from
the RADC program are expected in FY-76.   Paragraph 2.a of subject
ROC proposes that a detailed analysis and evaluation of
administrative functions be performed.   The data gained from this
activity should be factored into the AFBITS Program.   5a

RADC (IS) has been actively involved in the ARPA net and in the
development of an on-line system using the net for over two years.
Thus at the present time there is a cpability at RADC to do many
of the things cited in the ROC.   These include remote access by
computer terminals to a remote central processor over a
communications network.   By this means there is an ability to
create, on-line, large documents, edit them, disseminate and store
them, and to have on-line access to them.   All of this
electronically without the 'need' for hard copy.   5b

RADC (IS) has been responsible for the development of the Air
Force Master Personnel Record System.   5c

Much of this capability is available right now, including hardware
, software and trained personnel.   5d

Recommendations to increase the overall effectiveness of the proposed
capability.   6

Evaluation of ROC 17-73 Project ADMIN

None.   6a

Evaluation of ROC 17-73 Project ADMIN

(J30048) 5-FEB-74 13:33;   Title: Author(s): Edmund J. Kennedy/EJK;
Sub-Collections: RADC; Clerk: EJK;
Origin: <KENNEDY>ROCEVAL.NLS;3, 4-FEB-74 14:47 EJK ;

Visitlog, 5 Feb 74, IBM (haller, Pope, and Leonard)

Visitlog: IBM: Robert E. Haller, Manager of Word Processing, Program
Development (201 848 2729); E.T> Pope, Manager of IBM Account (848
3177); Richard P. Leonard, Manager IBM Account Programs (848 1900);
ALL of
Office Products Division
Parson's Pond Drive
Franklin Lakes NJ 07417   1

    Bob Haller made the initial contact and requested a demonstration.
    He is interested in the state of the art in office automatioin
    vis-a-vis word processing. IBM doesnt want to duplicate effort in
    that area, and in fact they are way behind us. They seemed to be
    interested in the ultimate office...the "office of the future".
    The other two were interested for their own edification as it
    were, and seemed much more versed in the technology than Bob.
    Specific interest was expressed in the effects of the technology
    on users from a psychological standpoint, which arose out of a
    desire to humanize typing pools and the present mechanized office
    that results when IBM sets up its Word Processing System. Since
    the only things that I ever have found dealing with these aspects
    of the system are what I have done (including literature searches
    for similiar investigations of system impact on users), I gave a
    copy of my article in the PROCEEDINGS OF THE SID, 1973.   1a

Documentation provided: 1b

    Cue cards   1b1

    Experiences with an Augmented Human Intellect System (Bair)   1b2

    Augmented Knowledge Workshop   1b3

    Coordinated Information Services...   1b4

Future contact was planned and the issue of what kind of help we
could provide arose. As a minimum, I plan to keep in touch with
them and send a list of the previous contacts we have had with
IBM.   1c

Visitlog, 5 Feb 74, IBM (haller, Pope, and Leonard)

(J30049) 5-FEB-74 16:43;   Title: Author(s): James H. Bair/JHB;
Distribution: /JCN RWW MDK PR; Sub-Collections: SRI-ARC; Clerk: JHB;

summary of Communications Expectations Conference at Hotel
Bonaventure

The following represents my first-hand, of-the-cuff impressions of
the "Communications - Expectations" Conference held at the Hotel
Bonaventure in Montreal on January 31 - February 1, 1974.   1

The conference was sponsored by three industrial associations: 1a

Can'n. Cable Television Assoc.   1a1

Can'n. Telecommunications Carriers Assoc.   1a2

Can'n. Assoc. of Broadcasters   1a3

The program for the conference revolved around these five topics,
with each topic receiving approximately 90 minutes of the
conference time followed by smaller working group discussions of
approximately one hour duration.   1b

User and Home   1b1

User and Community   1b2

User and Region   1b3

User and the Nation   1b4

User and the Universe ( )   1b5

I have outlined below some of the general impressions that I
received from the conference.   1c

The conference was significant because it represented one of
the few times that the sponsoring groups have been able to get
together to discuss anything.   1c1

The conference was the first opportunity that the groups had a
chance to sound-off in front of the other groups, and the
proceedings (formal and informal) took on the air of an
industry conference rather than a conference of all the
interested parties in the game of communications futures.   1c2

While the conference was represented as being future-oriented,
it dealt with some very everyday topics: 1c3

What's wrong wth CBC programming today?   1c3a

Why is current local origination programming so bad ?   1c3b

What effect does viewing repeated acts of violence have on
young television viewers ?   1c3c

The conference was presented as a meeting place for
representatives from the different sponsoring organizations,
but many of the oranizers apparently thought that they were
offering much more. There was a feeling that they were
presenting a really open forum for all types of users of
communications technology and services. This was just not the
case.   1c4

The discussions, presentations, and workshops were dominated by
traditional, middle-class values. This would hardly rate any
significant notice if it weren't for the fact that the
representatives were extending their values and perceptions to
the larger world of prospective users of some of their
equipment. (1c5

    Incidentally, while one would expect the conference to have
    a very definite hardware/technology orientation, this was
    not the case; if anything, the accent was on the media
    overwhich the message might be transmitted, and to a slight
    extent, on the message itself. The concept of different
    communications services never did evolve as an identifiable
    issue.)   1c5a

There were a few token representatives from the outside world
(a farming family from Ontario, communicatons students from
Loyola Univerisity, a labour union official from Newfoundland),
and the idea of having them interact with the industry
representatives was a good one, but it never got off the
ground. The structure was too formal, with little opportunity
to follow-up interesting areas of discussion.   1c6

At the conclusion of the conference, the floor was opened to
anyone wo had comments on the proceedings or organization of
the conference. Several people were critical of the operation
for a number of different reasons.   1c7

    Apparently no expense was spared in setting up the
    conference. The registration fee of $100 was felt to be far
    too expensive for many groups who would have liked to have
    attended. (The organizers responded that it was not until
    too late that they realized this had been a factor in many
    invited groups not attending. There had always been a plan
    to subsidize the cost of the conference for those groups,
    apparently.)   1c7a

2

summary of Communications Expectations Conference at Hotel
Bonaventure

The setting of the Hotel Bonaventure was such that many
groups from lower income areas, or from different cultural
backgrounds would have been discouraged from attending.   1c7b

summary of Communications Expectations Conference at Hotel
Bonaventure

(J30050) 4-FEB-74 10:06;   Title: Author(s): Michael T. Bedford/MIKE;
Distribution: /LHD MIKE; Sub-Collections: NIC; Clerk: MIKE;

Reply To NLS Forms System Interface with Data Computer

The picture as best I can determine it. All comments welcome. Every
firm stand contained herein is assailable by the slighest bit of
logic.

Reply To NLS Forms System Interface with Data Computer

Historical Perspective   1

    The forms system and related interfaces to data management
    packages have been on my mind for some time. My first attempts to
    construct forms on NLS were in late 71 and early 72. I was at
    that time a real novice in NLS, and tried to duplicate an image of
    the form using ---'s and   's for the boundries of preprinted
    boxes. I did it, but the result was obviously of no practical
    use. I began to think of ways that one could insert statements
    into a reqular NLS file structure and make them be printed out in
    the proper place on a piece of paper.   1a

    My first attempt to specify what I felt needed to be done, was in
    Jul of 72. Unfortunately, I did the writing on a Termicette
    cassette, and DEX was a long time in coming (at least to the
    network), so it never made it into NLS. Tom Lawrence help me a
    lot in the early days, when we were still fumbling around in the
    dark.   1b

    The first evidence of what we were thinking about appeared in: 1c

        DLS 12-JAN-73 10:58   13779
        FORMS GENERATOR PACKAGE
        Location: (MJOURNAL, 13779, 1:w)   1c1

    We were just completing the first contract (between RADC and SRI)
    under which EKM revived the Calculator. A follow-on contract was
    in the works and in our mind it was to result in a Forms Package.
    The workstatments were written in a very general way, at the
    insistence of JCN. We were agreeable, because everything was in a
    state of flux. We were also seeking special consideration from
    SRI, in terms of people support in the training and application
    areas and in terms of access to the PDP-10X.   1d

    About Mar of 73, there was some question in the minds of EKM and
    others at the ARC, whether it would be better to add an interface
    to BASIC and improve the Calculator Package, or to leave it as it
    was and concentrate on the Forms Package. The decision was made
    in favor of the later. Responses to some of DVN's questions in
    this area are contained in: 1e

        DLS 10-APR-73 14:01   15660
        Calculator, forms gen, terminals, etc
        Location: (MJOURNAL, 15660, 1:w)   1e1

    EKM prepared a design document, which was reviewed by all the
    members of the AKW group here at RADC. Questions about the design
    document and preferences are indicated in: 1f

Reply To NLS Forms System Interface with Data Computer

DLS 11-JUN-73 14:25   17112
Review of (michael,forms)
Location: (JJOURNAL, 17112, 1:w)   1f1

In Jul, EKM and others made a trip to RADC, primarily to gain an
appreciation for the environment within which a forms system would
have to operate. Existing forms were reviewed in detail. The
patterns of movement of various forms within the Branch were
discussed. They were also introduced to IDS. I presumed when
they left, that they were going back to begin serious coding of
the forms package. Her trip report is contained in: 1g

EKM 30-JUL-73 14:37   18121
RADC Visit
Location: (LJOURNAL, 18121, 1:w)   1g1

My first indication that work was not proceeding directly on the
Forms System came by way of DVN in his note: 1h

DVN 24-SEP-73 09:20   19265
State of Forms Generator
Location: (JJOURNAL, 19265, 1:w)   1h1

During the next 2 months, the AKW team at RADC was engaged almost
full time in preparing proposals for an RADC MIS and for an AFSC
MIS. These proposals considered NLS as the primary working medium
of engineers, administrators, secretaries and managers; with a
link to a data management system specifically for the storage and
retrieval of management data. The initially proposed data
management system was IDS (at Frank Tomaini's insistence). Within
the proposal, however, provision was made for consideration of
another DMS in two years. The proposal talks as though the Forms
System were in existence, and it is assumed as the data collection
vehicle for input of data into the data management system. The
proposal is contained in: 1i

DLS 19-DEC-73 06:28   20969
The Initial RADC MIS Proposal
Location: (MJOURNAL, 20969, 1:w)   1i1

In Dec EKM sent me a restatement of the requirements of the Forms
Package, indicating that redesign of the Package was being
contmplated, in light of changes in NLS editor, journal and query
systems (MJOURNAL,20728,1:w).   1j

My trip in Jan to the ARC, reveled that plans were being made to
include the Data Computer as an integral part of the Forms
Package. The emphasis had shifted from a Forms Package per se to

an integrated Management Information System, with attendent
increases in development time and costs.   1k

My purpose in reiterating the background leading up to the present
is simply to say that the need for a Forms Package has been on our
minds for a long time. That I saw it finally becoming a reality
under the current contract. That I was disappointed to find out
that it was not yet to be. That the ARC view of the
implementation of the package has changed as NLS and the network
have changed. That there should have been closer coordination
between ARC and RADC people as these changes became visible.   1l

The proposed Forms System, as documented in (michael, formedit,) has
been reviewed by D Stone, J Cavano and others who are in the data
management business here at RADC. Subsequently, discussions were
held with Frank Tomaini. The following is a summary of RADC's
position with regard to Forms Package and the proposed connection to
the data Computer.   2

1. The incorporation of a forms description, preperation and
printing capability with in NLS is neither a trivial job nor will
it result in a "toy" system. A truly general purpose Forms
Package has wide application throughout government organizations.
The utility of such a package lies in the fact that NLS users have
to (and will have to for some time to come) interface with the
"outside" world. That is, information readily created and edited
within NLS, must be communicated outside the NLS community in a
conventional manner, which in many cases means a preprinted form.
The ability for a nonprogrammer to specify formatted files easily
and for the disinterested user to be assisted in filling out these
files is of great value in many organizations within and without
the government. The ability for a nonprogrammer to easily specify
the format of the printed version of a formatted file would be a
major advance over conventional "RPG's", where one must be a
programmer to specify the printed format.   2a

2. The utility of any forms system will be greatly increased if it
can also be used as a data collection device for input to
Management Information Systems (MIS). Much of the management type
information within the AF is first created on some form. In
almost all instances now, it is transcribed onto coding sheets for
input to various MIS's, because the forms themselves were never
designed for computer input. This process leads to errors and
inconsistencies in the data base, untimley data in the MIS files
and consequently, less than usfeful MIS's.   2b

3. The question is not whether or not to interface an NLS forms
system with a data management system, but which, when, how and
who. There are a number of pragmatic reasons why we would prefer

to have the interface made to IDS; due to our role of support to
user organizations within the AF.   2c

   The IS Division at RADC is heavily committed (for better or
   worse) to supporting the World Wide Military Command & Control
   System (WWMCCS) community. We have people developing, testing
   and applying Executive systems, Data Management systems,
   Networking systems, and Job programs at several sites
   throughout the WWMCCS community. The current machines in use
   within WWMCCS are the H-6000 series. The initial WWMCCS Data
   Management System (WWDMS) will be essentially COBOL-IDS.
   Honeywell is supporting IDS, and its capability will be
   increased in several phases. In our support of DMS and MIS
   development efforts then, we must be constantly thinking of the
   ultimate users of our development efforts; which at the present
   time are largely WWMCCS people.   2c1

   In preparation for support to WWMCCS, we are acquiring a H-6100
   machine and have invested substantial manpower in understanding
   and using IDS. We are aware of its limitations, but are
   committed to making it work, since our "customers" are buying
   it. The AF (at least the part we support) does not own or
   control any PDP-10 machines. Therefore, we have to consider
   the problems associated with transfering any software developed
   on machines other than the H-6000.   2c2

   Any data bases generated for experimental or operational use
   are better controlled if they reside on our machine. They are
   accessable locally if the network or remote hosts are down. If
   response times are poor, local steps can be taken to improve
   them. There is always the political question to be faced; "How
   many machines around the network should we scatter our
   management data across?"   2c3

The other role that ISI plays is one of Exploratory Development.
This allows us to check out the practical feasibility of
technology developed under more basic research projects.
Arguments favoring interconnection with the Data Computer
generally fall into this category.   2d

   It appears that the initial interface of the NLS forms system
   can be made easier and more quickly with the Data Computer.
   Other than the MIT machine running the MULTICS executive, there
   are no H-6000 machines currently on the ARPANET. Although
   there are a number of internal AF organizations which are
   forcing things in this direction, the first AF machines on the
   ARPANET will be CDC-6600's. The RADC H-6100 may be the 4th
   machine, but this will not happen for a year. Therefore, if
   RADC wishes to demonstrate the basic concept of interfacing NLS

Reply To NLS Forms System Interface with Data Computer

with a data management system in an INTERACTIVE manner in the
near future, there is really no viable alternative outside the
Data Computer.   2d1

   I emphasize the word interactive, because it is possible to
   dump files to our 8090, which puts them on tape. The 8090
   is currently used for local printing of files received from
   the network. However, another printer is being procured
   with a direct connection to the TIP. In an operational
   sence then, it should soon be possible to dump management
   data collected from forms filled out in NLS to the 8090 tape
   and transfer the tape to the Honeywell machine for update of
   the IDS data bases. The data base would then be queryed via
   one of the local IDS query systems.   2d1a

The Data Computer design offers easy interface to other
processes on the ARPANET in a highly interactive manner. As
such, it is a prototype candidate for future AF DMS's and
should be explored by people in IS. IS personnel will have to
become familiar with the Data Computer, before intelligent file
designs can be set up on it. The Data Computer query language
must also be learned, since it is not geared to inexperienced
users.   2d2

Use of the Data Computer is consistent with the general IS
policy of attempting to apply technology sponsored by ARPA.   2d3

With the above discussions in mind, I will try to answer the
questions posed in (GJOURNAL,21389,1c).   2e

Do the working levels and appropriate management understand the
implications of operating a full blown system and the cost of
achieving such a system?   2e1

   The cost and manpower commitment neccccessary to develop and
   implement an operational MIS are only too well understood by
   Tomaini and the workers within his Branch. This is one of
   the reasons that Tomaini cannot make a commitment to the
   Data Computer based MIS at this time. His resources (both
   dollars and internal manpower) are severely limited.   2e1a

How are other plans in the Air Force going and is there any
probability that what we are proposing can ever connect to it
or what is required to achieve a connection?   2e2

   Any relationship between your proposed connection of NLS and
   the Data computer and Air Force plans is in the distant
   future, at least in terms of WWMCCS and their commitment to
   Honeywell machines. If there is a connection to be made, it

will probably be made through the IS Division. In its role
as advisor to WWMCCS, it can exert influence on the future
upgrades of the WWMCCS system.   2e2a

If we were to produce a stage 1 system exactly what purpose
would it be for, demo for RADC management of the frontend
concept, real operational use by some small group etc. and what
exactly does RADC think would have to be in Stage 1 to fullfil
this goal? Is what we are proposing for Stae 1 the right
things?   2e3

   The proposed Stage 1 could only be used to demonstrate the
   possibility of using NLS as a front end for a MIS. It could
   not be used operationally. The numbers and types of forms
   handled would have to be increased significantly, before a
   pilot operational system could be set up, even for the
   Branch.   2e3a

   The principle role of the ISI Branch in seeking to apply NLS
   to its daily job is to evaluate the possibility of doing
   that; its costs and its benefits. With just a couple of
   forms handled by the Forms Package, it cannot be applied in
   any real sence to augmenting that part of the Branch's job
   which calls for communicating with the outside world via
   forms.   This seems to most people, especially managers and
   administrators of the government type, to be a most straight
   forward job for a system like NLS to do. Probably, because
   they have seen other system which do it. If we cannot show
   its usefulness at the Branch level, then it is more
   difficult to obtain support from the Division and higher
   levels of management in the Center. If we can't make it
   work in the Center, we have even less chance of selling it
   to AFSC or Hq USAF.   2e3b

Assuming Stage 1 is successfull what are the implications for
follow on funding and work, would ARC be the right group or
should some other group do the work in collaboration with us
etc.?   2e4

   I cannot see at this time how we could support the ARC at
   any greater level than we have in the past ...$75K per year,
   simply because of our limitations in available funds. The
   effort should be persued, since I believe that it is of
   general interest to any large organization using NLS and the
   ARPANET. I suspect that ARPA would be more than willing to
   support this effort, since they are already supporting
   efforts in common query languages for DMS's and have
   supported the development of the Data Computer itself.   2e4a

Reply To NLS Forms System Interface with Data Computer

In short, the effort should be undertaken, RADC cannot
afford it at this time, its within the scope of the
general ARPA workstatement under which you are now
operating, ARC is the most logical group to undertake the
interface.   2e4a1

Who in the RADC management is asking for this work? My feeling
is that to be worthwhile the answers to the above questions
need to be agreed upon by and supported by fairly high RADC
management (at least to Tomani?)   2e5

As the project engineer for all contracts between RADC and
the ARC, I have the responsibility to see that the ARC
delivers what is contracted for. We contracted for so many
hours of time, which I understand from Norton are expended.
In the sence that we do not have a useable general purpose
Forms Package, I have failed to communicate the necessary
quidance to you to assure a visible useful product.   2e5a

I personally (as does the rest of the AKW group) support the
interface work with the Data Computer, but unfortunately I
must get money from Frank Tomaini. Frank cannot see his way
clear to embark on a new development effort at this time.
If we were to get money from another source, which is always
a possibility, then the effort would be reconsidered.   2e5b

I do not think ARC should proceed beyond Stage 0 until above
questions or equivalents are answered and until we have
assurance of RADC management support.   2e6

I think that the ARC should spend the next 4-5 months trying
to create a general purpose Forms Package within NLS,
independent of an interface to any Data Management system at
this time. There are a lot of problems just in making the
NLS part of the Forms Package work smoothly. Meanwhile, I
will be seeking support for the larger problem of
interfacing it with the Data Computer.   2e6a

I realize that some of the work might have to be redone in
the event that the interface with the Data Computer is
persued, but if it is not, then at least we will have
something which is useful, even if in a marginal sence.   2e6b

Reply To NLS Forms System Interface with Data Computer

On-line only Delivery of Journal Documents

Mike and Jim are right in suggesting that the RADC delivery of
Journal items be changed to on-line. The are enough terminals and
experienced users here now, so that most items can be read at the
terminal or printed on the line printer. We do appreciate your
efforts in the past in sending us hardcopy. It has allowed us to
maintain a local hardcopy library, which has proved to be very
valuable on a number of occasions. Dena Meyer has written a user
program, which helps in getting Journal documents printed for us. I
hope to get one of the secretaris to run this on a reqular
basis..daily..so that we can continue to maintain the hardcopy
library. Your action will force me to get this procedure going. I
needed a little pushing.   1

On-line only Delivery of Journal Documents

(J30052)   6-FEB-74 03:54;   Title: Author(s): Duane L. Stone/DLS;
Distribution: /MLK JHB FEED MDK; Sub-Collections: RADC; Clerk: DLS;

Documentation on Protection of Files - Where Is It ?

It's becoming more and more important for us to get some
documentation on how to work the file protection numbers, ie. what
does each number mean. We're not thinking of locking everything up,
but we would like to open up a couple of files so that more than one
person could write in them.   Also, we would like to be able to open
up some files for reading by anyone in our user-group but to no one
outside...how do we do this....where is the documentation ?   1

Documentation on Protection of Files - Where Is It ?

(J30053)   6-FEB-74 06:43;   Title: Author(s): Michael T. Bedford/MIKE;
Distribution: /JHB IMM MIKE; Sub-Collections: NIC; Clerk: MIKE;

If you want to know about how to protect one of your files and also
transfer files from one directory to another take a look at
(GJOURNAL,21786,1:w)   1

(J30054)   6-FEB-74 08:24;   Title: Author(s): Inez M. Mattiuz/IMM;
Distribution: /MIKE PW PF LHD JHK2; Sub-Collections: BELL-CANADA; Clerk:
IMM;

Initial file lockup

On 6 Feb, approximately 0800 your time, I logged in to Office 1.   I
read a message (Tenex) and then tried to inmes.   I found that the
thing kept feeding me the same message over and over to
wit:<kennedy>ejk.nls;20 locked by kennedy (jdh) followed by error in
reading message.txt.   I finally managed to stop this with a control
C. On going back to nls and executing a status file I was told that
the file was locked by kennedy (jdh).   After several abortive efforts
to do something I ended up outputting the file and creating a version
20.   I then deleted the version 19. My question is "?".   Further I
understand you are Mr. "Journal".   A couple of items that I journaled
on 5 Feb do not yet appear in my author branch.   Are the the cause of
the hangup?   Should I wait or rejournal them??   Comment please.   1

Initial file lockup

(J30055)   6-FEB-74 09:36;   Title: Author(s): Edmund J. Kennedy/EJK;
Distribution: /JDH DLS RJC; Sub-Collections: RADC; Clerk: EJK;

Mark Davies Visit

Mark Davies will be here next Thur. (feb. 14) to talk to me about the
comp. conferencing project. I explained to him that you wold be
becoming more involved in or work with them, and I thoght that yo
might like to participate on Thurs. He'll be arriving abot 1030 or
1100, so we'll probably join him for lunch as well. Join us ?   1

Mark Davies Visit

(J30056)   6-FEB-74 10:00;   Title: Author(s): Michael T. Bedford/MIKE;
Distribution: /IMM MIKE; Sub-Collections: NIC; Clerk: MIKE;

DC inputs to Evaluation of ROC 17-73, Project ADMIN

DCLP (R.Kenyon/2355)   1

Evaluation of USAF ROC 17-73, Project ADMIN   2

RADC (DCL) (DCM) (IS)   3

USAF ROC 17-73 has been reviewed and evaluated as requested in your
memorandum of 18 Jan 74. The following comments sequentially address
the factors listed in Paragraph 2 of subject memorandum.   4

   A relatively high degree of automation may be achieved based on
   existing technology. The introduction of interactive terminals,
   word processing routines and a centralized microform or microfiche
   high density data storage and retrieval system when combined with
   revamped administrative procedures offers a potential for large
   cost savings.   4a

   There are many on-line typewriter-like terminals which can be used
   for composing and editing reports and correspondence. Redactron
   and IBM are two notable examples. Additionally, there are
   numerous text editing systems with which the terminals could
   interact. A common user language for text editing, such as that
   used by the Augmented Knowledge Workshop personnel at RADC,
   appears to be a representative example of technology that might be
   used for Project ADMIN. The communications system required to
   effect the administrative information transfer would be a function
   of the speed, accuracy and anticipated traffic density
   requirements for a given air base. However, it is believed that
   this would not be a stand alone system. The total on-base
   information transfer should be considered, i.e.,administration,
   supply inter-office and record communications.   4b

   Obviously automation will not be introduced into an information
   transfer system unless it can be demonstrated to be
   cost-effective. The suggestion of implementing a pilot base to
   establish an information transfer system configuration is a
   reasonable approach and necessary step towards establishing a
   quantitive foundation for determining cost effectiveness. This
   approach has also been suggested by the Air Force Base Information
   Transfer System (AFBITS) Program Manager.   4c

   RADC (DC) has proposed, in support of the AFBITS Program, to
   undertake the task of defining communications processor
   requirements for on-base information transfer. Initial
   concentration will be upon determining the size and type of
   communications processor required for satisfying diverse automatic
   message processing and distribution needs, the objective being to
   reduce the number of people involved in the processes. The
   Network Processing Supervisor/355 (NPS/355) software package in

1

DC inputs to Evaluation of ROC 17-73, Project ADMIN

conjunction with the DATANET-355 hardware will provide a test bed
capability at RADC. It is anticipated that the information gained
on the RADC test bed could be directly scaled to the total
information transfer requirements of an air base. Outputs from
the RADC program are expected in FY-76. Paragraph 2.a of subject
ROC proposes that a detailed analysis and evaluation of
administrative functions be performed. The data gained from this
activity should be factored into the AFBITS Program.   4d

DC contact for the RADC proposed activity is Mr. R. Kenyon, DCLP,
Ext. 2355.   5

HAROLD J. CROWLEY   6

Chief, Special Projects Office   7

Telecommunications Branch   8

DC inputs to Evaluation of ROC 17-73, Project ADMIN

(J30057) 6-FEB-74 10:10; Title: Author(s): Edmund J. Kennedy/EJK;
Distribution: /; Sub-Collections: RADC; Clerk: EJK;
Origin: <KENNEDY>ROCEVAL2.NLS;1, 6-FEB-74 10:09 EJK ;

Lab Acivity Report - Base Comm Review

Labaratory Activity Report   1

On 17 January 1974, as part of the base communications review, a
group of people representing Hq USAF, AFCS, AFSC, ESD and RADC were
briefed on various topics.   2

   E. J. Kennedy briefed the group on work that has been on-going at
   RADC for over two years, on automated data processing as it
   relates to the problems of communications.   2a

   Topics included the use of the ARPA net, the on-line system
   developed at the Stanford Research Institute, and especially the
   experience of the Information Science Division in using these
   tools and evaluating them for Air Force applications.   2b

   It was pointed out that many of the problems identified in the
   Mission Analysis for Base Communications and being studied for
   possible solution in the Study of Automatic Data Processing
   Requirements are being looked at daily by a small group of people,
   and that considerable expertise, experience and data are available
   at RADC.   2c

   There was considerable interest expressed in RADC's data
   collecting capability in the areas of user acceptance of desk-top
   terminals, and our experience in electronic message distribution
   and receipt from a terminal.   2d

Lab Acivity Report - Base Comm Review

(J30058) 6-FEB-74 10:14;   Title: Author(s): Edmund J. Kennedy/EJK;
Distribution: /RJC RFI JLM FJT; Sub-Collections: RADC; Clerk: EJK;
Origin: <KENNEDY>LABACT.NLS;1, 1-FEB-74 14:52 EJK ;

Journal mail —Last quarter 1973

(hdec)   1

  (DLD2) 3-DEC-73 05:38 20675 WWMCCS status report (November 30,
    (IJOURNAL, 20675, 1:w)   1973)   1a

  (DLD2) 4-DEC-73 08:17 20699 Journal mail to Daughtry   1b

    Message: If you wondering about the where abouts of Daughtry
    he is in room 34 bldg 3. I still am not receiving journal mail
    due to system problems so if there areany messages please call
    me at intercom #7. I'll be glad to talk to you...signed dave   1b1

  (DLD2) 19-DEC-73 08:24 20972
    (MJOURNAL, 20972, 1:w)   1c

    Comments: WWMCCS STATUS REPORT AS OF 19 December 1973   1c1

  (DLS) 19-DEC-73 06:28 20969 The Initial RADC MIS Proposal
    (MJOURNAL, 20969, 1:w)   1d

    Comments: This is the way the proposal finally looked (for
    those of you who have not seen it). Its 50 pages, so see me
    for hard copy if interested. This is the one that Gabe
    rejected, wlthough he did not see it. I am journaling it in
    the hopes that we can use it later in the game...like maybe 20
    years   1d1

  (DLS) 19-DEC-73 08:50 20973 Instructions on how to use the IMLAC
    (MJOURNAL, 20873, 1:w)   1e

  (EJK) 19-DEC-73 12:21 21025 Status of EJK's wife (hit control o
if
    (MJOURNAL, 21025, 1:w)   you are not interested)   1f

  (EJK) 28-DEC-73 14:21 21234 Statement of Agreement AFCS/NCA/RADC
-
    (MJOURNAL, 21234, 1:w)   (Draft two)   1g

  (JCN)   9-DEC-73 15:21 20819 Note to RADC Users: Transfer of AKW
    (MJOURNAL, 20819, 1:w)   Online Services to OFFICE-1   1h

  (JHB) 16-DEC-73 10:23 20912 Notice of NLS Training at RADC
    (MJOURNAL, 20912, 1:w)   1i

    Comments: Duane, Would you please see that everyone has a copy
    of this in hardcopy form if they are not likely to receive it
    on-line. Thanks.   1i1

Journal mail -Last quarter 1973

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(RJC)   6-DEC-73 06:52 20731  tickler for week of 3 Dec - 14 Dec
   (MJOURNAL, 20731, 1:w)                                          1j

(RJC)  10-DEC-73 06:07 20825  Tickler for week of 10 December
   (MJOURNAL, 20825, 1:w)                                          1k

(RJC)  17-DEC-73 06:54 20922  Tickler for week of 17 Dec
   (MJOURNAL, 20922, 1:w)                                          1l

(TFL)  18-DEC-73 06:32 20941  RADC TIP EXTENSIONS
   (MJOURNAL, 20941, 1:w)                                          1m

13-DEC-73 0957-PST  BERGSTROM:  DM-1 Data Management System.
   cc:   tomaini, carrier, iuorno, cavano
   Received 13-DEC-73 09:57:26                                     1n
```

On 13 Dec. 73 a letter was received from the Asst. Deputy for
Advanced Airborne Command Post requesting information regarding
the functional testing of DM-1 for the Air Force Data Services
Center. They also requested any other performance measurements
on DM-1 capabilities. The former part of the request poses no
particular problem, since the AFDSC is going to prepare a
report on their T&E. The request for performance measurements
is a problem. We have none. A suitable reply will be prepared
by DFB. Any recommendations will be appreciated.   1n1

(hnov)   2

```
   (DLD2) 30-NOV-73 06:59 20647  DAUGHTRY's directory             2a
```

Message: I have been given a directory in my name. Kindly send
messages and journal maail to me using initials "DLD2. For
some reason I have not gotten any journal since creation of the
direectory. If i have not responded to requests then now you
have the reason. I askked Jim Bair to fix the problem. Dave
Daughtry   2a1

```
(DLS)  30-NOV-73 06:16 20645  Summary and Comments on IR
   (IJOURNAL, 20645, 1:w)        Proposal..INSTANT                2b

(EJK)  12-NOV-73 15:31 20179  demo                                2c
```

Message: just a demo folks don't get excited.   2c1

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(EJK)  13-NOV-73 12:50 20204  objective
   (IJOURNAL, 20204, 1:w)                                         2d

(EJK)  14-NOV-73 15:03 20244  MIS Presentation
   (IJOURNAL, 20244, 1:w)                                         2e
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Journal mail -Last quarter 1973

    (EJK)   27-NOV-73 08:37 20570 System Access
        (IJOURNAL, 20570, 1:w)   2f

    (FJT)   1-NOV-73 06:06 19989 Tickler for 29 Oct - 9 Nov
        (LJOURNAL, 19989, 1:w)   2g

    (FJT)   5-NOV-73 05:33 20043 Tickler - 5 - 16 November
        (LJOURNAL, 20043, 1:w)   2h

    (FJT)   7-NOV-73 08:09 20081 Additional Info on Tickler
        (LJOURNAL, 20081, 1:w)   2i

    (FJT)   9-NOV-73 11:42 20139 tickler
        (IJOURNAL, 20139, 1:w)   2j

    (FJT)   19-NOV-73 06:45 20370 Tickler - 19 Nov - 30 Nov 73
        (IJOURNAL, 20370, 1:w)   2k

        Comments: Please NOTE that CONFESSIONS are this Wednesday - 21
        Nov   2k1

    (FJT)   29-NOV-73 07:08 20621 mess   2l

        Message: I would appreciate it if you guys - when you send
        messages to Frank's directory, please send copy to Carrier's
        directory as sometimes I don't have a change to log on as both
        Carrier and Tomaini, if you know what I mean. And if the
        message should be important, please make sure you do
        that...Thanks much...Bobbie   2l1

    (JHB)   9-NOV-73 16:13 20151 New and renamed directories for
    RADC.   2m

        Message: A new directory has been created for Ed Laforge and
        the dirs for Bethke and Sliwa have been renamed to Daughtry and
        Liuzzi respectively.   In order to complete the renamiing
        process, the original dirs had to be destroyed and new dirs
        created under thenew names. This is a complex process that
        involves file transfer problem and consequently the contents of
        the old dirs will not be completely restored until Tues.,13
        Nov. although the process actually began on Thurs., 8 Nov.
        When completed all the files from Bethke should be in Daughtry,
        and the same for Sliwa to Liuzzi.   2m1

        Comments: Now you can use sndmsg and Journal to communicate by
        he correct name and ident (see goto ident submode).   2m2

    (JHB)   29-NOV-73 11:02 20626 New Directory at RADC for MAW   2n

Message: Mike A. Wingfield now has a directory and may be sent
Journal ident = MAW) and sndmsg communications. Welcome aboard
Mike   2n1

(JLM)   7-NOV-73 07:40 20080   automated base supply
    (LJOURNAL, 20080, 1:w)   2o

    Comments: this is a set of notes on a pitch i heard on subject,   2o1

(RJC) 20-NOV-73 06:44 20385 Preparation of Form 2
    (IJOURNAL, 20385, 1:w)   2p

(RJC) 20-NOV-73 11:55 20395 Phone Hook-Ups
    (IJOURNAL, 20395, 1:w)   2q

(RJC) 21-NOV-73 05:49 20432 tickler for the week of 26 Nov 73
    (IJOURNAL, 20432, 1:w)   2r

(RJC) 26-NOV-73 05:24 20495 tickler for week of 26 November
    (IJOURNAL, 20495, 1:w)   2s

    Comments: Please note that Form 2s are due this week   2s1

(RJC) 26-NOV-73 06:08 20496 Biography - Frank J. Tomaini
    (IJOURNAL, 20496, 1:w)   2t

    Comments: Col Thayer - A hard copy is being provided   2t1

(RJC) 26-NOV-73 07:34 20499 trip report form
    (IJOURNAL, 20499, 1:w)   2u

    Comments: I am sending to you all the trip report format. You
    can make a copy of it and keep it in your directory or copy it
    from my directory whenever you want to use it. The directory
    name is trip. Also, in Block 1d - Also put in the project
    number that was used on your travel orders and who directed the
    trip (AFSC, RADC, etc.etc.)   2u1

(RJC) 26-NOV-73 08:23 20500 AFSC Procurement Policy Briefing   2v

    Message: On 29 Nov, Thursday in Bldg. 106, Auditorium from 1000
    hrs. - 1400 hrs. there is an AFSC Procurement Policy Bfg being
    held. All engineers involved with purchase requests should
    attend this meeting per F. Tomaini.   2v1

(RJC) 27-NOV-73 06:16 20548 Tickler for week of 26 Nov -
Additional
    (IJOURNAL, 20548, 1:w)   Info   2w

Journal mail -Last quarter 1973

   (RJC)   27-NOV-73 07:54 20569   RE - TRAVEL VOUCHERS   2x

      Message: PLEASE BE ADVISED THAT PERFRANK TOMAINI NO
      TRAVELVOUCHERS ARE TO BE HANDCARRIED. THEY MUST BE SUBMITTED
      THROUGH THE BRANCH OFFICE WITH TRIP REPORT.   PLEASE
      COMPLY   2x1

      Comments: Info Cy - Col Thayer   2x2

   (RJC)   28-NOV-73 05:56 20618   travel vouchers   2y

      Message: In regards to travel vouchers, send them to the Branch
      Office along with your trip repot and IF YOU WISH TO HANDCARRY,
      PLEASE attach a note saying so and I will call you when they
      are ready. Is that okay with everybody. The reason for this
      action is because some people handcarry their travel vouchers
      over and they never bother doing their trip report. And this
      FJT do not LIKE   2y1

   (RJC)   28-NOV-73 07:20 20598   Tickler for 26 Nov Thru 7 Dec 73
      (IJOURNAL, 20598, 1:w)   2z

      Comments: Am remindng you guys about the Procurement Meeting
      Thursday at 10:00   2z1

(hoct)   3

   (FJT)   25-OCT-73 06:31 19852   tickler for week 22 Oct - 2 Nov
      (LJOURNAL, 18852, 1:w)   3a

   (JHB)   25-OCT-73 09:59 19854   RADC Host MIS and TR   3b

      Message: JMB is a cute little female (not Chick, bad word) =
      Jennie Beck, who is a writer out here.   I will look at the
      proposal for info purposes. Im surprised (well, not really)
      that no movemen toward an RADC ARPA NET Host has been made.
      There cerainly does seem to be a possibility for "swapping"
      compuer ervices.
      Yes...I really appreciate your offer (,19851,) to check on the
      thing I would like to see become a TR (see -- bair,sec1,).   I
      can't imagine that it would have any negative impact and I'm
      sure that are some worthwhile ideas in the 180 pp.
      *****Note: For your information*****   3b1

      Comments: I copy of this is sent to Rich Thayer so that he
      would be aware of the interest I have in the RADC MIS effort(s)
      and that the report I promiised is there, done and ready to go
      as a TR.   3b2

Journal mail -Last quarter 1973

(TFL)   31-OCT-73 07:40 19975   MESSAGE TO RADC AKW PRINTER USERS-31
    (LJOURNAL, 19975, 1:w)   OCT '73   3c

(TFL)   31-OCT-73 12:39 19978   AKW PRINTER MESSAGE-AN UPDATE
    (LJOURNAL, 19978, 1:w)   3d

Journal mail -Last quarter 1973

(J30059) 6-FEB-74 14:06;   Title: Author(s): Richard H. Thayer/RHT2;
Distribution: /; Sub-Collections: RADC; Clerk: RHT2;

tickler item

Energy Conservation Officer - DAY FOR CAPT DAUGHTRY   1

tickler item

(J30060)   7-FEB-74 06:32;   Title: Author(s): Roberta J. Carrier/RJC;
Distribution: /DLD2; Sub-Collections: NIC; Clerk: RJC;

System problems

I tried to send you a mess but it would not do it. All I got was
stone -- can't. The message was to try the index program and see
what happens. It worked yesterday fine, but today all I get is
running... then it steps to the next line and tells me the file is
not on-line and to use the exec's etc. Let me know if you can make
it work.   1

System problems

(J30062)   7-FEB-74 14:32;   Title: Author(s): Edmund J. Kennedy/EJK;
Distribution: /DLS RLM2; Sub-Collections: RADC; Clerk: EJK;

Queries and Speculations on System

I am interested to hear your thoughts on a couple of things.   1

Frank Tomaini, who as you know blows alternately hot & cold on NLS,
asked me to check into getting a capability to run a very important
program using OFFICE- 1.   2

the problems break down like this.   3

  I would like to set up a single directory to be know by the
  program name rather than an individual name,   because there are at
  least four different organizations involved.   Two of these in DC
  and one in ALABAMA of all places.   This is besides Rome and
  possibly ESD.   This involves probably as many as a dozen or more
  people on an infrequent basis.   3a

  It is necessary that they function as members of a team, yet they
  still have a need to intercommunicate with each other.   Stoney
  rejects the idea of having several people share the same directory
  since every time there is a journal communication they all get it
  and the directory rapidly fills up.   Which is a point.   However I
  do not want to give a lot of people their own directores since
  then the good guys ie. the paying customers will never be able to
  get on the system.   3b

  Is it possible and/or reasonable to set up a single directory,
  with a number of users, with only one "initials file" yet with
  several 'idents' where individuals can receive messages via tenex?
  If so thismight solve the problem.   3c

  I am particularly interested in this because: 3d

    it is a hot program   3d1

    it involves several headquarters including AFSC and USAF   3d2

    The system is the only reasonable way that I know to handle
    their probelms of communicating and sharing files   3d3

    after they get used to it, maybe we can sell them some time,
    and then let the virus spread.   3d4

Also, Frank would like to get the other two branch offices on the
system.   What is your opinion of directories for organizations rather
than individuals? I know the general philosophy of the AKW, to
augment the individual, but in the interests of infiltration isn't
this a reasonable altenative? After all, if we can demonstrate how
invaluable the system is to the organization, haven't we won round
one?   4

Queries and Speculations on System

Thayer has given up, at least for the moment, but we are winning
other converts — some of whom I had never expected to show the
slightest interest.   5

Onward and Upward.   6

I realize that these are problems for our system architect, but he's
as busy as a one-armed paperhanger with you know what. He' trying to
do a job for Dick Nelson which, if successful, will really turn Frank
on to the system.   7

Queries and Speculations on System

(J30063) 8-FEB-74 17:08;   Title: Author(s): Edmund J. Kennedy/EJK;
Distribution: /JCN DLS(info & rebuttal) JLM(info) RFI(info) FJT(info);
Sub-Collections: RADC; Clerk: EJK;

Comments on pathname syntax

Dave--
The things that occur tpo me immediately about your rfc are:
1. You got the name wrong; it is rfclynn, not lynnrfc (who's Lynn?)
2. You should make some mention about lines - i.e. the pathname
should probably be contained all on one line, that is, there are no
intervening <CR><LF>s. This may force you to say something about
line length, implementation-dependent but maximum specifiable anyway
(see the two recent RFC's about FTP (#607 and #614). You may have to
say that the whole thing is no longer than 75 chars, for example.
3. You don't specify what character set is legitimate for the
non-literals in the pathname. For example are <CR>s, <LF>s, <SP>s
legitimate within the pathname? Should they be allowed with a
<ctrl-v> like char, i.e. take the next char literally? Can you
specify a take-me-literally character?
4. What about control characters, as opposed to printable
characters?
5. What about site-conventions like TENEX <ESC> or <ctrl-f>? Are
these to be specifically excluded, or site-dependent allowed?
Just a few little niggly things. Call me at work on of these days.
I never am successful calling you.   Nancy   1

Comments on pathname syntax

woodberry

Ordered by Street   1

   DE IORIO, Dr. Anthony & Nedda   733-9281
   1 Barley Mow Run   1a

   WERGES, Byron & Phyllis   724-6686
   3 Barley Mow Run   1b

   MILLET, Dr. John & Marge   735-3109
   4 Barley Mow Run   1c

   OBERNESSER, Dr. Charles & Fran   735-8258
   5 Barley Mow Run   1d

   POZEFSKY, Paul & Dawn   733-5548
   6 Barley Mow Run   1e

   GOLDEN, Leatrice   732-7196
   7 Barley Mow Run   1f

   SULLIVAN, Mark & Sue   724-3721
   8 Barley Mow Run   1g

   LEWIS, Richard & Carol   724-7679
   8 Barley Mow Run   1h

   HERMAN, Gene & Elaine   7735-4119
   10 Barley Mow Run   1i

   ADAMS, Jr. Charles & Audrey   797-5728
   11 Barley Mow Run   1j

   GOUNTANIS, Robert & Nancy   735-8004
   12 Barley Mow Run   1k

   CLIFFORD, John & Eileen   735-1268
   13 Barley Mow Run   1l

   ALPEROVICH, Dr. Felepe & Eugenia   735-5161
   14 Barley Mow Run   1m

   SAVETT, Dr. Marshall & Bobbie   724-6292
   15 Barley Mow Run   1n

   LANZ, John & Ann   797-1788
   16 Barley Mow Run   1o

   LEFFERT, David & Lillian   735-8463
   17 Barley Mow Run   1p

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JACKSON, Martin & Geri            737-7800
13 Barley Mow Run                                        1q

FIORENTINO, Eugene & Nicky        797-4864
19 Barley Mow Run                                        1r

GOLDSTONE, David & Ruth           737-5156
20 Barley Mow Run                                        1s

KOSCHMANN, Mark & Dorothy         724-0616
21 Barley Mow Run                                        1t

SAUL, Charles & carol             737-7557
22 Barley Mow Run                                        1u

LUCARELLI, Ralph & Maryrose       737-9138
23 Barley Mow Run                                        1v

FINOS, Victor & Luci              737-7558
24 Barley Mow Run                                        1w

KIMBALL, Richard & Luci           Unlisted
25 Barley Mow Run                                        1x

RITTER, Henery & Pat              737-5894
25 Barley Mow Run                                        1y

AUSLANDER, Emil & Marjorie        737-75894
27 Barley Mow Run                                        1z

GOLDSTEIN, david & fransis        737-5258
29 Barley Mow Run                                        1a@

DE NIGRO, Joseph & Terry          737-5258
31 Barley Mow Run                                        1aa

ESTEY, Howard & Helen             737-7589
33 Barley Mow Run                                        1ab

GOLDBERG, Pierce & Mimi           737-7771
1 Woodstock Court                                        1ac

WIDDER, Dr. Aronold & Brenda      737-5139
2 Woodstock Court                                        1ad

SANFORD, Eugene & Elaine          737-9262
3 Woodstock Court                                        1ae
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Woodberry

KEANE, Steve & Winnie   737-7530
4 Woodstock Court   1af

ROSEN, Philip & Debbie   737-5171
5 Woodstock Court   1ag

PEARCE, Dr. David & Elaine   737-0981
6 Woodstock Court   1ah

ALTONGY, Dr. Albert & Ann   737-7750
7 Woodstock Court   1ai

LALLY, John & Dot   737-5774
8 Woodstock Court   1aj

HOVEY, Thomas & Phylis   737-5566
3 Foxcroft Road   1ak

STEWART, Allan & Claire Marie   737-5720
4 Foxcroft Road   1al

O'DONNELL, Ted & Edge   737-5775
5 Foxcroft Road   1am

PICKER, Herbert & Louise   737-7595
6 Foxcroft Road   1an

RUFF, Dr. Herbert & Elinor   737-5155
7 Foxcroft Road   1ao

HUTSON, Charles & Fran   737-5047
8 Foxcroft Road   1ap

SCHWARTZ, Dr. Stuart & Elaine   737-7484
9 Foxcroft Road   1aq

SAMUELS, Allen & Ellen   737-5834
10 Foxcroft Road   1ar

EPSTEIN, Irving & Estelle   737-7291
11 Foxcroft Road   1as

DANIELS, Bruce & Irene   737-5752
12 Foxcroft Road   1at

NUDING, Eugene & Irene   737-5137
14 Foxcroft Road   1au

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FOSTER, Gene & Shirley   732-2934
15 Foxcroft Road   1av

WOODBURY, Terry & Barb   737-4147
18 Foxcroft Road   1aw

FRADENBURGH, Donald & Ellen   735-1763
20 Foxcroft Road   1ax

HILTON, Robert & Elaine   737-7674
21 Foxcroft Road   1ay

TAUBMAN, Jerome & Rita   733-8257
22 Foxcroft Road   1az

LORENZ, Charles & Moe   737-9291
23 Foxcroft Road   1b@

STOKER, John & Carol   733-8494
24 Foxcroft Road   1ba

GRABOWSKI, Donald & Lucille   737-5895
25 Foxcroft Road   1bb

SCHAEFFER, Philip & Gloria   735-7091
26 Foxcroft Road   1bc

ROTYLIANO, Joseph & Helen   737-5281
28 Foxcroft Road   1bd

KWATEK, Irwin & Myrna   737-8964
30 Foxcroft Road   1be

GOLDSTONE, Dr. Ronald & Sherry   737-5892
32 Foxcroft Road   1bf

KERNAN, John & Rose   737-5893
34 Foxcroft Road   1bg

BROOKS, Frederick & Alice   737-7880
36 Foxcroft Road   1bh

SOLDANO, Rocco & Marie   737-7918
38 Foxcroft Road   1bi

KELLY, Richard & Mary   737-8846
4 Rollingwood Drive   1bj

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GUTHIER, William & Monica 6 Rollingwood Drive	737-7278	1bk
HARTMAN, Thomas & Marilyn 8 Rollingwood Drive	737-7881	1bl
SMITH, Walter & Yvonne 10 Rollingwood Drive	737-9182	1bm
TREMLIN, Robert & Betsy 14 Rollingwood Drive	737-9214	1bn
BERKOWITZ, Jerry & Roz 20 Rollingwood Drive		1bo
BUCCI, Richard & Marlene 22 Rollingwood Drive	737-9112	1bp
SOGGS, John & Pattie 24 Rollingwood Drive	737-8585	1bq
GRETHER, Dieter & Wilma 26 Rollingwood Drive	737-9142	1br
MC NULTY, Bob & Ann 29 Rollingwood Drive	737-5777	1bs
STANGA, Dennis & Marlene 30 Rollingwood Drive	737-7583	1bt
MORROW, Wen & Jean 33 Rollingwood Drive	737-7325	1bu
SCHWARTZ, Nathan & Ruth 2 Woodberry Road	797-6537	1bv
BULLOCK, Arthur & Jean 4 Woodberry Road	732-7431	1bw
ROWLEY, Sr. Robert & Alice 6 Woodberry Road	797-4124	1bx
FORD, Loren & Marge 10 Woodberry Road	724-9376	1by
ZAPPONE, Thomas & Mary 12 Woodberry Road	724-2998	1bz

woodberry

ROSENTHAL, Donald & Phyllis   733-6570
14 Woodberry Road   1c@

PEARLE, Philip & Betty   733-7359
15 Woodberry Road   1ca

HOTTON, John & Helen   735-2195
16 Woodberry Road   1cb

CRAMER, Lawrence & Carole   733-4284
17 Woodberry Road   1cc

SOUTHWICK, Fred & June   797-0619
18 Woodberry Road   1cd

DRESHER, Howard & Marilyn   733-3017
19 Woodberry Road   1ce

BYRUM, Charles & Dolly   733-2674
20 Woodberry Road   1cf

WISE, Curtis & Judy   724-6675
21 Woodberry Road   1cg

JOHNSON, Al & Fran   735-5891
24 Woodberry Road   1ch

HOBAICA, Dr. Robert & Doris   735-4502
25 Woodberry Road   1ci

SOTENDAHL, Henry & Audrey   797-3282
26 Woodberry Road   1cj

MONTANA, Donald & Barbara   724-0376
27 Woodberry Road   1ck

KELLY, Robert & Jan   797-2111
28 Woodberry Road   1cl

ESPOSITO, John & Marie   724-1529
29 Woodberry Road   1cm

LICHTMAN, Bernard & Roz   733-7126
330 Woodberry Road   1cn

BREMER, Charles & Connie   797-4906
331 Woodberry Road   1co

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STROHECKER, Peter & Marty   797-2745
32 Woodberry Road   1cp

LAURIE, Clark & Betty   732-1278
33 Woodberry Road   1cq

MULLOY, John & Maryanne   733-2810
334 Woodberry Road   1cr

JENNINGS, Craig & Judy   797-7265
335 Woodberry Road   1cs

JOHNSON, Grant & Barb   724-7519
36 Woodberry Road   1ct

SHALEN, William & Dot   797-2575
337 Woodberry Road   1cu

MEE, Robert & Francis   733-5782
38 Woodberry Road   1cv

BONASERA< Dr. Alberto & Noma   724-3009
39 Woodberry Road   1cw

ZAMPIER, Albert & Shirley   735-9831
41 Woodberry Road   1cx

HUGHES, Jr. James & Sally   724-1562
42 Woodberry Road   1cy

GORDON, Bernard & Roberta   735-6288
433 Woodberry Road   1cz

DE TRAGLIA, Dr. John & Cynthia   Unlisted
44 Woodberry Road   1da

SMALLEY, Dr. Melvin & Terry   797-3844
45 Woodberry Road   1da

GRIFFIN, John & Kitty   724-0787
46 Woodberry Road   1db

RIZIKA, Robert & Marsha   724-3806
47 Woodberry Road   1dc

KOBOS, Mitzi   733-8916
48 Woodberry Road   1dd

MURRAY, Jr. Thomas & Norma   732-2621
49 Woodberry Road   1de

BAUMAN, John & Diane   735-5840
50 Woodberry Road   1df

COLWELL, Baron & Cathy   732-6947
51 Woodberry Road   1dg

WENNER, Jr. Frank & Judy   732-5918
52 Woodberry Road   1dh

GATES, Dr. Richard & Nancy   732-6096
54 Woodberry Road   1di

TIBBITTS, John & Helen   735-9684
56 Woodberry Road   1dj

ULBRANDT, Mary   724-8798
58 Woodberry Road   1dk

HOGE, Albert & Barbara   735-1924
60 Woodberry Road   1dl

CLARK, Harold & Eva   797-4074
61 Woodberry Road   1dm

HALL, Warren & Nancy   733-8750
62 Woodberry Road   1dn

RESNIK, Seymour & Sandy   724-2940
63 Woodberry Road   1do

KOGUT, John & Barb   733-3345
64 Woodberry Road   1dp

WELCHONS, Richard & Dorsey   735-0946
65 Woodberry Road   1dq

TURNBULL, III James & Ruth   732-1909
66 Woodberry Road   1dr

JAKES, William & Marge   797-1776
67 Woodberry Road   1ds

BRUNO, Peter & Pat   732-7850
68 Woodberry Road   1dt

SIEGENTHALER, William & Marge 69 Woodberry Road	724-7789	1du
OHLBAUM, Dr. Paul & Billy 70 Woodberry Road	724-8451	1dv
HUBBARD, Robert & Carol 1 Woodstream Court	737-7649	1dw
JONES, David & Audrey 2 Woodstream Court	737-5032	1dx
FLEMMA, Edward & Phyllis 333 Woodstream Court	737-7047	1dy
TREMAYNE, Ronald & Joyce 4 Woodstream Court	737-8951	1dz
BECKER, Richard & Beth 5 Woodstream Court	737-7531	1e@
SHKANE, Dr. Albert & Mary 6 Woodstream Court	737-7555	1ea
ILER, Gerald & Jean 8 Woodstream Court	737-5784	1eb
COBB, Arthur & Marie 10 Woodstream Court	737-7937	1ec
HEYWOOD, Dr. James & Mary 12 Woodstream Court	737-9226	1ed
IUORNO, Dr. Frank & Rosanne 14 Woodstream Court	737-8486	1ee
HOLZEL, Robert & Carolyn 15 Woodstream Court	737-8172	1ef
MORENO, Jr. Frank & Cookie 16 Woodstream Court	737-5251	1eg
REISNER, Norman & Bobby 17 Woodstream Court	737-8135	1eh
DRESHER, Donald & Linda 18 Woodstream Court	737-5198	1ei

MANNING, Milton & Sandy 19 Woodstream Court	737-5233	1ej
ANDRES, Norbert & Pauline 20 Woodstream Court	737-5921	1ek
EMERY, Peter & Mary 21 Woodstream Court	737-5761	1el
SCANLAN, Richard & Betty 22 Woodstream Court	737-7563	1em
OWENS, Brian & Bard 24 Woodstream Court	737-8671	1en
MAY, John & Joan 25 Woodstream Court	737-7212	1eo
WALKER, Jr. John & Lynne 26 Woodstream Court	737-8574	1ep
HILL, James & Ruth 28 Woodstream Court	737-5054	1eq
BUDOFF, Irving & Karen 30 Woodstream Court	733-6495	1er
JACKSON, Vernon & Rose 32 Woodstream Court	737-9185	1es
ORLANDO, Joseph & Dot 1 Hubbarton Road	737-9234	1et
LEWIS, Leslie & Karen 3 Hubbarton Road	737-7635	1eu
COOLSON, Kenneth & Pat 4 Hubbarton Road	737-9180	1ev
MOORE, James & Carole 5 Hubbarton Road	737-7874	1ew
WEBER, Pete & Nelda 6 Hubbarton Road	737-8010	1ex
JADHON, Dr. Anthony & Ann 7 Hubbarton Road	Unlisted	1ey

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SWAHLEN, Dr. Hartely & Audrey   724-7884
8 Hubbarton Road   1ez

MILLER, John & Dee   737-9188
8 Hubbarton Road   1fa

BOND, Jr. Dr. Bud & Phyllis   737-9158
10 Hubbarton Road   1fa

DIGILIO, Frank & Charlotte   737-8868
11 Hubbarton Road   1fb

KONTRIMAS, Dr. Richard & Raimonda   737-7724
12 Hubbarton Road   1fc

WALTERS, John & Nancy   737-8970
13 Hubbarton Road   1fd

PAOLICELLI, Frank & Yolanda   733-0055
2 Talmadge Court   1fe

SWANSON, Richard & Betty   733-0205
4 Talmadge Court   1ff

BOCK, Eugene & Jan   735-2714-6 Talmadge Court   1fg

DEVENNEY, John & Virginia   733-3107
8 Talmadge Court   1fh

BERNARDI, Patt & Ann   735-2764
10 Talmadge Court   1fi

GALL, Jr. William & Claire   737-8848
200 Gilbert Road   1fj

CATER, Ted & Zee   735-3767
201 Gilbert Road   1fk

BOYLE, John & Irene   737-8666
202 Gilbert Road   1fl

SOLOMON, Howard & Selda   737-8255
203 Gilbert Road   1fm

SKOOG, Donald & Lisa   737-5998
204 Gilbert Road   1fn

MAC COUN, Townsend & Rosemary   737-7928
205 Gilbert Road   1fo

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SIEGEL, George & Leonore   737-5885
206 Gilbert Road   1fp

CROSBY, Richard & Barbara
207 Gilbert Road   1fq

BORTON, Glenn & Nancy   737-9268
208 Gilbert Road   1fr

BIRR, Gerald & Carolyn   737-7817
209 Gilbert Road   1fs

UPCRAFT, Dr. John & Mary   737-8967
210 Gilbert Road   1ft

SMITH, Richard & Marilyn   737-8819
211 Gilbert Road   1fu

JACOBSON, Sanford & Roz   737-7361
212 Gilbert Road   1fv

ALBETINO, John & Millie   737,9168
213 Gilbert Road   1fw

HANTIS, Perry & Marie   737-9197
214 Gilbert Road   1fx

Turner, Phillip & Ruth   724-3447
1 Woodberry Lane   1fy

Soggs, Nelson & Carol   732-2742
2 Woodberry Lane   1fz

In from Printer file   2

Sort Alphabetically.H=WOODBERRY HILLS DIRECTORY";2ADAMS, Jr.
Charles & Audrey   797-572811 Barley Mow
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737-9168213 Gilbert Road32bALPEROVICH, Dr. Felipe &
Eugenia735-516114 Barley Mow Run22cALTONGY, Dr. Albert &
Ann737-77507 Woodstock Court22dANDRES, Norbert & Pauline737-592120
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Richard & Beth737-75315 Woodstream Court02hBERKOWITZ, Jerry &
Roz20 Rollingwood Drive/2iBERNARDI, Pat & Ann735-276410 Talmadge
Court22jBIRR, Gerald & Carolyn737-7817209 Gilbert Road32kBOCK,
Eugene & Jan735-27146 Talmadge Court32lBONASERA, Dr. Alberto &
Noma724-300939 Woodberry Road22mBOND, Jr. Dr. Bud & Phyllis

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737-915810 Hubbardton Road12nBORTON, Glenn & Nancy737-9268208
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Frederick & Alice737-788036 Foxcroft Road32r#1BRUNO, Peter &
Pat732-785068 Woodberry Road22sBUCCI, Richard & Marlene737-911222
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Charles & Dolly733-267420 Woodberry Road22wCATER, Ted &
Zae735-3767201 Gilbert Road32xCLARK, Harold & Eva797-407461
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735-126813 Barley Mow Run22zCOBB, Arthur & Marie737-793710
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732-694751 Woodberry Road12aaCOOKSON, Kenneth & Pat737-91804
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Terry737-525831 Barley Mow Run12agDE TRAGLIA, Dr. John &
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Charlotte737-886811 Hubbardton Road02ajDRESHER, Donald & Linda   2d

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Phyllis737-70473 Woodstream Court/2asFORD, Loren &
Marge724-937610 Woodberry Road12atFOSTER, Gene & Shirley732-293415
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737-77711 Woodstock Court12ayGOLDEN, Leatrice732-71967 Barley Mow
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737-515620 Barley Mow Run12baGOLDSTONE, Dr. Ronald &
Sherry737-589232 Foxcroft Road22bbGORDON, Bernard &
Roberta735-628843 Woodberry Road12bcGOUNTANIS, Robert &
Nancy735-800412 Barley Mow Run12bdGRABOWSKI, Donald & Lucille
737-589525 Foxcroft Road22beGRETHER, Dieter & Wilma   2g

737-914226 Rollingwood Drive.2bfGRIFFIN, John & Kitty724-078746

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Drive/2bhHALL, Warren & Nancy733-875062 Woodberry Road12biHANTIS,
Perry & Marie737-9197214 Gilbert Road22bjHARTMAN, Thomas &
Marilyn737-78818 Rollingwood Drive/2bkHERMAN, Gene &
Elaine735-411910 Barley Mow Run12blHEYWOOD, Dr. James &
Mary737-922612 Woodstream Court/2bmHILL, James & Ruth737-505428
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737-767421 Foxcroft Road22boHOBAICA, Dr. Robert & Doris
735-450225 Woodberry Road12bpHOGE, Albert & Barbara735-192460
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Thomas & Phylis737-55663 Foxcroft Road32btHUBBARD, Robert & Carol 2i

737-76491 Woodstream Court/2buHUGHES, Jr. James & Sally724-156242
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Grant & Barb724-751936 Woodberry Road12cfJONES, David &
Audrey737-50322 Woodstream Court/2cgKEANE, Steve &
Winnie737-75304 Woodstock Court12chKELLY, Richard & Mary737-88464
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Rosemary737-7928205 Gilbert Road22d@#6MANNING, Milton & Sandy   2l

737-523319 Woodstream Court/2daMAY, John & Joan737-721225
Woodstream Court/2dbMC NULTY, Bob & Ann737-577729 Rollingwood

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Marge735-31094 Barley Mow Run22dfMONTANA, Donald &
Barbara724-037627 Woodberry Road12dgMOORE, James & Carole737-78745
Hubbardton Road12dhMORENO, Jr. Frank & Cookie737-525116 Woodstream
Court/2diMORROW, Wen & Jean737-732533 Rollingwood Drive.2djMULLOY,
John & Maryanne   2m

733-281034 Woodberry Road12dkMURRAY, Jr. Thomas & Norma732-262149
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Brian & Barb737-867124 Woodstream Court/2dr#7PAOLICELLI, Frank &
Yolanda   733-00552 Talmadge
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Court12dtPEARLE, Philip & Betty733-735915 Woodberry
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Norman & Bobby   2n

737-813517 Woodstream Court/2dxRESNIK, Seymour & Sandy   2o

724-294063 Woodberry Road12dyRITTER, Henry & Pat737-589426 Barley
Mow Run12dzRIZIKA, Robert & Marsha   2p

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Carol737-755722 Barley Mow Run12ehSAVETT, Dr. Marshall &
Bobbie724-629215 Barley Mow Run12ei#8SCANLAN, Richard &
Betty737-756322 Woodstream Court/2ejSCHAEFFER, Philip &
Gloria735-709126 Foxcroft Road22ekSCHWARTZ, Dr. Stuart &
Elaine737-74849 Foxcroft Road32elSCHWARTZ, Nathan & Ruth   2q

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Dr. Melvin & Terry   797-384445 Woodberry
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Walter & Yvonne737-918210 Rollingwood Drive.2euSOGGS, John &
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Carol732-27422 Woodberry Lane22ewSOLDANO, Rocco & Marie737-791838
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737-8255203 Gilbert Road22eySOTENDAHL, Henry & Audrey797-328226
Woodberry Road12ezSOUTHWICK, Fred & June797-061918 Woodberry
Road12fâ#9STANGA, Dennis & Marlene737-758330 Rollingwood
Drive.2faSTEWART, Allan & Claire Marie737-57204 Foxcroft
Road32fbSTOKER, John & Carol733-849424 Foxcroft
Road22fcSTROHECKER, Peter & Marty797-274532 Woodberry
Road12fdSULLIVAN, Mark & Sue724-37218 Barley Mow Run22feSWANSON,
Richard & Betty733-02054 Talmadge Court22ffTAUBMAN, Jerome &
Rita733-825722 Foxcroft Road22fgTIBBITTS, John & Helen735-868456
Woodberry Road12fhTREMAYNE, Ronald & Joyce737-89514 Woodstream
Court/2fiTREMLIN, Robert & Betsy   2s

737-921414 Rollingwood Drive.2fjTURNBULL, III James &
Ruth732-190966 Woodberry Road12fkTURNER, Phillip & Ruth724-34471
Woodberry Lane22flULBRANDT, Mary724-879858 Woodberry
Road12fmUPCRAFT, Dr. John & Mary737-8967210 Gilbert
Road22fnWALKER, Jr. John & Lynne737-857426 Woodstream
Court/2foWALTERS, John & Nancy737-897013 Hubbardton Road02fpWEBER,
Pete & Nelda737-80106 Hubbardton Road12fqWELCHONS, Richard &
Dorsey735-094665 Woodberry Road12fr#10WENNER, Jr. Frank &
Judy732-591852 Woodberry Road12fsWERGES, Byron & Phyllis   2t

724-66363 Barley Mow Run22ftWIDDER, Dr. Arnold & Brenda
737-51392 Woodstock Court12fuWISE, Curtis & Judy724-667521
Woodberry Road12fvWOODBURY, Terry & Barb737-414718 Foxcroft
Road22fwZAMPIER, Albert & Shirley735-983141 Woodberry
Road12fxZAPPONE, Thomas & Mary724-299812 Woodberry
Road12fyZWAHLEN, Dr. Hartley & Audrey724-78848 Hubbardton
Road12fz#11   2u

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(J30066) 11-FEB-74 09:46;   Title: Author(s): Duane L. Stone/DLS;
Distribution: /DLS; Sub-Collections: RADC; Clerk: DLS;
Origin: <PETELL>MITZI.NLS;1, 11-FEB-74 09:45 DLS ;.H=WOODBERRY HILLS
DIRECTORY";

Dave:
well in spite of your giving me the wrong file name i found the file
and gave it the once over. little things first then the bigger
issues. i dont like the optionality of the left bracket on the host
field, too many options spoil a standard. paper tape has both input
and output possibilities thus you need PTR and PTP, but then the
printer name is messed up so use LPT. (why are you limited to three
characters? dont use the word virtual use the word STANDARD. virtual
things dont exist but act like or are simulated by real things -
physical objects. this is a format a syntax, not a physical thing or
a simulated physical thing. i think some system used percent to
indicate a comment. maybe that was only in an assembler tho. the big
squack will be that you (we) (someone) is ramming TENEX down their
(everyones)(someones) throat. what do you do if the host is in
another network? the network is in another counrty? on another
planet? in another solar system? ... you get the idea there a
limited number of characters that can be used to bracket filenames
host names, network names, etc. thus for extenability a different
scheme is needed, each set of bracketing characters takes away from
the set allowed in the basic filename we already know of files that
use * . [ ] - / as part of the filename not as delimeters. But do not
be discouraged, there is a need to get this topic discussed and this
is as reasonable a proposal as i have seen.
--jon.

1

(J30068)   11-FEB-74 14:19;   Title: Author(s): Jonathan B. Postel/JBP;
Distribution: /DHC; Sub-Collections: NIC; Clerk: JBP;

Comments on a draft CCL

These are my reactions to MAP's first version of the CCL (granted
that the version which I saw was extensively discussed at the using
meeting, and is perhaps different from what will be published.)   1

   It is very multics like, perhaps to counteract it's becoming tenex
   like. I suspect few people know that the tenex command language
   is entirely suitable for line at a time use, and for terminals
   with local echo.   1a

   It is not particularly suitable for command
   completion/recognition. Call what happens when one types COP<sp>
   to tenex command recognition, and what happens when one types
   COP<esc> recognition and completion.   1b

   Computers can parse relatively difficult compiler languages with
   little difficulty, so the prime considerations in the design of a
   command language should be it's human engineering fearures rather
   than it's simplicity.   1c

   We presently have protocols which are intended for use by
   machines;   either this philosophy should be hewed to, or it should
   be changed. If the philosophy is to be hewed to, then the CCL
   should make no special consessions for use by machines, and if it
   is to be abandoned, then the CCL might be a suitable vehichle for
   a uniting protocol.   1d

My own version of the CCL   2

   My own suggestion as to the appearance of the command language is
   that it should be multi-word, with no special distionction to
   command words as opposed to control arguments; in scanning, the
   computer will know what words can come next; if the user uses
   demand recognition/completion, the computer should assume/supply
   as much as possible from the context of the users input up th the
   point where he demands completion, and type it out; if he invokes
   completion with a separator, the system should supply completion
   up to the next occurrence off that separator.   2a

   The words in the command language should be abbreviatable by
   typing any initial string thereof; the computer would use context
   and the initial string to determine the users meaning.   2b

   The command language should be suitable for use on half duplex or
   full duplex terminals. When used on a half duplex terminal, the
   user would normally type all command words, but he would wish to
   abbreviate and leave out noise/descriptive words, and this should
   be possible. When used from a full duplex terminal, it should be
   possible to use the terminal exactly like a half duplex one, and
   also to use command completion, possibly of several levels (ie,

1

Comments on a draft CCL

<esc> invokes as much as possible, but <sp> invokes only up to the
end of the command token, etc. for whatever separators are defined
in the language).   2c

The file commands should be based on the definition of the file
structure of FTP; ie it sould always be possible to impliment any
of the file commands in the CCL by going through the IMP to the
FTP server and issuing appropriate commands. If this implies that
further work is required on the definition of FTP, of of the NVFS,
so be it.   2d

Comments on a draft CCL

Message to Yngvar Lundh from Stanford University

yngvar, this is torstein haugland and vint cerf. could you please
advise us as to the password of your account <norsar-tip> so that
torstein can log in there. Meanwhile, he will log into SU-DSL as TH
but until we have officially got a NIC ident for him, you can send
him mail via CERF at ISI or VGC at OFFICE-1 (using NLS). How are your
network studies coming? We have a PDP-11 connected to the net now,
and torstein is working on file transfer protocol for it. We are
concurrently working on internetwork experiments -- as you will have
seen from the INWG notes. Vint and Torstein   1

Message to Yngvar Lundh from Stanford University

(J30070)   11-FEB-74 18:05;   Title: Author(s): Vinton G. Cerf/VGC;
Distribution: /YL; Sub-Collections: NIC; Clerk: VGC;

Comments on CCL

This note is largely my contribution to sub-subcommittee (1) or "why
CCL?" I will also have a few comments to make on "context" and
"arguments". The background to this note is Mike Padlipsky's Draft
#3, Bob Thomas' Comments on that draft, and Mike's answer to Bob. I
had intended to write this note several weeks ago, but the usual
delays occurred and it now appears that Bob has written it for me;
that is, I agree wholeheartedly with Bob's analysis and motivation in
espousing a two-protocol (or separate protocol) approach to
standardization and resource-sharing.   1

    The two major aims of Mike's UULP which has come to be CCL are
user convenience in the form of a standardized (uniform) view of
the network world and resource sharing. It must first be
determined if these two aims are comparable, i.e. can be satisfied
well by a single protocol. I believe they can't; one requires a
user-oriented protocol and the other a machine-oriented protocol.
If they can't, the next question is what is the role of CCL, that
is, which path should it follow? This seems to me to be an issue
of time and the capabilities of the USING members.   1a

    If, in presenting my arguments, I seem to be repeating all of
Bob's thoughts, I apologize for that repetition, but it seemed
necessary.   1b

The aims of CCL, as stated in Draft #3 are User convenience
(standardization), Resource-sharing, Economy of mechanism (this is an
issue for systems programmers and I would like to discard it as
irrelevant for CCL and USING), Front-ending (standardization),
accounting and authentication (another network committee is
considering this, and rather than come up with counter-proposals we
should coordinate any CCL effort with the results from that
committee), and process-process functions. These break down into two
main categories--standardization and resource-sharing, which I
believe result from different foci, and should have different
solutions. Mike's aim in having a human usable resource-sharing
protocol is to pull these two together. Bob Thomas claims that it is
not only difficult and wasteful to do so, but also that it shouldn't
be done. I fully support this claim.   2

    I believe the focus of much of Mike's thoughts has been the TIP or
ANTS user who doesn't have a home machine and thus lives part-time
at several different hosts, or if this example is too partisan,
the user who prefers to move from job to job (host to host) than
to bring the needed resources home to a single host. This user
would find it very convenient to see the same environment at every
site s/he uses. And this is the main reason for a common command
language. But the future of networks is to have machines do the
work, rather than humans, so it will eventually be easier and
cheaper for all users to have their resources (files, programs,

Comments on CCL

etc.) moved to them, than for the user to travel. I believe the
future view of the network will have your true network user
accessing a single "User site" whose interactive mode s/he
prefers, which will in turn interact with "Service sites" to run
the requested jobs. If this produces cries of waste of money and
resources, I can only state my belief that accounting will
eventually be biased in favor of machine interaction and that
machines will be much cheaper resources than humans. (This is not
a philosophical comment.)   2a

It seems obvious that moving resources is a totally different
problem from moving humans; machines don't require help,
documentation, catering, hand-holding ,etc. and humans can't be
expected to be detailed, accurate, and have large memories. The
entire outlook of designing a program for human interaction or for
machine interaction must be different, regardless of the
practicality (or lack of it) of designing a communications
protocol that is human-readable as well as machine-parsable.   2b

  Our experience with the File Transfer Protocol has shown that
  it is extremely difficult to cater to both human users and
  machines at once. FTP tried to do this, and the result has
  been a spec that has needed numerous modifications and
  redefinitions, that still is not clarified on many points, that
  causes wide discrepancies in implementation, and even a general
  disinclination towards supporting it. The language for
  communication is not acceptable for humans, and awkward for
  machine implementations.   2b1

  A much more acceptable protocol has been the TELNET protocol,
  because it is unequivocably machine oriented, and every site,
  including TIPs, has provided at least a reasonable
  "user"-implementation with a human-usable interface.   2b2

I think these arguments, and those explained in more detail in Bob's
spec, discourage combining a common user environment with
machine-oriented resource-sharing. And I must add that it was my
impression from the USING meeting that there was NO general support
for making CCL "a common intermediate representation suitable for
program as well as human use". If one then supports the "separatist"
theory, where does CCL stand?   3

  The committee can continue to define a common "exec" language to
  be used as a front-end to server sites accessed from the network.
  However, this would be a temporary measure either until users
  began utilizing resource-sharing programs that become available,
  or until they became familiar enough with the site to use its
  native language. One could argue that CCL should remain around
  for those users that still prefer to do site-travelling, but that

group will eventually be small and the resources expended may not
be worthwhile.   3a

   The current spec contains optional commands that require
   intersite (i.e. machine-machine) communication; there has been
   no explication of the management involved in these operations.
   This is a step in the direction of resource-sharing that would
   be several orders of magnitude more difficult to implement than
   the remainder of the local commands. I believe the commands
   should be restricted to this local set, and that CCL should
   behave as only a local front end.   3a1

Since I believe that resource-sharing should essentially be a
machine-machine protocol, I don't think USING needs to participate
in the design process, except to suggest "generic" functions, to
offer our experience with user requirements in designing a user
interface for resource sharing programs (such as the version for
TIPs and ANTS where the users don't have a choice of systems), and
to encourage the general resource-sharing effort because of its
value to users in the future. Continuing to create a spec for a
common command language will further all of these goals.   3b

                                                                            4

The consideration of CCL as a front-end for users of foreign sites
brings us to a the question of the context of CCL. A
resource-sharing protocol will eventually take the place of the ICP;
a standard exec interface is not going to do that. The best context
we can place CCL in, is the server end of another ICP socket, so that
the user may immediately speak CCL upon contacting the foreign host.
In any case s/he will have to use a User TELNET to do so. Every site
has one, and even TIP and ANTS users can be expected to know how to
run it, including how to change the character and line delete
functions. (But since Postel is in charge of TELNET, I leave any
further comments on that protocol to him. I am in agreement with
most of you that a first implementation of CCL should be called from
the foreign exec, though I would push for it being pre-login rather
than post-login.)   5

   As for other protocols, Mike espouses the single-socket approach,
   which Bob points out is site-dependent for its efficiency. I
   don't see much value in saving sockets, though there is the issue
   of user convenience. The user would like to be able to access as
   many of his normal functions easily through the same mechanism.
   Unfortunately, nothing is won by having the user "drop into the
   FTP environment", since Mike implies by this the site FTP Server.
   Besides the old problem that FTP is not really human-engineered,
   there is nothing the user can do talking locally to a Server FTP,
   except possibly dump a file to an arbitrary wild port. The Server

FTP is representing the same file system as is accessible through
the CCL file commands, which clearly are easier to use. A more
useful idea for the user would be to have the "ftp" command call
the FTP User-process on the host that has been accessed, although
this is minimally easier than exiting to the "local" exec and
invoking the FTP User-process directly.   5a

   At another time I will discuss the file commands in more
   detail, but it needs stating now that the the file commands
   must be local only (i.e. no network pathnames allowed) since
   network interaction would bring in all the problems of
   resource-sharing that aren't handled by CCL.   5a1

                                                                      6

Finally I offer my two cents about arguments. I don't find control
arguments natural to use at all, and considering that they are
familiar only to people who have used Multics (a small part of the
network population) I suspect that they will not be natural to most
people. Remember user convenience is one of our aims. This argument
also works in favor of prompting, in that the user should not be
expected to remember exactly which set of arguments, or parameters,
is relevant for a particular command at each differnt host that s/he
accesses. However, as a way out of the issue, the current command
set, minus those commands that access third-party resources, would
encounter this problem only with the mail commands and these can
assuredly be worked out.   7

Comments on CCL

(J30071) 12-FEB-74 07:34;   Title: Author(s): Nancy J. Neigus/NJN;
Distribution: /CCL; Sub-Collections: NIC CCL; Clerk: NJN;

INFORMAN Report

Alan--
I really did receive your note and now can't remember if I answered
it yet. I apologize if I didn't (and also if I did, for repeating
myself.) I would like you to work on the section you
requested--namely (1) what info should be available and in what form.
I hope you will consider this for off-line info as well as online.
(How does this relate to the work of the HELP-DOC committee?) Having
developed a great familiarity withthe FEEDBACK document I must
disagree with you about its relevance to info-mgmt. I hope you will
greatly expand upon the ideas expressed there.
I am sending another note to the committee as a whole with the rest
of my comments on our progress(?). Nancy   1

INFORMAN Report

(J30072)   12-FEB-74 07:48;   Title: Author(s): Nancy J. Neigus/NJN;
Distribution: /ARH; Sub-Collections: NIC; Clerk: NJN;

Getting started on the INFORMAN draft

INFORMAN Group--
We all (except Mike, bless you) seem to have forgotten that the first
INFORMAN draft is scheduled to be ready on Mar. 1.   That gives us a
little over two weeks.   Alan has expressd an interest in section (1),
Mike has already written a draft for section (2) which I hope you
will all look at in the <USING> directory, Kirk is continuing to look
at the WAC, and I will (very soon I promise) have a draft for section
(3).   The explanation of these sections is in (gjournal, 21427, 1:w).
I also hope to hear from Dave and Barbara soon, and that we will have
something ready to read by the beginning of March.
Thanks,   Nancy   1

Getting started on the INFORMAN draft

(J30073)   12-FEB-74 08:09;   Title: Author(s): Nancy J. Neigus/NJN;
Distribution: /INFORMAN; Sub-Collections: NIC INFORMAN; Clerk: NJN;

INFORMAN correction

My humblest apologies....It is April 1, not March 1 for the first
draft. 7 weeks is better than 2; sorry I panicked; but let's get to
work anyway.
Nancy   1

INFORMAN correction

(J30074)   12-FEB-74 11:48;   Title: Author(s): Nancy J. Neigus/NJN;
Distribution: /INFORMAN; Sub-Collections: NIC INFORMAN; Clerk: NJN;

UDE? information?

Jake--
(gjournal,21624,) is not on-line. Please indicate some other way of
obtaining it, or some other name under which we might find it
on-line.   Thanks,   Nancy   1

UDEF information?

(J30075)   12-FEB-74 11:55;   Title: Author(s): Nancy J. Neigus/NJN;
Distribution: /JAKE AWH(to save you the trouble of looking for it);
Sub-Collections: NIC; Clerk: NJN;

Jon--

    So Niegus and Pogran want to respond to my errant RFC draft, eh?
Humphh. So be it. It is nice to know that they agree with many
points, but not sure I agree that the spec is a good job overall, but
no matter. Don't quite understand your report of the notion of
redefining the first digit of reply code as follows: "1" good
preliminary response, "2" good completion, "3" good intermediate
response, "4" bad completion. I think I understand except for "1" --
what means "good preliminary response"? If one of the aforementioned
duo plans to explain this in a future RFC, I can wait for that.   1

    As concerns the PASV/ACTV question, it appears to me as though
it perhaps was understood by those at the FTP meeting that PASV was
for one transfer only, but I am unable to find anything in the
protocol spec to this effect. If anyone can point it out to me, I'll
be glad to withdraw my complaint.   2

    As regards what to do now, it strikes me as a good idea to get
the REAL RFC out as soon as possible, to minimize the bad effects of
it's having been circulated unintentionally in rough draft form.
Therefore I propose not to hand it out to the list of 10 wheels you
mentioned initially, but release it to the world as soon as Wayne
Hathaway comments on the second draft (Jim White has already
responded to it, and is in total agreement). Let me know if you have
any objections.   3

    By the way, Jim has agreed to co-author the RFC. Any chance you
would care to have your name added to the author list? The more the
merrier, you know.

                                        --Mark   4

1

resend of previous journal item re the Comm'ns. Conference held at
the Hotel Bonaventure by the three industry associations

The following represents my first-hand, of-the-cuff impressions of
the "Communications - Expectations" Conference held at the Hotel
Bonaventure in Montreal on January 31 - February 1, 1974.   1

    The conference was sponsored by three industrial associations: 1a

        Can'n. Cable Television Assoc.   1a1

        Can'n. Telecommunications Carriers Assoc.   1a2

        Can'n. Assoc. of Broadcasters   1a3

    The program for the conference revolved around these five topics,
    with each topic receiving approximately 90 minutes of the
    conference time followed by smaller working group discussions of
    approximately one hour duration.   1b

        User and Home   1b1

        User and Community   1b2

        User and Region   1b3

        User and the Nation   1b4

        User and the Universe (!)   1b5

I have outlined below some of the general impressions that I
received from the conference.   1c

    The conference was significant because it represented one of
    the few times that the sponsoring groups have been able to get
    together to discuss anything.   1c1

    The conference was the first opportunity that the groups had a
    chance to sound-off in front of the other groups, and the
    proceedings (formal and informal) took on the air of an
    industry conference rather than a conference of all the
    interested parties in the game of communications futures.   1c2

    While the conference was represented as being future-oriented,
    it dealt with some very everyday topics: 1c3

        What's wrong wth CBC programming today?   1c3a

        Why is current local origination programming so bad ?   1c3b

resend of previous journal item re the Comm'ns. Conference held at
the Hotel Bonaventure by the three industry associations

What effect does viewing repeated acts of violence have on
young television viewers ?   1c3c

The conference was presented as a meeting place for
representatives from the different sponsoring organizations,
but many of the oranizers apparently thought that they were
offering much more. There was a feeling that they were
presenting a really open forum for all types of users of
communications technology and services. This was just not the
case.   1c4

The discussions, presentations, and workshops were dominated by
traditional, middle-class values. This would hardly rate any
significant notice if it weren't for the fact that the
representatives were extending their values and perceptions to
the larger world of prospective users of some of their
equipment. (1c5

    Incidentally, while one would expect the conference to have
    a very definite hardware/technology orientation, this was
    not the case; if anything, the accent was on the media
    overwhich the message might be transmitted, and to a slight
    extent, on the message itself. The concept of different
    communications services never did evolve as an identifiable
    issue.)   1c5a

There were a few token representatives from the outside world
(a farming family from Ontario, communicatons students from
Loyola Univerisity, a labour union official from Newfoundland),
and the idea of having them interact with the industry
representatives was a good one, but it never got off the
ground. The structure was too formal, with little opportunity
to follow-up interesting areas of discussion.   1c6

At the conclusion of the conference, the floor was opened to
anyone wo had comments on the proceedings or organization of
the conference. Several people were critical of the operation
for a number of different reasons.   1c7

    Apparently no expense was spared in setting up the
    conference. The registration fee of $100 was felt to be far
    too expensive for many groups who would have liked to have
    attended. (The organizers responded that it was not until
    too late that they realized this had been a factor in many
    invited groups not attending. There had always been a plan
    to subsidize the cost of the conference for those groups,
    apparently.)   1c7a

resend of previous journal item re the Comm'ns. Conference held at
the Hotel Bonaventure by the three industry associations

         The setting of the Hotel Bonaventure was such that many
         groups from lower income areas, or from different cultural
         backgrounds would have been discouraged from attending.   1c7b

resend of previous journal item re the Comm'ns. Conference held at
the Hotel Bonaventure by the three industry associations

(J30079)   13-FEB-74 08:08;   Title: Author(s): Michael T. Bedford/MIKE;
Distribution: /LHD MIKE; Sub-Collections: NIC; Clerk: MIKE;

Problems working through the link stack.

When working backword in the loop of files that I've developed (by
using the A: &   routine, the first file that pops up is the
file that I start in, rather than the file I was in just previously.
Is this normal ? Have I overlooked something ? It didn't work like
this at ARC, did it ?   1

Problems working through the link stack.

(J30080)   13-FEB-74 16:09;   Title: Author(s): Michael T.
Bedford/MIKE; Distribution: /FEED IMM MIKE; Sub-Collections: NIC; Clerk:
MIKE;

item for tickler

Dave, how was your trip to "Mickey Mouse"???

item for tickler

Officers Commander's Call - 1600 hrs. Officers Club - ALL OFFICERS
MUST ATTEND   1

itea for tickler

(J30081)   14-FEB-74 06:01;   Title: Author(s): Roberta J. Carrier/RJC;
Distribution: /DLD2; Sub-Collections: NIC; Clerk: RJC;

Officers Commander's Call - 1600 hrs. Officers Club - ALL OFFICERS
MUST ATTEND   1

(J30082) 14-FEB-74 06:03; Title: Author(s): Roberta J. Carrier/RJC;
Distribution: /MAW; Sub-Collections: NIC; Clerk: RJC;

tickler for week of 18 Feb through 22 Feb

Please note that 1152s are due for all those interested

tickler for week of 18 Feb through 22 Feb

(fm4) 18 February — Monday HOLIDAY   1

   Due Date — ISIM/W. Rzepka — Request for Technical Evaluation —
   PR-B-4-3250 (SDC)   1a

   0830 hrs. Branch Chief's Meeting   1b

   R & T Selection on the Month is due in ISI.   1c

(ft4) 19 February — Tuesday   2

   Due Date — ISIM — IR&D Evaluation — Project 31 & 32 (RCA)Completed   2a

   Due Date — ISIS/ISIM — 1152s due in ISM NLT 20 Feb for MVCC spring
   term courses   2b

   Due Date — ISIM — Mgt Eval of Training over 40 hours — Liuzzi,
   Calicchia, Bergstrom, & Stone   2c

(fw4) 20 February — Wednesday   3

   ISF 0830 hrs.   3a

   R & T Selection of the Month is due in ISM.   3b

   Due ISM — 1152s for Term V, University of Southern California —
   Dates 4 March through 29 april 1) ASM 525 — Probabilistic Models
   in Decision Making and 2) ASM 557 — Systems Integration — Tuition
   Rate $270 per person.   3c

(fth4) 21 February — 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

   Tentatively scheduled — Mr. Aaron Navarro of Planning Research
   Corp. will give a summary briefing of the work accomplished under
   Contract F30602-73-C-0198. Involves imbedded software monitors in
   user IDS programs to collect CPU and I/O timings and frequency an
   IDS module uses. Time: 1330 hrs. Place: Bldg. 3, Conf Room 1a —
   ALL INTERESTED PERSONNEL ARE WELCOME — Focal point — Capt Daughtry   4c

(ff4) 22 February — Friday   5

   Bobbie: Travel figures due by noon.   5a

1

tickler for week of 18 Feb through 22 Feb

Due date Tom Bucciero - Submission of FY-75 Contract Maintenance
Requirements - RADC 66-5 (TUMM ltr. dtd. 16 Jan 74)   5b

Due Date - ISIS/S. DiNitto - Negative Interim Report Inventions -
F30602-72-C-0467 - Computer Sci CorpCompleted   5c

tickler for week of 18 Feb through 22 Feb

(J30083) 14-FEB-74 06:07;   Title: Author(s): Roberta J. Carrier/RJC;
Distribution: /RADC; Sub-Collections: NIC RADC; Clerk: RJC;

notes briefdo

Notes On Meeting On 14 Feb. 1100 - 1300 Among A. Barnum, R. Iuorno,
R. Weber, & E. J. Kennedy   1

   Al Barnum   1a

      Concentrate on data bases   1a1

      Spell out what you are going to do   1a2

      Ask them if that is what they want   1a3

   Roger Weber   1b

      According to Capt Brunei, the only way to get to l/col Warloe
      is to give him personnel data.   1b1

      Doug Barnum and Dick Cafarelli have the most interest and in
      fact have files that they access right now.   1b2

   Al Barnum   1c

      We must discuss the plan from the user's point of view. Tell
      him what data bases will be in FEMIS. Tell him what is
      different from the printouts that they are accustomed to.   1c1

      Go to whoever is responsible for personnel, tell him what we're
      planning on doing and see if it meets his requirements.   1c2

      Same thing for manpower - this is probably even more important.
      For example in planning for and/or reacting to RIF's, who goes
      where, what spaces are affected. (How does it ripple)   1c3

   Al Barnum   1d

      Emphasize in user-terms what we're doing and what it is for.
      Forget about how it is being implemented, computers, CRT's etc. 1d1

   Roger Weber   1e

      Al Mario is organized to the point where HE doesn't really need
      an on-line system.   1e1

      However, he loves on-line updating of the data base (Achille's
      heel?)   1e2

      The two most important needs: 1e3

         on-line update   1e3a

notas briefdo

personnel and manpower data	1e3b
Al Barnum	1f
Why can't we talk about:	1f1
FEMIS —	1f1a
what it can or can't do	1f1a1
files available	1f1a2
who'll use and how much — collect data	1f1a3
study — on contract	1f1b
find out who needs what and for what	1f1b1
if study shows value of on-line system then we can use the available IDS	1f1b2
Roger Weber	1g
The big problem may be fast, accurate timely updating of the data base	1g1
The big problem with the FEMIS is that you replicate the software with each new file that you create and you can't address more than one file at a time	1g2
Al Barnum	1h
We must discuss the manpower fileas a prelude to the next meeting	1h1
Who needs what for what?	1h2
We must talk to the people — Warloe,Sullivan, D Barnum	1h3
Al Barnum	1i
What we want to talk about has nothing to do with computers	1i1
WE have to talk about the user, the organization, information needs and information flow	1i2
Al Barnum	1j

notes briefdo

Take a hard look at the block labelled 'study'. What is going
to be done as part of the study?   1j1

Get PRC to write up the words for us and make the vuegraphs   1j2

Roc Iuorno   1k

Many of the applications are implicit in the user's manual   1k1

Roc Iuorno   1l

Let's check and substantiate this. Perhaps Cafarelli — Has his
use of the personnel data gone up or down.   1l1

General   1m

There was some discussion of the question Why Us??
Fundamentally we are hoist by our own petard and cast in
concrete by the General Larsen memo authored by Gabe.   1m1

My comment was that the memo obligated IS to come up with a
MIS, BUT did not obligate the Center to use a MIS. This puts
us in the posiion of trying to build something without
resources and provide a service that no one is obligated to
use.   1m2

Barnum then indicated that it would be a good idea to get
together with DO and pose the question to them WHat would they
like in the way of personnel or manpower files.   1m3

I suggested that we shoot for the time when the pitch was
scheduled since undoubtedly Warloe's scheduel was free for that
time.   1m4

Guidance received an dry run for briefing to DO.   2

RE: Current status of Center MIS   2a

source data B3500 data tapes — only   2a1

additional files manpower and personnel — only   2a2

In verbal part — support WILL come frome PRC contract   2a3

RE: Proposed IDS based Center MIS   2b

First they wanted to change input procedures to simply state
line — or batch.   2b1

then, instead, under source data simply a statement that we
will take off data from the B3500 for a year or so and include
new data bases as they become available.   2b2

Future plans — Cut out the comm and the afsc datanet   2b3

put statements in user-oriented language. ie. What does
augment data query mean to a guy like Runninger? Why not say
more query flexibility   2b4

RB: Descriptions of tasks   2c

The entire thing is too computer oriented. It should be
reworded in terms of the problems of the users rather than in
the terms of the sysytem designers or the computer madmen   2c1

RB: Proposed work plan for IDS based Center MIS   2d

software design block should indicate between $100 and $300k   2d1

Instead of test and evaluation — name it something else.
Perhaps exercising and updating or ???   2d2

RB: pitch itself   2e

What we need is someone to deliver it who is not
computer-oriented and who is not cognizant of all the jargon of
the discipline(?) who can talk in terms or user-needs in user
language. Someone who is ignorant and cannot talk above the
heads of the uninitiated. Like Kennedy........   2e1

The Femis capability is being slighted, perhaps we should get
someone else, ie one of the troika, to deliver a short pitch in
this area.   2e2

4

notes briefdo

(J30084) 14-FEB-74 14:00;   Title: Author(s): Edmund J. Kennedy/EJK;
Distribution: /FJT(info) JLM(info) RFI(I7ll get a copy to Roger);
Sub-Collections: RADC; Clerk: EJK;

-------   1

Date: 14-FEB-74 1403-PST   2

From: at CFFICE-1   3

Se: Explaining the Junk Mail Sent to You   4

- - - -   5

Perhaps the phone is better than sndmsg. I wanted to explain the junk   6

mail I have een seending. I am trying to write a scenario which will   7

work under most conditions. ad would like to kknow what you got   8

from me.   9

                                                                            10

esnnse   11

Jeanne   12

-------   13

                                                                            14

(J30085) 14-FEB-74 14:09;   Title: Author(s): Jeanne B. North/JBN ;
Distribution: /DHC ; Sub-Collections: SRI-ARC; Clerk: JBN;

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Date:  14-FEB-74 1426-PST                                      2

From:  PURDUE at OFFICE-1                                      3

Re:    New TTS                                                 4

- - - -                                                        5

New version of TTS is up....  see info on 4k                  6

IMLAC console.                                                 7

Next ARPA group meeting 26 FEB 74 (Tuesday).                  8

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(J30086) 14-FEB-74 14:27;   Title: Author(s): William James Croft/WJC
; Distribution: /RKM HRC JWB2 ; Sub-Collections: ; Clerk: WJC;

communications on Cavano

Suggest that those of us who have recent info on Joe's condition use
the system to keep the rest of us informed.   1

communications on Cavano

(J30087)   14-FEB-74 15:05;   Title: Author(s): Edmund J. Kennedy/EJK;
Distribution: /RADC; Sub-Collections: RADC; Clerk: EJK;

sndmsg to nic journal

by the way, we are constructing a document of our own about SNDMSG to Journal. Extracting from (17777,).

sndmsg to nic journal

Jean -- I gather your author copies indicate what I receivewd, since
you receive the same as me. To verify: (30085,) was delivered as an
untitled citation (document treated as file, rather than message);
(21835,) was handled the same; (21833,) was a titled message.

OK? Let me know if you wanted more or different info. Dave. @   1

sndmsg to nic journal

(J30090)   14-FEB-74 18:06;   Title: Author(s): David H. Crocker/DHC;
Distribution: /JBN; Sub-Collections: NIC; Clerk: DHC;

Information on the TI-725 Terminals

Contains serial numbers, maintenance and paper contact points.

Information on the TI-725 Terminals

We received the TI-725 terminals on the 10th of Sept, 1973. The
following serial numbers were noted.   1

   09606, 09611, 09612, 09613, 09614, 09615, 09616, 09617, 09619.
   #09614 was missing a dot in the center of the print matrix
   occasionaly and #09615 had a carrier light that didn't work.
   Other than that all units apeared to be in good working order.   1a

They were delivered without any paper, so I called the main office of
TI (713-494-5115), and eventually got hold of Robbie Grothe. The TI
part number is 213714-0008. There is no federal stock number. She
quoted prices of $5.00 a roll from their regional offices, $4.75 in
case lots from Texas, and $4.25 in pallet lots (FOB Stafford Texas).
There are 12 rolls to the case ($57.00) and 528 rolls to the pallet
($2244.00). She indicated 6-8 weeks delivery from receipt of order
on the pallet, and 2-3 weeks by the case. I have asked SRI to ship
us a case or two to hold us over..They said they would.   2

   The address is: 2a

   Texas Instruments Inc.
   PO Box 1444
   Houston, Texas 77001
   Atten: Robbie Grothe   2a1

   According to Robbie Grothe at TI , The paper was shipped on 3 Dec.
   1973 Via "ROADWAY". The Sales Order # is 0007-2607. Our Purchase
   Order # is 74-M-4272. Bobbie will you ask Tom Bucciero to
   checkit out. The paper may be sitting on a loading dock somwhere
   waiting for someone to claim it.   2b

I also talked to a Joe Porter about maintenance. He said the nearest
offices were in Waltham, Mass (617-890-7400) and Springfield, NJ
(201-574-9800)...contact is Joe Gililland. The GSA contract # is
GS00S-08577. The units are on one year warrenty, so if we have any
trouble during that time, we will have to ship the units to one of
the above addresses. Porter suggested contacting the Waltham office,
and explaining our current problems to them. He also suggested
having a local technician learn how to do minor repairs and
preventive maintenance.   3

After borrowing three rolls of paper from Honeywell, and receiving a
case from SRI, we got all 9 units into operation. Within a week
(sometime in mid Oct.) #9617 gave out with a stuck print head. A
week or so later #9614 did the same.   4

I finally got around to calling the Waltham office on the 26th of
Nov. (since I was traveling to MITRE, thought I could hand carry the
defective terminals). I talked to a guy by the name of Doane in

Information on the TI-725 Terminals

maintenance. He indicated that the stuck printhead might be due to
loose screws in the carriage return mechanism. He had apparently
encountered this before. He gave instructions over the phone on what
to look for, but I thought since they were still under warenty, that
they might as well fix them. He apparently does diagnostics over the
phone...I should tell the facility about this...I also discovered
that the year's warrenty applies only to parts; labor is covered only
for 90 days; so guess I had better get a manintence contract started.   5

    the directions for getting to TI in Waltham are: 5a

        go North on 128 to the Winter Street East exit   5a1

        go about a 1/10 of a mile east toward Boston   5a2

        TI is at 504 Totton Pond Rd....turn right into the parking lot   5a3

        They are on the 3rd floor of #504...the building with the MOBIL
        sign on the top of it.   5a4

Information on the TI-725 Terminals

(J30091) 15-FEB-74 04:42;   Title: Author(s): Duane L. Stone/DLS;
Sub-Collections: RADC; Clerk: DLS;
Origin: <STONE>TI.NLS;1, 7-JAN-74 10:22 DLS ;