

DCE 22-MAR-73 15:41 15250

Forthcoming visit by computer-graphics group from Lawrence
Radiation Labs in Livermore, and background notes

Request for action from Jim and Dick

Forthcoming visit by computer-graphics group from Lawrence
Radiation Labs in Livermore, and background notes

Jim and Dick; I got a call yesterday from Dr. Steve Levine asking if we could host this group, about 7 people maximum. Would you two put your heads together and select a suitable ARC host; then have that host contact Steve? (415) 447-1100, X3360 1

Steve has a timing preference, for next week, for either Tuesday afternoon (27 Mar) or that Friday (anytime). Half a day minimum (from my point of view, it is a good investment); I asked him to be ready to give us a short presentation about their work. In the past, they have done some very interesting graphic things at LRL. 1a

I'd like the chance to be in on their presentation; and if the mutual interests seem high enough in the judgement of the host to warrant it, I'd like to sit in on a final half-hour bull session. 1b

Steve worked for us as a systems programmer during the last part of the CDC3100 days, and the early months of the 940 development. He moved over to work under Bill Miller at Stanford, did a graphics project for his PhD work. I think that he worked part time for Nick Szabo of Singer-Link for a while, too. I gather that he hasn't been at Livermore too long. 2

I don't know the exact nature of their interest. Steve is an enthusiast about our activities and goals (says the outlook and experience he got here affected his later work and thinking quite a bit), and I'm sure that he at least wants people there to integrate what they can from our developments. He thinks there is considerable interest there in the visit. 3

I am very much interested in having this visit be a way "into" the AEC computer world, from the angle of their becoming participants in our KW Utility and the various special communities. So I'd like for the selected host to be able to work into the discussions the nature of our plans and the possibilities with them and other LRL or AEC groups. There are some pretty high-powered application groups within the AEC, covering a surprising range of application: heavy computation, of course; sophisticated graphics for representing the products of computation; some heavy data-base problems; etc. They have been able to justify very expensive computer installations. If they felt that a K-W support system for any of these areas was worth considering, I think that they would be a very stimulating and knowledgeable bunch to work with. 4

[Note: I have had previous contact at LRL with George Michaels

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and with Ray De Sauusseure. Once gave them a seminar and showed some movies (pre 1968 versions). And at a subsequent JCC in Houston I worked through a scenario with Ray about collaborating on an "intelligence data base" for computer information. He has been the guy at LRL who often does their intensive, comparative surveys into machines and equipment; he thought the idea was great, to have the chance to use NLS to support his work, and to make the end results more or less generally available (and to have other people to share the surveying and basic data gathering). He was even going to check up on how the security people at LRL felt about piping into their high-security area some computer communication lines from outside facilities. Neither of us contacted the other since, though.]

5

15250 Distribution

Norton, James C. , Wetson, Richard W. , Irby, Charles H. , Brown,
David R. , Cox, Bonnar , Stone, Duane L. , Rech, Paul , Kudlick,
Michael D. ,

Seminar on tracing for NLS programmers

I plan to give a "class" - seminar on Wed. 3/28 at 3PM on how NLS programmers can use the new call-return and memory reference tracing system for debugging and mini-analysis. All NLS programmers outta be there. It will be almost entirely real-time examples

1

15251 Distribution

Victor, Kenneth E. (Ken) , White, James E. (Jim) , Dornbush, Charles F. , Michael, Elizabeth K. , Vallee, Jacques F. , Mitchell, James G. , Deutsch, L. Peter , Kaye, Diane S. , Andrews, Don I. , Bass, Walt , Hopper, J. D. , Irby, Charles H. , Lehtman, Harvey G. , Watson, Richard W. , Rech, Paul , Wallace, Donald C. (Smokey) , Victor, Kenneth E. (Ken) , Deutsch, L. Peter , Engelbart, Douglas C. ,

seminar reservation

I am giving a seminar on Wed. 3/28 at 3PM and I want to use the projector. Could you see if this conflicts with anything else? And make arrangements to warm up and tune up the projector? Thanks.

1

15252 Distribution
Byrd, Kay F. ,

Proposal to Mount the Conference Room Blackboard

Mike Kudlick proposed some time ago that the blackboard we presently carry in an out of the conference room be mounted permanently on the West wall.

1

No one responded.

2

Let us put it this way: if no one objects, we will mount the blackboard permanently on the west wall.

3

Please respond by March 30.

3a

15253 Distribution

Van De Riet, Edwin K. , Van Nouhuys, Dirk H. , Victor, Kenneth E.
(Ken) , Wallace, Donald C. (Smokey) , Watson, Richard W. , Andrews,
Don I. ,
Keeney, Marcia Lynn , Hoffman, Carol B. , Lee, Susan R. , Michael,
Elizabeth K. , Dornbush, Charles F. , ARC, Guest O. , Feinler,
Elizabeth J. (Jake) , Handbook, Augmentation Research , Kelley, Kirk
E. , Meyer, N. Dean , Byrd, Kay F. , Prather, Ralph , White, James E.
(Jim) , Vallee, Jacques F. , Kaye, Diane S. , Rech, Paul , Kudlick,
Michael D. , Ferguson, Ferg R. , Lane, Linda L. , Auerbach, Marilyn
F. , Bass, Walt , Engelbart, Douglas C. , Hardeman, Beauregard A. ,
Hardy, Martin E. , Hopper, J. D. , Irby, Charles H. , Jernigan, Mil
E. , Lehtman, Harvey G. , North, Jeanne B. , Norton, James C. ,
Paxton, William H. , Peters, Jeffrey C. , Ratliff, Jake

Reponse to Dr, Richard Overton of CIRAD

This leter has been sent to Dr. Overton after receiving their modified version of the original CIRAD report incorporating changes suggested in (15067,)

Reponse to Dr, Richard Overton of CIRAD

Stanford Research Institute
Augmentation Research Center
333 Ravenswood Avenue
Menlo Park, California 94025

Dr. Richard Overton
CIRAD
401 N. Harvard
Claremont, CA 91711

Dear Dr. Overton:

Thank you for your response of 19 March to our suggested changes to the RICASM report. The edited version which you enclosed is acceptable to us.

1

We look forward to receiving a copy of the published report.

2

Sincerely,

Harvey G. Lehtman
Augmentation Research Center

15254 Distribution

Irby, Charles H. , Kaye, Diane S. , Hopper, J. D. , Engelbart,
Douglas C. , Watson, Richard W. ,

RE: proposed protocol notebook update.

- 1) is it a good idea to reprint the notebook while two major segments are under revision ? (telnet and FTP).
- 2) the ascii codes should be in the official section and should be presented in a document of the standards institute not some manufacturer.
- 3) ignoring (1) above the ftp should be represented by rfc 454.
- 4) the note on graphics protocol should be in that section (rfc 292)

15255 Distribution

Keeney, Marcia Lynn , North, Jeanne B. , McKenzie, Alex A. ,

Answer to SDC2 Request for Assistance with Directives

.LBS=1; .PxFShow 1; .PxFLU=1; .PxFLS=1; .PxFLD=0;

1

Steve:

2

This is the best I could do without further interaction.

2a

The above directives seem to do the trick - two blank lines before level one statements, one after, and one after level two statements.

2a1

The trouble is that you must use the combination of LBS=1 and Px---- directives to get the first two levels right--but it goes further than that.

2a2

If you don't want blank lines between statements on levels below two, this doesn't solve your problem.

2a2a

On the other hand, you probably should use LBS=1 for most of the rest of the body of most documents, only turning LBS back to 0 for selected parts of the document, such as in tables:

2a2b

10,000 .LBS=0;
2,000
3,000
45,000 .LBS=1;

2a2b1

2a2b2

2a2b3

2a2b4

It's up to each user to do what he wants.. but that's the way I do it.

2a2c

This is the second level

2b

This is the third level

2b1

This is the third level

2b2

This is the first level

3

This is the second level

3a

This is the third level

3a1

This is the third level

3a2

This is the second level

3b

Answer to SDC2 Request for Assistance with Directives

This is the third level

3b1

This is the third level

3b2

This is the first level

4

This is the first level

5

15256 Distribution

Crocker, Steve D. , Coley, Anita L. , Bass, Walt , Meyer, N. Dean ,
Van Nouhuys, Dirk H. ,

Tenex Linking

Alex ... On Linking:

I agree with your objections to the Tenex link mechanism as it's now constituted. (This is in reference to the journal item you sent me last month, NIC# 14852, 2-Mar-73, for which I'm sorry the reply is so late. I heard you loud and clear, because I've suffered with the same problem.)

The problem is that SRI-ARC can't change the Tenex link mechanism, but only uses it. The only two commands one can use to control the linking process while using NLS or any other Tenex subsystem are "REFUSE" and "RECEIVE", to refuse all links or receive all links, respectively. This is clearly not enough.

The only way this will be changed is through efforts at BBN, for example via Ray Tomlinson and/or Bob Clements.

While we're comparing notes on linking, I might offer a suggestion, for whatever it's worth:

The model that I would like to see followed in the design of an entirely new TENEX link mechanism is that of a super-efficient personal secretary, as follows:

The user should be able to tell the system i.e., his "secretary", that he will accept links (analogous to accepting "phone calls") from users x, y, and z, say, but from no one else.

The system would in turn keep a record of all attempted links giving person, date, and message, if any. (This would be analogous to the present "MESSAGE.TXT" file, though done in real time.)

Such a record should be in a file, say "LINKS.TXT", which could be interrogated, deleted, etc. at any time by the user.

The system would NEVER allow anyone to link in the present sense. Rather, it would intercede as a secretary would, tell you that X is trying to link, and give you the option of accepting or rejecting the link.

This would give you the privilege of replying in one of a few standard ways, for example:

Will accept the link now.

Busy in output mode (or busy in input mode) (or busy with another link): will link back within N minutes.

Tenex Linking

Note that with such a scheme, even when the system tells you that X is trying to link, X must be one of the persons that you specifically said it was o.k. to accept links from. Otherwise, the attempted link from X would merely be noted in the file "LINKS.TXT".

10

Note also of course that this still leaves a problem to be resolved: How should the system tell you that one of the privileged users (X, Y, or Z in the above simple example) is trying to link to you?

11

In my opinion you should either be interrupted by the system as at present, or else not be told until the next time TENEX typed its herald "@". At that point the system could type something like LINK FROM X, TYPE "LINK CR" TO READ IT.

11a

These two options might be selectable by the user, or they might not. I have no strong preference.

11b

Perhaps the model of a super-efficient secretary can be exploited even further. Regardless, I strongly believe that it is the correct model to use. We need privacy when we're using the computer; we need protection from intrusions on our input or output copy; and we need a way to reply courteously and promptly to those who would sincerely like to get in touch with us.

12

I'd be interested to know if there's any interest at BBN to implement such a link mechanism.

13

... Mike Kudlick (MDK)

14

15257 Distribution

McKenzie, Alex A. , Victor, Kenneth E. (Ken) , Wallace, Donald C.
(Smokey) , Watson, Richard W. ,

Complaint on Quality of Printer Paper

JCN-- Please have someone check into the printer paper which is being ordered for us. The present supply tends to hang up in the printer, tearing, and also giving an erroneous end-of-paper message. It doesn't take much staff time spent in straightening out the printer, and printer time consumed in redoing a printout of a long file to eat up any economy. This note is sent to other ARCERS in case I am the only one creating the problem. --Jeanne

1

15258 Distribution

Van De Riet, Edwin K. , Van Nouhuys, Dirk H. , Victor, Kenneth E.
(Ken) , Wallace, Donald C. (Smokey) , Watson, Richard W. , Andrews,
Don I. ,
Keeney, Marcia Lynn , Hoffman, Carol B. , Lee, Susan R. , Michael,
Elizabeth K. , Dornbush, Charles F. , ARC, Guest O. , Feinler,
Elizabeth J. (Jake) , Handbook, Augmentation Research , Kelley, Kirk
E. , Meyer, N. Dean , Byrd, Kay F. , Prather, Ralph , White, James E.
(Jim) , Vallee, Jacques F. , Kaye, Diane S. , Rech, Paul , Kudlick,
Michael D. , Ferguson, Ferg R. , Lane, Linda L. , Auerbach, Marilyn
F. , Bass, Walt , Engelbart, Douglas C. , Hardeman, Beauregard A. ,
Hardy, Martin E. , Hopper, J. D. , Irby, Charles H. , Jernigan, Mil
E. , Lehtman, Harvey G. , North, Jeanne B. , Norton, James C. ,
Paxton, William H. , Peters, Jeffrey C. , Ratliff, Jake

NDM 22-MAR-73 11:36 15259

Solicitation

please....

Solicitation

A directory called <user-progs> has been created. The purpose is to consolodate all user programs of general interest.

1

Dean Meyer is the user programs librarian. He is responsible for collecting programs which might be of use to people and making them available.

2

Please call on Dean if you have a problem which might be solved by a user program. He should be able to provide you with the program.

2a

But, in addition to being an announcement, this is a solicitation. Dean is trying to collect all the already existing programs that might be of general interest. If you have any such programs in your directory, please let Dean know about them. His phone number (in Berkeley) is (415) 845-1099. If he is on-line, feel free to link to him. If he isn't, SNDMSG should serve. He appears at SRI Menlo-Park periodically.

3

Your cooperation at this phase is very important to the success of this experiment. Please share your programs with Dean.

4

A table of contents of user programs is forthcoming.

5

15259 Distribution

Van De Riet, Edwin K. , Van Nouhuys, Dirk H. , Victor, Kenneth E.
(Ken) , Wallace, Donald C. (Smokey) , Watson, Richard W. , Andrews,
Don I. ,
Keeney, Marcia Lynn , Hoffman, Carol B. , Lee, Susan R. , Michael,
Elizabeth K. , Dornbush, Charles F. , ARC, Guest O. , Feinler,
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E. , Meyer, N. Dean , Byrd, Kay F. , Prather, Ralph , White, James E.
(Jim) , Vallee, Jacques F. , Kaye, Diane S. , Rech, Paul , Kudlick,
Michael D. , Ferguson, Ferg R. , Lane, Linda L. , Auerbach, Marilyn
F. , Bass, Walt , Engelbart, Douglas C. , Hardeman, Beauregard A. ,
Hardy, Martin E. , Hopper, J. D. , Irby, Charles H. , Jernigan, Mil
E. , Lehtman, Harvey G. , North, Jeanne B. , Norton, James C. ,
Paxton, William H. , Peters, Jeffrey C. , Ratliff, Jake

More on Xeroxing

On the subject of xeroxing, Mike raised a question about the necessity of sending 150 copies of every NIC document to the network. He suggested sending some kind of abstract, at least for certain documents, giving the people the option of getting the document in hard copy. I think this is a great idea, and makes much more sense than sending several documents that people are not particularly interested in. This would obviously change the present concept of a "Station Collection", because the station agent might no longer have copies on hand of all NIC documents. (I am using NIC to mean documents distributed by the Network Information Center crew.) In order to know better what we are talking about, Mike asked that I get some rough figures of what kinds of documents we send. Since the beginning of this year, we have sent 58 documents to the network (distribution=150). Of these 80% have been RFC's, 8% messages or other documents originated at ARC, 7% miscellaneous, and 5% messages from network people. I realize that if something like this comes about, it will require some amount of judgement on someone's part to decide what should be sent, and what should be sent as an abstract. The originator of the document could be asked what distribution he thinks the document should be sent (everyone or just an abstract to everyone). I don't really think that making the decision about distribution would be that much work, and certainly not as much as just sending everything. (or as costly).

15260 Distribution

Kudlick, Michael D. , Keeney, Marcia Lynn , North, Jeanne B. , Van
Nouhuys, Dirk H. ,

The last time I stamped envelopes I watched the clock, and it appears that one can stamp about 25 envelopes a minute. At the rate of 1000 a month, 40 minutes of someones time will be used each month. At the current rate of pay for Carol and Marcia, it would cost between 2.10 and 2.30 a month. It costs 13.00 to have them printed, so unless we just have lots of money floating around, it seems that it would be best to wait until the beginning of next year when the cost would be less or to just drop it all together, especially if we aren't making such large mailings in the future. Well, so much for augmentation

1

15261 Distribution

Kudlick, Michael D. , North, Jeanne B. , Keeney, Marcia Lynn , Van
Nouhuys, Dirk H. ,

Happy Trails to You, Until We Meet Again

My friends at ARC,

I came to Calif. a year and a half ago, not knowing anyone and wondering if I would find friends. And indeed, I've found many very dear friends here at ARC. It's been a fine and exciting time (not without disappointments and frustration), and I'm happy to have been here. The work has been interesting, but most important are the people I've gotten to know. For all the bullshit, this is a really fine group of people. I'm going to miss you during my stay back East, and look forward to seeing you in July.

If any of you feel inclined to call or write, please do - I'd love to hear from you. Address and phone are*

Bill Ferguson

Route 6

Andover, Conn. 06232

(203) 742-7193

Keep a seat open for me at the Goose and I'll catch you later.

Ferg

15262 Distribution

Van De Riet, Edwin K. , Van Nouhuys, Dirk H. , Victor, Kenneth E.
(Ken) , Wallace, Donald C. (Smokey) , Watson, Richard W. , Andrews,
Don I. ,
Keeney, Marcia Lynn , Hoffman, Carol B. , Lee, Susan R. , Michael,
Elizabeth K. , Dornbush, Charles F. , ARC, Guest O. , Feinler,
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Hardy, Martin E. , Hopper, J. D. , Irby, Charles H. , Jernigan, Mil
E. , Lehtman, Harvey G. , North, Jeanne B. , Norton, James C. ,
Paxton, William H. , Peters, Jeffrey C. , Ratliff, Jake

Proposal for Research No. ISU-73-51

Proposal for Research No. ISU-73-51

Proposal for Research No. ISU-73-51

I INTRODUCTION

1

A. Brief scope statement

1a

The purpose of this proposal is to request support for extending the utilization of the knowledge workshop technology developed at the Augmentation Research Center (ARC) of Stanford Research Institute (SRI). The extension will be to those RADC offices who would be willing to undertake further exploratory use of augmented knowledge workshop techniques.

1a1

The support is required for two activities: computer services and technical services.

1a2

The computer services will be supplied through the ARPANET to geographically distributed user groups (RADC and others) from a computer facility maintained and operated by a commercial timesharing company. The computer portion of this service will be run under a subcontract with ARC. As prime contractor, ARC will handle all service subcontracts.

1a2a

The technical services provided by ARC personnel have the following objectives:

1a2b

Maintain and update the "utility" version of our application software;

1a2b1

Support the user groups in learning how to use these tools.

1a2b2

Descriptions of the applications being suggested for exploratory use are given in a paper by Engelbart, Watson, and Norton [15] and in an earlier paper by Engelbart [16]. Copies of these documents are included with this proposal as Attachments A and B.

1a3

B. ARC's "Community Plan" for promoting development of augmented knowledge workshops.

1b

Introduction

1b1

ARC is a one-organization community of researchers and system developers, supported by several different contracts. The research and development activities of

Proposal for Research No. ISU-73-51

ARC are aimed at exploring the possibilities for augmenting individuals and groups in the performance of knowledge work with the help of computer aids. These computer aids range from offline batch to online real-time. Exploratory development and operation of augmentation systems have been our substantive work.

1b1a

ARC's Research and Development Strategy

1b2

The researchers within ARC do as much of their work as possible using the range of capabilities offered. Thus they have served not only as researchers, but also as the subjects for the analysis and evaluation of the augmentation systems that they have been developing.

1b2a

Consequently, an important aspect of the augmentation work done within ARC is that the techniques being explored are implemented, studied, and evaluated with the advantage of intensive everyday use. We call this research and development strategy "bootstrapping".

1b2b

In our experience, complex man-machine systems can evolve only in a pragmatic mode, within real-work environments where there is an appropriate commitment to conscious, controlled, exploratory evolution. For ten years the evolution of our "augmented knowledge workshop" system has gone on within such an environment.

1b2c

The Next Stage in ARC's Research and Development Strategy

1b3

We believe that it is now time for a next stage of application to be established. We want to involve a wider group of people so that we can begin to transfer the fruits of our past work to others, and so that we can obtain feedback needed for further evolution from wider application than is possible in our project alone. We want to find and support selected groups who are willing to take extra trouble to be exploratory, but who:

1b3a

1) are not necessarily oriented to being developers (they have their own work to do),

1b3a1

2) can see enough benefit from the system to be tried and from the experience of trying it so that they can justify the extra risk and expense of being "early birds", and

1b3a2

Proposal for Research No. ISU-73-51

3) can accept our assurance that reliability, system stability, and technical application help will be available to meet their conditions for risk and cost. 1b3a3

The establishment by ARC of a Workshop Utility and its promotion of the type of service work proposed herein are part of its long-term commitment to pursue the continued development of augmented knowledge workshops in a pragmatic, evolutionary manner. It is important to note that our last few years of work have concentrated on the means for delivering support to a distributed community, for providing teleconferencing and other basic processes of collaborative dialogue, etc.--consciously aiming toward having experience and capabilities especially applicable to support remote and distributed groups of exploratory users for this next stage of wider-application bootstrapping. 1b4

C. Organization of this Proposal 1c

This proposal is divided into two parts, each of which is broken down into several sections. 1c1

Part One is the Technical Proposal, covering the proposed work and its background and context. 1c2

Section I is the introduction. 1c2a

Section II is a summary outline of proposed project activity. 1c2b

Section III is an extended discussion of proposed project activity. 1c2c

Section IV is a list of selected references. 1c2d

Part Two contains the Contractual Provisions, with sections covering such topics as estimated time and charges, reports, contract form, acceptance period, and a cost estimate with supporting schedules. 1c3

The Attachments contain additional supporting material. 1c4

II SUMMARY OF PROPOSED PROJECT ACTIVITY

2

The proposed project work will include:

2a

Availability 16 hours a day, 6 days a week of Workshop Utility computer service to the ARPANET from a PDP 10 TENEX system operated by a commercial supplier. We call our basic software system "Online System" (NLS).

2a1

Providing training as appropriate in the use of Display NLS (DNLS), Typewriter NLS (TNLS), and Deferred Execution (DEX) software subsystems.

2a2

Providing technical assistance to an RADC "workshop architect" in the formulation, development, and implementation of augmented knowledge work procedures within selected offices at RADC.

2a3

Providing technical assistance to help set up and assist selected RADC groups, who share a special discipline or mission orientation to use the Workshop Utility Services and to develop procedures, documentation, and methodology for their purposes.

2a4

This assistance will include help in the development of NLS use strategies suitable to the RADC environment, procedures within the RADC organization for implementing these strategies, and possible special-application NLS extensions (or simplifications) to handle the mechanics of particular RADC needs and methodologies.

2a5

III EXTENDED DISCUSSION OF PROPOSED PROJECT ACTIVITY

3

A. Objective

3a

The objective of this effort is to work with RADC technical and other personnel in the mutual development and use of procedures, methodology, software features, and other computer tools; and in the training of users that will allow their exploratory use of Augmented Workshop systems.

3a1

We expect that this proposed service will be used within the ARPANET community both by distributed special-interest communities of people and by individual coherent organizations.

3a1a

In the following discussion, we refer to this collection of clientele as "ARPANET users", and to either type of client group as "group".

3a1b

This objective has three key components:

3a2

1) Establishing a Workshop Utility Service to provide straightforward means for arranging that a client group can get necessary services, both of NLS support and of technical assistance;

3a2a

2) Building a user clientele who will find real value in applying the Service, and whose participation will contribute to Government research goals both directly by making the users' activities more effective, and indirectly by accelerating the maturation and acceptance of augmented knowledge workshop techniques;

3a2b

3) Developing know-how and capability for integrating innovation with new-development transfer--i.e., while stimulating and collaborating in innovative Workshop system development, arrange also for stable, coordinated service support to help new groups begin augmenting their knowledge work, to help established groups evolve new tools and work methods more effectively, and to facilitate active collaboration among us all on the continuing evolution of improved Workshop systems.

3a2c

Proposal for Research No. ISU-73-51

B. Background

3b

The Augmentation Research Center has developed, over a period of years under Government sponsorship, a general-purpose interactive augmentation system centering about what we now call an "Augmented Knowledge Workshop," abbreviated below as "Workshop". The goal of ARC's work has been to evolve a prototype Workshop system that will improve significantly the performance of individuals and teams engaged in knowledge-work activities, where the Workshop "system" involves daily use of coordinated tools, procedures, methodologies, and languages.

3b1

For further background discussion, see [15] and [16], and the references in Section IV.

3b2

While the discussion in Attachment B is oriented toward communities of discipline or mission oriented users, the same types of services and knowledge workshop orientation apply to individuals and groups of workers in a local environment.

3b3

C. Scope of Proposed Work

3c

Introduction

3c1

Initial use of the ARC Workshop Technology over the ARPANET by selected RADC people has occurred under a separate contract (No. F30602-72-C-0333) during the past year.

3c1a

It now appears appropriate for the technology, as currently developed, to be used by a greater number of RADC research people in their day to day work over an extended period of time.

3c1b

The types of workshop services that we can begin to support at varying levels of capability are described in [16] under the headings:

3c1c

15

COLLABORATIVE DIALOGUE	3c1c1
DOCUMENT DEVELOPMENT, PRODUCTION, AND CONTROL	3c1c2
RESEARCH INTELLIGENCE	3c1c3
COMMUNITY HANDBOOK DEVELOPMENT	3c1c4
COMPUTER-BASED INSTRUCTION	3c1c5
MEETINGS AND CONFERENCES	3c1c6
COMMUNITY MANAGEMENT AND ORGANIZATION	3c1c7
SPECIAL KNOWLEDGE WORK BY INDIVIDUALS AND TEAMS	3c1c8

Proposal for Research No. ISU-73-51

Our present capabilities in the above areas are briefly indicated in [15] and [16]. For each area, there is an immediate applicability of the basic NLS provisions for composing, modifying, studying, publishing, collaborating, etc., and we have additional special provisions specifically supporting almost every area (the one exception now being the "computer-based instruction" area). We are dedicated to continuing the evolution of each area in a persistent, year-after-year strategy where the profile of evolutionary effort expended at any given time over the array of application specialties is to be responsive to the profile of application needs and values of the user communities.

3c1d

Our Approach to the Problem of Technology Transfer

3c2

We propose to begin to transfer technology from our local group of experienced users to a wider group of inexperienced, geographically separate users within the ARPANET community. This technology consists of computer software capabilities; a coordinated repertoire of computer-assistance tools; associated concept and language additions dealing with the tools and with the information organization and task processes associated with their use; and new aspects to intra-group organization and working methodology. Training a group in these new matters is necessary to the transfer; and to help others learn to train people in the new technology requires a transfer of the additional technology used to support the training.

3c2a

We are fortunate, in the case of RADC, to have a core of users who have gained much useful experience through their recent use of the system on the ARC machine.

3c2a1

The process of technology transfer is not a simple process, judged by our and others' experience. We base our "Community Plan" strategy upon our experience that there are at least two main requirements for the transfer process both to be successful and to proceed at a reasonable speed and cost:

3c2b

- 1) The group originating the technology and having the experience, enthusiasm, and initial commitment to its value must follow through with training and application support of the end user groups until a

critical mass of equivalently experienced and enthusiastic end users has developed.

3c2b1

2) The end user groups must have at least one properly placed, active supporter of the transfer process. We have been using the term "local workshop architect" for this role.

3c2b2

This seems similar to what Thomas Allen of MIT, who has studied the technology transfer process in some detail [13], calls a "gate keeper". His "gate keeper" is a person oriented both toward the problems of his organization and toward capabilities developing outside his organization. He functions as the gate through which new ideas and technology enter his organization.

3c2b2a

We find that Allen's concept of a "gate keeper" is highly relevant in our considerations, both for the successful transfer of our technology and for keeping the cost of this transfer to a reasonable level.

3c2b2b

We would like to give particular emphasis to this second requirement--that each coherent group planning to integrate the proposed services into its working life should have at least one member serving as a "workshop architect" or "group coordinator."

3c2c

The function of this person is to be familiar in detail with both the needs of his organization and the capabilities we are proposing. This person, knowing his group's needs and our capabilities, would help introduce a workshop system meeting these needs into his organization in the appropriate evolutionary stages.

3c2c1

During the past year, RADC use of the ARC workshop system has been under the guidance of a local RADC workshop architect. This has proven to be a very effective arrangement.

3c2c2

ARC personnel would continue to work closely with the workshop architect--in training him, in giving him significant help in his role, and in a continuing exchange of technical information.

3c2c3

The labor-funding levels in this proposal are based

Proposal for Research No. ISU-73-51

on the assumption that when a client group is allocated a portion of the Utility Computer Services, the corresponding allocation of direct technical support will go primarily to its workshop architect. We assume that much of the responsibility for integrating the Workshop service into his organization or community will be handled by this person.

3c2c4

If a workshop architect is not available within a client group, or if extra people need our direct technical support (as may be the case with some non-RADC users of the Workshop Utility), then additional funding will have to be provided.

3c2c5

Careful selection of the initial communities and organizations (in addition to RADC groups) to support in the use of a new type of service is another important part of the "transfer" strategy.

3c2d

For use of the Workshop Utility services, selection criteria for many other groups would be jointly determined with ARPA (a potential major user of the Utility), and would probably include such factors as: interest in participation; willingness to make the risks and investments in training and other changes necessary to make successful use of the system; and expectation of longer term payoff in using such a service within the larger organizations of which they are a part.

3c2d1

Clientele for the Workshop Utility Service

3c3

We distinguish four main groups that would use the proposed service.

3c3a

1) Mission or discipline oriented groups within the ARPA community who want to experiment with a greater variety of augmented workshop services and in greater depth than would be available with normal Network Information Center (NIC) service.

3c3a1

Examples of such groups within the ARPA area might be those involved in TENEX system programming, Illiac use or system development, Automatic Programming, Satellite and Radio Packet Communications, Speech Understanding, and AI

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subgroups. Other examples could come from research programs supported by other ARPA offices. 3c3a1a

2) Local organizations that want to use Workshop services in an integrated way within their organization. (For instance, selected offices at RADC and ARPA.)

3c3a2

3) Local organizations that are not trying to make integrated, internal use of Workshop services, but that have individuals who want to use some of the services in more depth than can be justified as "experimental usage" of the NIC.

3c3a3

Examples here would be individuals doing system documentation, writing a PhD thesis, or doing other serious applications to office or information handling work.

3c3a3a

4) The Network Information Center, in the online services provided to its network clientele.

3c3a4

NLS support for NIC staff at ARC, doing its NIC-support work, would still come from the ARC machine.

3c3a4a

For any group we would expect evolutionary growth of their Workshop service application, in both quantity and in range. This growth will take guidance and support of the sort that in the commercial computer world would be offered by the applications specialists and "systems engineers". These people work with the end user organizations in integrating the manufacturer's or service company's technology into its operations. To follow through with our Community Plan, it is essential for us to offer a similar type of service, and this is our biggest challenge in establishing the Workshop Utility Service.

3c3b

Services to be Offered

3c4

The proposed Workshop Utility service consists of two components: computer support and people support. We discuss these components in detail below.

3c4a

Computer Services

3c4b

The underlying computer service support

3c4b1

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We plan to offer a Workshop-utility version of ARC's online system (NLS), serviced over the ARPANET, at least 16 hours a day, six days a week. NLS features are described in the documents listed in Section IV.

3c4b1a

There are two prime reasons for supporting Workshop services from a system operated and managed by a commercial timesharing utility company, rather than from a system directly operated by ARC.

3c4b1b

1) A commercial firm has the experience, facilities, leverage on vendors, and redundant equipment that make possible more reliable service than can be produced in a research and development environment.

3c4b1b1

2) It should be possible to expand the service in a more flexible manner in increments of whole or partial machines as usage grows.

3c4b1b2

Service Partitioning

3c4b2

We are presently designing a scheme for partitioning computer access and service between groups of users so as to guarantee each group its fair share of system resources while preserving both adequate responsiveness and an independence for each group to plan its own usage loading.

3c4b2a

We plan to implement and experiment with this scheme on the ARC machine before using it on the Utility system.

3c4b2b

Availability of the Workshop Service from a Variety of Terminal Classes

3c4b3

The display version of NLS (DNLS) can presently be supported over the ARPANET on appropriately configured IMLAC display terminals, of which there are a number on the network, several located at RADC. Beyond this, we are planning to extend ARPANET DNLS support to a wider variety of display systems in three ways:

3c4b3a

1) Through extension of the IMLAC protocol to other display systems which can be provided

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with local-processor support, and using TELNET-protocol communication to the NLS Utility.

3c4b3a1

2) Through developing special versions of DNLS that work with cheap, text-only display terminals, using no local-processor support and communicating with the NLS Utility via the TELNET protocol.

3c4b3a2

3) Through a general network-wide graphics protocol, serving display terminals with full DNLS service via the graphic protocol communication to the NLS Utility. (We are currently working with members of the Network Graphics Group on the design of such a protocol that could also support DNLS.)

3c4b3a3

Note that much of the development work mentioned in this proposal will be going on independently of the proposed work, but it is mentioned here because of its supportive nature to the proposed Utility.

3c4b3b

The typewriter version of NLS (TNLS) utilizes the Network TELNET Protocol and is therefore available to a wide variety of CRT and hardcopy "typewriter" terminals.

3c4b3c

We support a powerful "deferred execution" version of NLS (DEX) from offline typewriters using spooling stackup on magnetic tape cassettes, paper tape systems, or in local computers.

3c4b3d

DEX allows offline batch usage of a full range of NLS capabilities for document creation, editing, file manipulation--providing for almost any of the NLS operations for creating new files or working on existing files.

3c4b3d1

Other remote-service features:

3c4b4

NLS's Output Processor, a powerful subsystem for formatting and printing documents, can currently be used from typewriter and other printers on network hosts and TIPS.

3c4b4a

Using the Network File Transfer Protocol, we are

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developing flexible capabilities that will allow transfer and conversion of text files back and forth between other text-manipulation systems and NLS.

3c4b4b

We are also developing the capability to enter documents and messages into the ARC Journal system from files created in other hosts, and to deliver documents submitted to the Journal to users at remote hosts through the network.

3c4b4c

We are planning to have cooperating distributed Journal systems running on several hosts in the network, and to use bulk storage in systems such as the Data Computer for archiving Journal and other files.

3c4b4d

Our goal, as it was with the TELNET and File Transfer Protocols, is to work for general network protocols to provide needed capabilities and thus minimize or eliminate any special Network provisions to support NLS over the Network.

3c4b4e

More flexible delivery

3c4b5

We are planning to begin during the coming year to rewrite NLS in the Modular Programming System (MPS), a new modular, run-time linkable, machine-independent programming system being developed jointly with Xerox PARC. We plan for continued evolution of the modularized NLS--MPS will allow NLS to be easily reconfigured for different user groups, allow "interactive frontend" or other modules to run on other hosts in the network, and allow collaborating groups to experiment with special features in the system which we or they create.

3c4b5a

We have been and are studying various configurations of hardware so as to be able to recommend to isolated individuals or coherent groups display, typewriter, and offline systems possibly supported by a mini-computer in a range of prices and capabilities for their use with NLS.

3c4b5b

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File privacy

3c4b6

The Workshop Utility will provide (via the ARPANET) the necessary standard TENEX software and/or procedures to ensure some privacy of file access. It should be noted on the other hand, that the visibility and availability of planning information and other recorded dialog in ARC's currently open Journal system provides some of the more significant effectiveness-augmenting potential of our Workshop system.

3c4b6a

We assume that ARC computer-service personnel may occasionally have to access clients' user files as required from an operational standpoint; however, other individuals accessing Workshop Utility Service via the ARPA Network will be denied read, write and list access to a client's files, unless he specifically releases files for general use.

3c4b6b

People support services

3c4c

Frankly, we don't yet know the amount and nature of people support services that a successful Workshop Utility will need, particularly in the direct client support category. The levels specified in this proposal seem to us to be minimal.

3c4c1

Overhead services

3c4c2

The entire operation, including the interface between the Utility and the clients, will need competent administration.

3c4c2a

Documentation of the basic user features of the system and of their application techniques needs to be more complete and must have various special versions tailored for particular types of users.

3c4c2b

The version of NLS that runs on the Utility will need maintenance and quality assurance. A systematic means must be provided for features found useful in the development version of the system to be integrated into the version running on the Utility.

3c4c2c

Clerical support of various types will be needed.

3c4c2d

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Direct client support services

3c4c3

The people who would use the system must be trained to varying levels of competence, depending upon the nature of their jobs and the tasks they perform.

3c4c3a

New procedures and methods may have to be developed or learned to allow effective use of the system in their working environments. Specifying these procedures may require help in analyzing the group's needs and present operations.

3c4c3b

Therefore the following types of services will be required.

3c4c3c

Assistance in training Utility clients to make special use of the system for applications that are peculiar to their user environments.

3c4c3c1

Assistance to Utility clients in developing related documentation, procedures, records, and methods as needed locally to support their special use of the system.

3c4c3c2

Help in creating discipline or mission oriented workshop-user groups of clients, and assistance in their using the capabilities of the Workshop Utility to facilitate internal collaboration, etc. [15] and [16].

3c4c3c3

Help for the above areas would come in several forms:

3c4c3d

Sessions at SRI for training and application-system design.

3c4c3d1

Brief residency of SRI personnel at client sites to offer analytic or design help and training.

3c4c3d2

"Circuit riders" who would periodically visit client sites to discuss problems, receive feedback on how to improve the service, and offer training or analytic help.

3c4c3d3

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4

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I ESTIMATED TIME AND CHARGES

5

It is proposed that the work outlined herein be performed during a period of 14 months commencing 1 July 1973.

5a

The Institute must enter into an agreement with the organization that will provide Utility Computer support several months in advance of the date when Workshop Utility service is first delivered to users. It is requested that notification of any contract to be awarded as a result of the RADC technical evaluation of this proposal be transmitted to us by 1 May 1973, followed by a funded contract to begin on 1 July 1973.

5a1

We are planning for the first year of Workshop Utility service to begin about 1 September 1973.

5a1a

Due to the multiple sources of funding anticipated for the Utility Service, it is important that SRI negotiate major supporting contracts as early as possible, aiming at the 1 July 1973 date.

5a1b

The proposed project will result in Workshop Utility service being made available to selected RADC offices.

5b

The costs of the total Workshop Utility service will be accounted for separately by the Institute, with the amount charged to RADC under this contract being determined as a proportion of the total cost of the Workshop Utility operation based on its availability for RADC-directed use. Costs will include Utility Computer support subcontract costs and Utility People support costs associated with Utility management and coordination, system software efforts, documentation, user interface and training as needed.

5b1

It is anticipated that approximately 25% of the initial Utility Computer support and associated People support will be available for RADC-directed use.

5b2

We are currently seeking additional funding from other potential user organizations (including ARPA as a major supporter) for use of the remaining portions of the service.

5b3

Pursuant to the provisions of ASPR 16-206.2, attached is a

Proposal for Research No. ISU-73-51

cost estimate and support schedules in lieu of the DD Form 633-4.

5c

The estimated costs shown in the cost attachment are for the total Workshop Utility service operation. Costs expected to be borne by RADC are estimated to be about 25% of the total or \$205,654 as shown.

5c1

A contract resulting from this proposal should be for that amount.

5c2

A detailed review of the Workshop Utility operation, its services and their use, is planned after the sixth month of operation.

5c2a

The proportion of RADC contract charges that will be for Utility Computer support as opposed to Utility People support may vary and will be determined during the course of the contract on the basis of needs as they arise.

5c2b

II UTILITY COMPUTER SUPPORT SUBCONTRACT

6

During the past several months, the Institute has conducted a bidding competition among several commercial computer utility organizations for the purpose of selecting a qualified supplier of the Utility Computer support offered in the technical proposal.

6a

On the basis of our evaluation of the competitive bids, Tymshare, Inc., Cupertino, California has been selected as the potential subcontractor by the Institute. A formal subcontract will be negotiated when the Institute has assurance of adequate funding support to begin the service.

6b

III REPORTS

7

Because of the support nature of the efforts proposed herein, there will be no technical reports produced under this contract. Rather, documentation will be provided along the lines outlined below.

7a

The technical documentation will include:

7a1

TNLS and Deferred Execution Users Guides and updates

7a1a

DNLS User Guide and updates

7a1b

Proposal for Research No. ISU-73-51

IV CONTRACT FORM

8

Due to the nature of the work proposed, it is requested that any contract resulting from this proposal be awarded on a cost-plus-fixed-fee basis.

8a

V ACCEPTANCE PERIOD

9

This proposal will remain in effect until 1 June 1973. If consideration of the proposal requires a longer period, the Institute will be glad to consider a request for an extension of time.

9a

Proposal for Research No. ISU-73-51

Cost Estimate:

Proposal for Research No. ISU-73-51

COST ESTIMATE FOR FIRST YEAR WORKSHOP UTILITY SERVICE
(total facility)

Personnel Costs

Senior Prof	5900	hrs.	
Prof	3200	hrs.	
Clerical	1600	hrs.	
Total Direct Labor			\$ 101,236
Payroll Burden @ 27.2%			27,536
Total Labor and Burden			128,772
Overhead @ 107%			137,786
Total Personnel Costs			266,558

Direct Costs

Travel		14,160
30 trips East @ \$318 =	\$ 9,540	
120 Days Subsistence @ \$31 =	3,720	
Auto Rental 60 days @ \$15 =	900	
Communications		3,000
Utility Computer Support Subcontract		486,336
Documentation Costs		6,000
Total Direct Costs		509,496
Total Estimated Cost		776,054
Fixed Fee		46,563
Total Estimated Cost Plus Fixed Fee	\$ 822,617	
RADC CONTRACT SHARE: 25% =	\$ 205,654	

These costs are further explained in the Schedules that follow.

Proposal for Research No. ISU-73-51

Cost Schedules:

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SCHEDULE A

DIRECT LABOR

Direct labor charges are based on the actual salaries for the staff members contemplated for the project work plus a judgmental factor applied to base salary for merit increases during the contract period of performance. Frequency of salary reviews and level of merit increases are in accordance with the Institute's Salary and Wage Payment Policy as published in Topic No. 505 of the SRI Administration Manual and as approved by the Defense Contract Administration Services Region.

SCHEDULE B

OVERHEAD AND PAYROLL BURDEN

By letter agreement of 1 February 1973 with the Department of Defense Tri-Service Overhead Negotiation Committee, the Institute negotiated the following rates as acceptable for current billing and bidding purposes:

1973 Billing/
Bidding Rates

On-site Overhead	107%
Off-site Overhead	75%
Payroll Burden	27.2%

Rather than setting forth these specific rates, it is requested that contracts provide for reimbursement at billing rates acceptable to the Contracting Officer, subject to retroactive adjustment to fixed rates negotiated on the basis of historical cost data. Included in payroll burden are such costs as vacation, holiday, and sick leave pay, social security taxes, and contributions to employee benefit plans.

SCHEDULE C

TRAVEL COSTS

Air fare is based on prices for travel to Washington, D.C., at \$318 round-trip tourist established in the Official Airline Guide dated 1 January 1973.

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Domestic subsistence rates and travel by private automobile are established standards based on cost data submitted to and approved by DCAA.

SCHEDULE D

DOCUMENTATION COSTS

Documentation costs are estimated on the basis of the number of pages of text and illustrations and the number of copies to be produced:

The following is a breakdown of the estimated cost of reproduction:

TNLS Guide @ 120 pages, 200 copies @ .10/page=	\$ 2,400
DEX Guide @ 60 pages, 200 copies @ .10/page=	\$ 1,200
DNLS Guide @ 200 pages, 100 copies @ .10/page=	\$ 2,000
Mailing costs:	\$ 400
Total:	\$ 6,000

SCHEDULE E

UTILITY COMPUTER SUPPORT SUBCONTRACT COSTS

See subcontract bid by Tymshare, Inc., Cupertino, California, dated 12 October 1972.

We have selected configuration B, at a monthly cost of \$ 36,028 or a total of \$ 432,336 per year.

The Utility Computer support costs shown in our cost estimate include an amount of \$ 54,000 to cover the estimated cost of a BBN Pager to be acquired by the Utility Company. This amount is in addition to the costs shown for configuration B of the above subcontract bid.

Proposal for Research No. ISU-73-51

March 31, 1973
SRI-ARC 15263

Proposal For Research
SRI No. ISU 73-51

WORKSHOP UTILITY SERVICE FOR RADC
USE OF KNOWLEDGE WORKSHOP TECHNOLOGY

Part One--Technical Proposal

Prepared for:

Rome Air Development Center
Griffiss Air Force Base
Rome, New York

Attn: Duane L. Stone

Prepared by:

J. C. Norton, Assistant Director
Augmentation Research Center

R. W. Watson, Assistant Director
Augmentation Research Center

Proposal for Research No. ISU-73-51

Approved:

D. C. Engelbart, Director
Augmentation Research Center

Bonnar Cox, Executive Director
Information Science and Engineering Division

Proposal for Research No. ISU-73-51

March 31, 1973
SRI-ARC 15263

Proposal For Research
SRI No. ISU 73-51

WORKSHOP UTILITY SERVICE FOR RADC
USE OF KNOWLEDGE WORKSHOP TECHNOLOGY

Part Two--Contractual Provisions

Prepared for:

Rome Air Development Center
Griffiss Air Force Base
Rome, New York

Attn: Duane L. Stone

Proposal for Research No. ISU-73-51

(J15263) 30-MAR-73 18:35; Title: Author(s): Norton, James C. ,
Watson, Richard W. /JCN RWW ; Distribution: /SRI-ARC AGB (for info)
DLS LGR (for info) ; Sub-Collections: SRI-ARC; Clerk: JCN ;
Origin: <NORTON>RADCPROP.NLS;1, 29-MAR-73 16:37 JCN ;

JLM 23-MAR-73 7:41 15264

Staff Meeting Notes 7JUL72--27MAR73

Journalizing to save file space

Staff Meeting Notes 7JUL72--27MAR73

NOTICE TO ALL USERS OF THIS FILE: You MUST U[pdate] O[ld] if you make any changes in this file; BUT you do not have to update if you just read the file. JHB (This applies to any time you write in someone else's file.) (ID = JHB;) ID = DLS; SINCE (15 MAR 73 12:00);) 1

27 March: 2

GENERAL: 2a

Request for Lab Directors funds are due in by 2 April. We should examine our program in light of this request. 2a1

DLS should we resubmit the Descretionary Fund Proposal with AKW flavor? Maybe if we pitched it for Gabe's office specifically and toned the money down it would be acceptable to him. It seems to me that Doug et al have a good notion with augmentation of the "core" set of KW tasks and that Gabe or anyone else could get a lot more long range benefit from AKW than from any "stand alone" MIS--particularly if we get on the ARPANET and tie in IDS or other DM capability to NLS. 2a1a

I have reservations if we should say too much too early to Gabe but if it is tied to the notion of trying to interface a dms to akw maybe it is worht debating further 2a1a1

There is a request in for all employees to fill out a form recording any self improvement program they are on .They are due by 29 March. Jo has the forms. 2a2

DLS--would my Psych course at SUNY qualify? 2a2a

Yes 2a2a1

AHI: 2b

The plan for the terminals has been approved by the Div.(excluding the IMLAC,s) Paper work should be in asp. 2b1

WHAT HAPPENED TO THE IMLACS??? WE NEED THEM 2b1a

Capt. Stinson told me that he has learned that we will not require higher approval since they are part of a r&d program . 2b1b

Mg,t feels they are too expensive and wants us to persue some other type of CRT device and have it inerfated to NLS- 2b1b1

Staff Meeting Notes 7JUL72--27MAR73

DLS--What are the mechanics of getting around the paper shuffel to AFSC. I've always understood myself that RSD is exempt from certain coordination regs--but I think some one in our Center Staaff doesn't know this because they always send everything upstairs. 2b1b2

We will have to start the process and ask Stinson I really don,t know myself 2b1b2a

From all of our discussions it would seem as though it might make sense to conduct a second course on nls for all beginners I know i believe i would get a lot of it now that i have been on the system for a while. 2b1c

I think it would be an excellent idea. Discussed it briefly with tfl. He thinks so too. The question was raised as to whether it might be advisable to make a fairly firm schedule of short sessions with a larger group. This might be better at this stage than the almost individual instruction previously given. Comment? 2b1c1

I disagree. At this point, individuals each have there own particular problems. I doubt there would be much overlap. Therefore, a number of people (larger group) would not gain as much. Each indivdual has different problems/questions that would best be dealt with on an personal basis. Comprede'? 2b1c1a

Yes I agree.I think that all of us have reached a level where grup instruction would work fine. One other thought is why not consider sending you and ft to the nic/nls school 2b1c1b

PLEASE WAIT UNTIL BORDEN AND I HAVE DONE THE PRETEST COMM ANALYSIS ON TOMAINI 2b1c1c

One major advantage of a second course is that it forces everyone to review the total operation of the system. By now we have all settled into our own little ways of doing things. This mode of operation is based on selection of what we thought was the best way to do a job when we were just learning. As a result we have discarded and probably forgotten alternative ways of doing things that are probably more efficient. The structured course is less palatable because it forces a small amount of discipline. Nic/nls school for ejk and ft is probably a good idea. Suggest getting on with the comm analysis job. Otherwise events eill overtake the well laid plans. 2b1c1d

Staff Meeting Notes 7JUL72--27MAR73

Lets resolve how and when and commence

2b1c1d1

DATAMANAGENT:

2c

ROC,Where is a list of the fy-74 program .Lets get it in the system

2c1

VISITORS:

2d

TDY ANNUAL

2e

20March:

3

GENERAL:

3a

Ineed thoese Task write ups updated this week .In some cases the task write ups are yet to eneter the system.A reminder ,So they are easy to find each task write up should have its title start with eff.Also since if the format is uniform I can easily extract infor from your write ups ,use stone,s task write ups as a standard in terms of format,(stone,effairstaff,1:x)

3a1

Good to see you are using links imbedded (demo)

3a1a

Dr.Berra will give a seminar this thursday at 10pm

3a2

AHI:

3b

I want the terminal paper work for the buys in by the end of this week.

3b1

I hav eread the minutes of the meet with Borden and stone,s reaction and believe we need to do some soul searching of where we are and were we can or should go in terms of evaluation analysis

3b2

I am planning to go see Conrath in Waterloo if there are no objections. He charges \$300 per day plus travel, so I thought I should go talk to him first. (about how to get objective measures of the effect of AHI on the organization...)

3b3

I am glad I read the staff notes .Where is waterloo and why do you hvae to go see conrath?

3b3a

I think we had better resolve our differnces of opinion on traing with a meet not in the staff notes

3b4

From ed,s message should we go ahead with the acquistion of IMLAC,s converter?

3b5

Staff Meeting Notes 7JUL72--27MAR73

DATAMANAGEMENT:

3c

13 March

4

GENERAL:

4a

It is our confessions this Thursday lets use the confess file. 4a1

There is a request in for all employees to fill out a form recording any self improvement program they are on .They are due by 29 March.Jo has the forms. 4a2

DLS--would my Psych course at SUNY qualify? 4a2a

The request for short term courses is in our shop all men are welcome to put in their request 4a3

Are these for fy'73 or '74? 4a3a

The request in house now is for fy-73 but i am sure the other is soon to follow due date is 15 March 4a3a1

Request for Lab Directors funds are due in by 2 April.We should examine our program in light of this request. 4a4

DLS should we resubmit the Descretionary Fund Proposal with AKW flavor? Maybe if we pitched it for Gabe's office specifically and toned the money down it would be acceptable to him. It seems to me that Doug et al have a good notion with augmentation of the "core" set of KW tasks and that Gabe or anyone else could get a lot more long range benefit from AKW than from any "stand alone" MIS--particularly if we get on the ARPANET and tie in IDS or other DM capability to NLS. 4a4a

We have a request from the div. to submit any items of potential interst to the center commander to help keep him informed on IS,s activities.I,ll have marcel put this in the system.(radc,activityreports,1:w) 4a5

The SAB pitches are to be on the 13th ALLinvolved section personnel should attend when our two programs are being briefed.(AHI is 1030 ,DM-1 2:30) 4a6

The facility has a printer capability for us for NLS.I think Tom has distributed a copy of the instructions for sending a file to the printer. 4a7

Staff Meeting Notes 7JUL72--27MAR73

We have another group pf AFIT students here next week on the 19th. We have them from 1300 to 1400. I will give them a overview and want a guy from each group tp pitch the areas in more detail. Their will be 11 people again the idea is that we may get some of them to write their thesis in our area as well as work here after their done . 4a8

Lets schedule a roles and goals discussion with each group in conjunction with program call 4a9

AHI: 4b

The plan for the terminals has been approved by the Div.(excluding the IMLAC,s) Paper work should be in asp. 4b1

WHAT HAPPENED TO THE IMLACS??? WE NEED THEM 4b1a

Capt. Stinson told me that he has learned that we will not require higher approval since they are part of a r&d program . 4b1b

DLS--What are the mechanics of getting around the paper shuffel to AFSC. I've always understood myself that R&D is exempt from certain coordination regs--but I think some one in our Center Staaff doesn't know this because they always send everything upstairs. 4b1b1

I am planning to go see Conrath in Waterloo if there are no objections. He charges \$300 per day plus travel, so I thought I should go talk to him first. (about how to get objective measures of the effect of AHI on the organization...) 4b2

Has any one heard where thee cue cards are? 4b3

From all of our discussions it would seem as though it might make sense to conduct a second course on nls for all beginners I know i believe i would get a lot of it now that i have been on the system for a while. 4b4

I think it would be an excellent idea. Discussed it briefly with tfl. He thinks so too. The question was raised as to whether it might be advisable to make a fairly firm schedule of short sessions with a larger group. This might be better at this stage than the almost individual instruction previously given. Comment? 4b4a

Staff Meeting Notes 7JUL72--27MAR73

I disagree. At this point, individuals each have there own particular problems. I doubt there would be much overlap. Therefore, a number of people (larger group) would not gain as much. Each indivdual has different problems/questions that would best be dealt with on an personal basis.
Comprede'?

4b4a1

Yes I agree. I think that all of us have reached a level where gruop instruction would work fine. One other thought is why not consider sending you and ft to the nic/nls school

4b4a2

PLEASE WAIT UNTIL BORDEN AND I HAVE DONE THE PRETEST COMM ANALYSIS ON TOMAINI

4b4a3

One major advantage of a second course is that it forces everyone to review the total operation of the system. By now we have all settled into our own little ways of doing things. This mode of operation is based on selection of what we thought was the best way to do a job when we were just learning. As a result we have discarded and probably forgotten alternative ways of doing things that are probably more efficient. The structured course is less palatable because it forces a small amount of discipline. Nic/nls school for ejk and ft is probably a good idea. Suggest getting on with the comm analysis job. Otherwise events eill overtake the well laid plans.

4b4a4

I was very interested in the prop of jo Cavano .Iwould like to explore this furhter

4b5

What is the prop???

4b5a

The prop can be read using the fowlling link(cavano,gis,1:w)

4b5a1

What is the status of sri,s prop to us ?Is their hope that they will getto use some of the time on the usc-isi pdp-10?If so when and what does it mean to us in term of number of dirctories etc.

4b5a2

DATAMANAGEMENT:

4c

Dr L rudolph will describe his research in the area of hash coding on the 26th at 10 am.

4c1

Have we resolved how and when we should forward the dm-1 documentation to the Technology Review Committee?

4c2

Staff Meeting Notes 7JUL72--27MAR73

The user and reference documentation on dm-1 has been forwarded to Capt. R.D. Knol at ACDB. This group is prime for the

**technology review committee. If they want to see the maintenance documentation we can also send that to them. I can't see sending this latter stuff until they ask for it, however.

4c2a

Ge is having their annual IRED review on the 27th of March. It looks like they will be discussing their use of IDS. Maybe we should send someone like jo?

4c3

Where do we stand on dm-1 in terms of the tpe and the JOVIAL compiler?

4c4

Lets have a status discussion on dm-1 testing friday 8:30

4c5

VISITORS:

4d

On 13 and 14 March Mr. R. Muhlhouser will visit radc to discuss the implementation of new software for dm-1. The query and report production work will be the prime topic. Also, Miss L. Mead from the IITRI will be here to interface with Bob and to go over the dm-1/rac design.

4d1

TDY/ANNUAL:

4e

6 March:

5

GENERAL:

5a

The request for short term courses is in our shop all men are welcome to put in their request

5a1

Are these for fy'73 or '74?

5a1a

We are being asked to fill out a form for any self improvement program we are working on(Jo will make copies of the form for each individual

5a2

Lets schedule a roles and goals discussion with each group in conjunction with program call

5a3

The piches to be given by our section will be stone with akw and dean with a short report on the status of our dm-1 program for RAC.

5a4

Staff Meeting Notes 7JUL72--27MAR73

At first we thought that an akw was a Chinese machine gun.
 However, we finally decided that it meant Augmented Knowledge
 Workshop. True? 5a4a

Program call is about to begin .I want all form 30a,s in the
 system (both contractual and in-house.(roc their is a list of
 yours in my file called misp,just use this link(mcnamara,misp,1:w)

5a5

AHI:

5b

Is sri working on the larger charcters for the SAB pitch? 5b1

I want to walk through with stoney asp 5b2

I will give over view and akw demo to DIA 5b3

where is the terminal prop? 5b4

The proposal is in the system. I thought that Stoney had zapped
 a copy to you andd to WPB. Stony would you care to comment?

5b4a

I was very interested in the prop of jo Cavano .Iwould like to
 explore this furhter 5b5

What is the prop??? 5b5a

From all of our discussions it would seem as though it might make
 sense to conduct a second course on nls for all beginners I know i
 believe i would get a lot of it now that i have been on the system
 for a while. 5b6

I think it would be an excellent idea. Discussed it briefly
 with tfl. He thinks so too. The question was raised as to
 whether it might be advisable to make a fairly firm schedule of
 short sessions with a larger group. This might be better at
 this stage than the almost individual instruction previously
 given. Comment? 5b6a

DATAMANAGEMENT:

5c

Dr.Berra will give a report on his work to us on the 22 of March
 at 10 pm He will be discussing dm on the asp. 5c1

What is the status of the IDS job.? 5c2

Staff Meeting Notes 7JUL72--27MAR73

I made a cut of the minutes at the meet with Gabe on the radc mis .Please read and be prepared to discuss which of the action items we either are or should do as well as add any items or pertinent discussion which i left out.(mcnamara,radc/min,1:w) 5c3

VISITORS:

5d

Dr.Foster will be here on the 2th at 10 for a pitch on his su work 5d1

Auerabach will be here on the 5th to review their design with RACanour people 5d2

TDY/ANNUAL:

5e

28 Feb.

6

GENERAL::

6a

Dr Foster will give the pitch on the 6th of march instead of 28 Feb. as originally scheduled. 6a1

Jay Aditkson has asked if we would give a short 1 hr dicssusion of what we are doing in the area of MIS.I agreed saying that i would give a overview and dean and stone or Bair would give a demo and a talk on dm-1 as well.I mean that we would use their IMLAC to demo AKW to them (A group from DIA)It will be on wensday not sure yet of timethe time is 1:30.. 6a2

Our guys are on as follow sfor the GeneralRobbins briefing:bill,frankand ray are on the 26th from 4to 5 pm.Stoney is on from 1115 to 1200 on the 27th.He will give the pitch with the IMLAC in the display facility. 6a3

dr.Foster will give a talk on his work under the s u contract This will include a review of their use of a file handling system they are working with which they rented from IBM with contract money. 6a4

Personnel ratings-i ,ll make a cut and have roc and stoney review my ratings. 6a5

Le 6a6

Lets try to use the staffmeet file as a way of letting us know about vistors and guys taking planned days off.I will start by creating a branch for visitors days off and trips. 6a7

program call is here lets make sure that all of the form 30,a are on line and begin from their. 6a8

Staff Meeting Notes 7JUL72--27MAR73

The Gabe pitch is thursday i don,t know what time.I will check with roger.Their will be a dry run wed i think to iron out any differnces of opinion.

6a9

I am concerned that exuports are being taken from our offices without my okay .All reuest should be funneled to me.

6a10

Are all of the task write ups updated?

6a11

AHI:

6b

Since program call has begun lets use the calculator even if stoney has to the only guy to use it for a while.***Most of the people including me do not know the status of the calculator. Is it available? How is it used

6b1

We still should press for the large screen display for the SAB pitch.What can we do to try and pull it off anything.?***Teo immediate possiblities exist. The new Honeywell terminal and yhe Beehive.I have seen both of theese on the screen. The Honeywell gives a good quality character but I do not believe thwt it has enough characters on each line. The Beehive looks good bu there was a problem in syncning it on Friday and on monday it was sick. Tom is trying to see if the contractor an send someone to fix it or at least give us the nneded information.

6b2

Lets ask IMLAC who has the large screen terminals maybe it is acontractor we can borrow from for the demo like say bbn.

6b2a

I talked to Major Logan and he suggested either the week of the 5th or 12th for sending one of our guys down to train him on the sytem

6b3

I cant go until after the SAB visit... week of 19 Mar

6b3a

We should chat with Major Zarra about the possibility of bring him and F Allen on the system to work together on project admin.

6b4

I sent a message to you ed on the terminals .We ha*** Stoney haa thelist already done. Meeting my office 0900 28 Feb. to discuss.ve got the chance to order as many terminals as we think we need for our section and branch i guess as well as enough for the front office .

6b5

Lets at least consider taking a chance on say two crt types or talking to sri on the topic any way.

6b5a

Staff Meeting Notes 7JUL72--27MAR73

I need to go through the pitch with d stone to make sure what file of mine he is going to go to. 6b6

What is the status of the text editor?u*** Jim Bair has completed a draft report which I am reviewing. It is sticky going because I do not fully understand AHI and I am a virgin in the text editor. It would help if I knew for whom such a report is intended. If for our own people who are relatively sophisticated in the Ahi and/or the text editor there is probaly little problem. However the report as it stands is not too meaning 6b7

Lets ask norton how watson is doing on his paper 6b7a

DATAMANAGEMENT: 6c

When is the meet scheduled with RAC E(We need to get this clear in all of our minds. 6c1

How is the dm-1 testing going .I get the felling we are still slipping due to a number of flaps 6c2

Dean is going to debrief us after our staffmeet on his trip. 6c3

i am most concerned about their mg,t plan. 6c3a

I don,t want to see any last minute intergation like was done on the past contract. 6c3b

where do we stand on the IDS effort? 6c3c

The MIS demo is to be on thursday to gabebl don,t know the time yet. 6c3d

We expect to get together for a dry run on wed to iron out any differnces . 6c3d1

I think both wwdms and SMART should be discussed to some extent 6c3d2

program call I need all of your form 30,s on the system Did we ever find the hard copies? 6c3d3

Lets call s Mair and encourage her to consiser CAI in the conctect of AKW. 6c3d4

21 Feb. 7

GENERAL: 7a

Staff Meeting Notes 7JUL72--27MAR73

AHI:

7b

I want to establish by 21 Feb. how is stoney going to demo the system.(imlac,large imlac display tnl)

7b1

IMLAC

7b1a

What did tom find out from imlac people?Cabled orderd

7b1b

We picked up a cheat sheet from sri which should be helpful for beginners as reminders to them of the most used commands

7b2

Sri assured us that they to increase the number of ports in the mornig to help us out

7b3

P Resh has made a extensive analysis of their load and it is clear they can afford to do it in the morning .

7b3a

Has the primer been reproduced yet?

7b4

We talked to m auerabach and their plan is to have a complete update of the reference manual and the creation of a users guide done by june in the mean time the primer plus what ever bair has done and the cheat card is what we will have .

7b4a

Where do we stand with the text editor?

7b5

Who is in charge of the effort and what is the shedule .We must be done by the time of the SAB visit.

7b5a

We have to send someone down to train major logan(I think i goofed in that he preferred this week)

7b6

In that same context i need to chat with a barnum on col d,s plea for help on the br-700

7b6a

When do we stand with ft we are stalling

7b7

DATAMANAGEMENT:

7c

Wher is the DM-1 traing effort?

7c1

I would think that a update of the task writeup would really help

7c1a

12 Feb.

8

GENERAL:

8a

Staff Meeting Notes 7JUL72--27MAR73

The SAB will be here the 13,14 of March. The suggested agenda highlights olpars, asp. software (languages, software first) and Ahi. It is expected that other topics like our file primitives jtsa work and dm-1/rac may also be pitched. 8a1

I will be gone all week or at least untill friday so roc is in charge 8a2

FT reminded me that it is our confessions this week. They now want a list of our topics to be presented up tp them by wed at closing time. 8a3

I will make some suggestions in the file called confess roc and you can take it from their. 8a3a

This like a believe it or not but as I undestand it we have 4 pitches within a month. Gabe, Col. Danielian data processing committe, Gen. Robbins and the SAB. 8a4

The dates are (as of now) robbins 26 Feb., Adp committe 1&2 March, SAB 13 and 14 March. 8a4a

AHI: 8b

This is a key pitch for our ahi program. Ft is quick to urge that we go out to sri to enlist their aid in preparing the talk. Though i am not so convinced we have to go out their immediately i do think we should start planning the pitch now so we can indentify what we want to do and what we may need in the way of back up to pull it off. This then may point out the need for a trip. In addition it would seem neat if we can enlist their aid now via the system. Certainly what is ahi and how does it differ from texteditors will have to be fielded probably implicit in the pitch and explicit if asked. 8b1

What is the status of the IMLAC, S? I am concerned that we are not pushing or they are not responding to our mouse problem or as i underxtand it the one that is still down. 8b2

Bill Bethke wants us to push the terminal buys for the rest of our branch and for the front office and the other branch chiefs. Capt. Stinson is our point of contact to process the paper work. 8b3

** Dr. Borden (post doc) 35 days max by 30 Jun 73 = 5950 K (70% overhead) 4150 left, appointed to Georgia Tech, call from Everett on 20-FEB-73 8b3a

Staff Meeting Notes 7JUL72--27MAR73

Data management:

8c

We have to answer a letter from rac. I think it should be brought up at confessions this week and the suggestion that we meet on theis.

8c1

5 Feb.

9

GENERAL:

9a

There is a excellent pitch tomorrow on structured programming at 10 pm by h mills of IBM, I would think all should attend including the dm-1 class

9a1

Lets start a roles and goals on-line over time exercise

9a2

I now have a file called misp which is a attempt to summarize our program and monthly progress for ft and bb .I want to have links in their for+2c

9a3

If any one has one or more old contract folders they would like to retire jo is in the process.

9a4

aThe SAB is to visit us oon the 13-14 March. I have to give to a barnum by tomorrow a proposed agenda.

9b

Div has decide that capt. Stinson is to be responsible for all future terminal acquisition which means we have to let him know what our needs are. soon

9b1

I have several files which might have a bearing on this. (stone,term,) gives the initial thinking on AHI terminals for the branch. (stone,crt,) is a summary of manager type crts that might fit between the Execuport and the IMLAC. (stone,istern,) is a new file that attempts to use rrational similiar to that for the branch in defining Division terminal requirements.

9b2

I called marion and he said that if the bulk of the investment was arpa that we should be able to ride their d&f. I presume he means that we work out some way to send the money to them for our part of the service. He also said that if that did not work that then the dar route might be faster though he stressed that would have to be our bet in the last resort.

9b3

AHI:

9c

Rog Panara is going to be with us lets rexamine tasks assignments.

9c1

Staff Meeting Notes 7JUL72--27MAR73

Lets start a file where new users can turn for help bethke is a good example He is willing to learn but needs help when noe of us are around some times. 9c2

What can we do about using the mag card device as a interim printer more ? 9c3

We have got to start ft on the system who and when? 9c4

Lets call sri about making more ports available to us in the am. 9c5

sylvia mair will be here the 7th of feb.Her main interst is ahl so we can expect to demo and discuss with most of the mornig and if necessary the pm as well .I am sure jim will want to talk to her since they have had mutual programs of inerst in the past. 9c6

I would like to know where the Delphi program IR is handling is going on.Seems with a visit. 9c7

Need a reply to ft,s memo on terminals if you would draft a straw man i would likt to ineract on the finalversion. 9c8

Of interst I think is that the guy at CBS labs that invented color tv newest kick is a kind of wired community .My car pool companion is going to give me a article on his bit. 9c9

DATAMANAGENT: 9d

prepare or have dean prepare a answer to rc,s objection to our focal point meno. 9d1

Lets write a memo or send the facility our tasks plans on dm-1 or hold a confernce with them on our plans on dm-1.Their lack of understanding of what we are committed to do is apalling. 9d2

Where is that review article that appeared in modern data I think which disscussed the status of the various gdms,s? 9d3

I have a letter from general robbins thanking dean and asking for dm-1 doc as sonn as it is availablr.Are they talking about the current doc or after the adp program.Thayer asked for some background on this as well. 9d4

29 Jan. 10

GENERAL: 10a

Staff Meeting Notes 7JUL72--27MAR73

The adpcommittee will be here the 5 and 6 (I think we have them on the 5th. 10a1

ray is to a brief 10 minutes i guess on the EIS study.- 10a1a

I willl give the pitch on ahi but we do want a neat demo on ahi 10a1b

Everyone should read the new procurement guidance 10a2

Col.Larsen made a good point about trip reports lets make sure that each makes one and for sure have them loaded in the system. 10a3

This is a demo to Col. Vachino 10a3a

DATAMANAGEMENT: 10b

Advisor (be aware) 10b1

The honeywell job where do we stand (Dean should really get involved in this effort. 10b2

cobol ids how are we coming? 10c

AHI-- 10d

Gabe mention project eng handbook.Why not start guys doing that as weel as trip repots . 10d1

Text editor,I want a output of sorts by the end of this week .We should be able to say some general statements next monday if we have to.Who is to be the task engineer? 10d1a

We have to get in touch with Major Zarra 10d1b

What is the status of the printer .Lets keep pushing so we finally get something 10d2

Have someone prepare a answer to ft memo on terminals (good chance to help div. establish a realistic plan on terminals) 10d3

23 Jan. 11

GENERAL: 11a

make decsion on pitch men for adp visit 11a1

Staff Meeting Notes 7JUL72--27MAR73

Their is a copy of our fy 74 program in my file under misp. This will be the file I will use to keep track of where is our work for ft. 11a2

Lets get the taske write ups updated. Especially in light of our planned use bit. 11a3

reminder: You must get approval from f t for phone calls and also tell jo after call is over where and how long for a log she has to keep. 11a4

I intend to call the coffe guy and have them remove the pot etc. 11a5

DATAMANAGEMENT: 11b

Have we heard from Col. Bell yet? 11b1

I want taske write ups on all 3 jtsa efforts and both goel and sargent . In this way all of our tasks will be covered. 11b2

Who is going to attend the trian course next week? 11b3

We want to make sure and schedule some time for mulhause . As I understand it he will only be here part of the week. 11b4

Ssr model: I talked to sargent about the model harry wrote for the mpc job. He indicated that it was a usable tool and he would be happy to guide someone or find a student a su to use the model for Col. Thayer. 11b5

AHI: 11c

I requested 17 documents from the NIC that Stinson had dug up from the NIC index. The "station agent" I think its Bob Doane--should be doing this job. This brings up a point, should we push the use of the network (within the building or the Center) as an information service covering the latest and greatest in Computer Sciences Technology? It really is you know, since so many of the ARPA supported contractors are using the system to file both on-line and off-line documents. The use of the system will increase if ARPA buys a substantial portion of the NLS Utility. 11c1

Lets explore use of bound so we can chat with front office on phone cost 11c2

What is the status of esd admin 11c2a

Staff Meeting Notes 7JUL72--27MAR73

We need the printer .Who is resposible for making sure paper is ordered etc.? 11c2b

Who is the task engineer on the text editor vs ahi study? 11c2c

There should be no let up because cp is gone .Hi question reflect a real question which need to be put to bed once and for all. 11c2c1

When is the manpower reporting going to start? 11c2c2

ACTION: 11d

Call the coffee pot guy 11d1

Bring the barry landson reort back to b.Dondero woith th e info that saregent would be iintersted in exersing the model using a student if they like . 11d2

Hold meet and advise section that their will be a mandatory period of use of the ahi system 11d3

I think that this requires the ahi gusy sitting in the other offices for this time period due the lack of a adequate traing manual. 11d3a

Send a copy of the agenda to roc and ed as apparently it did not get their before 11d4

It is tenatively agreed that eithe ed or I will give the ahi pitch and roc and or roc the dm 11d4a

Start to use the task write ups if you want guys to update them 11d5

The ids cobol guys will start to put out a weekly printout of the r status 11d6

16 Jan. 12

GENERAL: 12a

Confessions will be this thursday 18 Jan. 12a1

Lets try our confessions file again. 12a1a

Staff Meeting Notes 7JUL72--27MAR73

DLS--I have created an open file called confess in Mac's directory. To use load file <mcnamara>confess. After using be sure to U[update] O[ld] to preserve the open status for everyone else (as you do with this file). 12a1b

DATAMANAGEMENT:

12b

Lets put airman wolden requirements in writing to them 12b1

FT asked me are we putting in a additional payable or replacing the old one .He hopes a add since you could then track pay history easily. 12b2

How is bill making out with multics with respect to computer time ? 12b3

You should reach a decsion on the jovial compiler (with some discussion with robbie). 12b4

Are the guys making out with dm-1 in terms of compute time better because if not we got to change something. 12b5

AHI:

12c

When is the gecoc text editor vs nls to begin and who is to participate? 12c1

DLS--it has begun in the sence that I have started to list the command structure of NLS ussing files in the system--see(stone,nls/gecoc,). Joe Cavano has made some preliminary comparisons with Text Editor , which I can use. 12c1a

As soon as I can , I need the GCOS experts, Walker, McClain, or someone to write out the command procedure for GCOS Editor. 12c2

DLS--What do you mean by command procedure? You would be in the best position to ask for Walker. We can work with him whenever he is available. 12c2a

Lets ask for walker now In addtion to yourself ((the same old comment came out in discussion with some of the mitre troops though their big boss quickly disagreed and pitched that ahi was much more than a text editor .None the less we have got to get this proram into 12c2b

What is the status of the forms printer and th tycon devices? 12c3

Staff Meeting Notes 7JUL72--27MAR73

DLS--Both procurements are at Hq AFSC for approval. Iv'e asked Tom B. to try to find out when they might be released but have had no feedback yet. 12c3a

What is the status of the call to mirtre on admin? 12c4

DLS--Have not made contact with anyone yet--Charlie Strom was out this morning when I called. 12c4a

The discussions led to them being very interested in getting into some kind of deal with us. For example they felt they could look at great detail the kind of talent required for ahi ,also they would like to get involved in a experiment in how well it helps communication of tow org. separated by distance etc. They would like to come in on some limited trail basis using one of our Id,s. What do you think? 12c5

DLS--I have no objections to them using the RADC directory, in much the same manner that Maj. Logan does. I'm not sure we're in any position to train them and thats'really required before on can observe any changes in geographically separated communications. 12c5a

I don't believe the system can support more users. Incidentally, why dont we ask SRI to set up more Net channels so we all can get in in the early AM? JHB 12c5b

I am becomong convinced that we need to train Jo on the system. 12c6

DLS--Why? I think that we should finish with Marcelle on the DEX system first. Then hopefully we can use her to help in the training of Jo. 12c6a

I agree, besides we need a terminal for her first.... lets wait for the TYCOM. 12c6b

J Norton really convinced me that we have got to scream daily if necessary for the printer. 12c7

also reminds me when are we going to train ft we can,t run away and hide. 12c8

See the minutes of our last meeting (bair,min,) 12c8a

Get someone to follow marcel to help her and guide her on her use of the system. 12c9

Staff Meeting Notes 7JUL72--27MAR73

DLS--I'm spending at least an hour a day with her on the mechanics of the system. You indicated last week that you would dig up effort writeups and form 30a's for her to input. Was this done? 12c9a

for instance I triwee to start her on inputting the taskwrite ups but i get too involved to keep track of her progress or give her any help. 12c9b

8 Jan. 13

General: 13a

All long distance calls have to be approved by FT from now on. Jo will keep a log so just have the guys tell her when they make a call. 13a1

Let,s start a file of form 30,s so I can track our fy-74 proram. 13a2

Dick Ward will be here tuesday a tl pm. 13a3

One item is the AED evalution ,Should remind ft that he is to be here. 13a3a

I am going to ty the approach of min confessions with a slight twist by having a special topic each time as well 13a4

Lets start with the AHI area and make the special topic use of the system. 13a4a

Wensdayat 8:30 13a4a1

Data Management: 13b

Dm-1 Testing :Lets ray and roc meet with me and get back at it. 13b1

What is the status of the IDS job for F T ? 13b2

Where is the transtion plan for the Advisor program? 13b3

I am concerned that we will be stuck for ever if something like that isn,t persued. 13b3a

i have two memos on the Rac Job wwe should discuss 13b4

Don Van is certain to go on the cobol course. 13b5

When is the tial course to be conducted on dm-1? 13b6

Staff Meeting Notes 7JUL72--27MAR73

I had a call from b mulhauser friday and he stated that mike had not approved the course material ????

13b6a

He also brought up the Jovial compilers and stated that no one version would run all of their modules and said(i think) that from their view they would prefer going to the wwmcc,s compiler which is the best of the lot.

13b6a1

AHI:

13c

lets meet with ed on the borden ws so it can go.

13c1

13c2

Stney should be prepared to go to ESD this week or next on project admin.

13c3

We also will have to explore workin some version of ATS a time sharing outfit in new york city since both allen and ESD are on it .

13c3a

Al barnum is having mitre people here thursday and friday to explore any other work like say having them on the ahi or evaluating terminals smart or dumb in the context of AHI. Whats your thoughts on the matter?

13c4

I want marcel to input all of the task write ups so then the guys can update them monthly.

13c5

Lets start the time keeping concept either on the system or manually if we have to .Lou is not that busy.

13c6

What are the possibilities of using money now to help pay for our service next year ?

13c7

Along these same lines what day is j Norton going to be here?

13c7a

3 Jan.

14

General:

14a

Data MANAGEMENT:

14b

My main concern is dm-1 testing

14b1

I want to meet friday when I get back with roc and ray to disscuss .

14b1a

Staff Meeting Notes 7JUL72--27MAR73

I am going on travel the next two days and so we will conduct this staff meet in abstentia 14c

i am gonig to visit with f allen and col. 14c1

We should try in the new year to beat our due dates if possible. 14d

18 dec. 15

General: 15a

We will have a new Lt. visting us on monday the 18 for inervIEWS 15a1

Lets make sure each guy knows about the news brief file and encourage its use. 15a2

Marcel is now ready to enter all task write ups into the nls.I will start her next week (19 dec) which means that the guys can then update on line. 15a3

It,s our week for confessions;21 Dec. at 8:30. 15a4

Lets see if we can submit a list for review using AHI.I ,ll have d stone take me through process of preparing a open file. 15a4a

Abstracts of papers for first national computer conference is due 27 Dec. 15a5

Data Managament: 15b

F T wants our reaction the esd plan on multicsthis week. 15b1

what is our response to the jovial requwsr by didk robinson.? 15b2

F Lamonica has to go to 106 on 19 Dec to have a on spot audit .The room is d 202;time;1415 and he should bring a copy of his job description. 15b3

Ahi: 15c

TO MAC: Bethke wants an on-line conference on WED, 20 Dec, with Doug Engelbart. With this he wants an speaker hooked up to the phone, and if possible, a link to the DRIPS display HELP 15c1

Staff Meeting Notes 7JUL72--27MAR73

Welcome back from the land of the sun: We are progressing at a fantastic rate as you will see Marilyn Auerbach was here last week and the system was down most of the time. You can also notice i,m still having some trouble spelling but i am improving. Any way welcome and back the land of AHI. 15c2

When do we trian FT. I think its important that we "bite the bullet" soon. A odeal week i would think is during the xmas week since very lltle goes on any way. 15c3

i am concerned about the imlacs one of the them is still not working 15c4

I haad jim bair prepare a ws on SRias I was concerned about it,s being funded You will probably hve to modify it but at least it has started through the mill 15c5

The forms priner is out of the Div i think. 15c6

Imet F Allen at the base mission analysis last week and he indicated they had tried out the TRYCON and found they were unreliable in the pllay back mode he mentioned a couple of other similar devices. He,s worth a call. 15c7

What does CCBS stand for in relation to the delphi technique? 15c8

12 dec. 16

general: 16a

How about the xmas party lets see if a lot of our guys will go (great, when? JHB) 16a1

We have a open file called news brief that everyone canenter items in as they happen. 16a1a

data management: 16b

deans dry run to col metscher will be 9:30 13 dec. 16b1

The pitch to mr. Sheddler will on the 20th with a dry run to general robbins on the 19th. The AFSC guys will treat this as their dry run also. 16b2

We need to contact l rudolph on hash coding effort he is doing for us so at least we have a general idea of what he is doing and what he thinks of the phd. report we recieved in this area from one of dr. berra,s students 16b3

Staff Meeting Notes 7JUL72--27MAR73

F T wants our reaction the esd plan on multicsthis week. 16b4

The RAC people will discribe for us and in their progress in the dm-1 program . 16b5

on thursday the 14 72. 16b5a

Why isn,t don van hevily involved with the rac people? 16b6

ahi: 16c

We have to talk to ft and get marcel off rom other secretarial duties .We have plenty of work for her. 16c1

Lets establish a new policy on the exuports which makes sure that they are returned to our area every day unless they get permission from me. 16c2

I am concerned about the lack of ID numbers for our other section members . 16c3

i can understand SRI,S concern but i think we need some other way to control the number of guys on line than limiting the ID numbers. 16c3a

I think we should really get on getting the other IMLAC,S up as the use of the termnals is really starting to increase. 16c4

I have tow comments left on the ws for borden i will give to Jim today and then it should go 16c5

Is the other ws for stone done? (done JHB) 16c6

5 dec. 17

general: 17a

bill patterson has the profs and some students coming to radc on 6 dec.to get a better understanding of what we do and some suggested thesis topics where possible 17a1

we will have them form 3:30 on .I will give them a overview and then roc should give them a detailed on dm and jim on AHIwith a demo (hopefully on the IMLAC)We should also be think ing about thesis topics. 17a1a

data management. 17b

Staff Meeting Notes 7JUL72--27MAR73

f t wants info on f lamonica . 17b1

i want a meet on the dm-1 test proram with roc and ray. 17b2

i want a meet with joe c and roc on the cobol/ids isi bit. 17b3

i talked to dave and it seems clear that we need to clearly identify the procedures for admin guys and get mac and f t to stay on top of them untill they get used to the idea that it is part of their job 17b3a

ray indicated that sargent is coming down some day next week i said that it was important for he f s and mike to agree on what he is to do .I hope that you can attend too. 17b4

what is the status of the honeywell effort on dm-1 i,m nervous as to their progress. 17b5

it,s critical that the papere work on bill,s pr get in 17b6

you will be getting the new guy in a short while i think he will fit in the ids job to start since he has a cobol background. 17b7

c p said that he knew col larsen had been out of town so we can expect action on dm-1 mon or tues. Dean should bug procurement . 17b8

f t told me that a prof.wang (i think we met him with goel) has applied for a grant from NSF and if he gets it he will work here in the summer.His work is in the area of modeling . 17b9

CP asked a intersting question that i would think we shoiuld think abput some time Will we have much of a dm problem if we had a trillion bit high speed memory. 17b10

CP recieved a call from Col.Wilson late friday stating that a mr.shectler(spelling is a guess)) wants a briefing on dm-1.It seems he saw the paper work on the fine deal and is intersted in dm-1.Unfortunately, jim burroughs is in the chain of inerested parties and wants to take part in some form of a dry run.He apparently also saw the paper work and has questioned some of our statements As far as ican see he is mainly confused so it should be relatively easy to answer his questions .Here they are as CP relayed them to me ,bill wilson is to send us a copy of them as weel and work out some arrangements for the pitch: 17b11

Pacer:He questioned any inputs of dm-1 technology to the pacer program 17b11a

Staff Meeting Notes 7JUL72--27MAR73

TIPI:He did not think we were doing any thing with tipi 17b11b

airborne command post:Again he questioned our statements in
this area 17b11c

JTSA:He apparently is not aware of our work and thinks this is
a mitre program 17b11d

Also questioned our statement that it was a possible back up tp
wwdms 17b11e

CPsuggested that we start (dean) to prepare a pitch and as a
subset prepare specific answers to these questions by Burroughs
for his dry run only He expects the pitch will take place the
week of the 11 or early part of the week of 18 17b11f

AHI: 17c

What is the status of the printer 17c1

We may have to call tom or talk to the facility but iwant to
know. 17c1a

Stoney did not get the prcs done on sri extension J im is going to
have to do it even if stone has to redo it when he gets back.It is
late now and needs to be in contention when the discussion on the
bucks come up 17c2

jim reminded me that we need a rapsession on what is the engineers
in ISIMother than the ahi guys going to do with AHI 17c3

what is the status of the IMLACS? 17c4

I understand that at least one is not working and their is some
doubt about the reliability of ther two. 17c4a

Lets get marcel trained on a dictating machine or jo trained on
AHI .I am convinced that i can make a more effient operation on
some things i e trip reports 17c5

my trip to ESD on the project admin resulted in the folloing 17c6

We may become the focal point for a ROC with ESD being the
administrator of the project 17c6a

I heard a lot of talk on the Bse Mission any.It appears that
the ahi kind of technology is exactly what they think the Base
of the future will use 17c6b

Staff Meeting Notes 7JUL72--27MAR73

Their is a briefing on this on the 13 of Dec I think it would be good if someone like a barnum would attend It might be a good meet for Dr.Kennedy as well 17c6b1

It would be neat i think if we could get f allen on the nls.He is now on the IBMATS system using some computer or IDnumber of MITRE,sIt might also make sense if we tried to gain accses to ATSSomewhere since from taling t f allen it sounds like they have some neat capabilities (mail boxx) for one 17c6c

Also he commented that the TYCONN termals have trouble in the playback mode with powere requirement s of some kind.I suggest that stoney contact him prior to any final commitment since he indicated their were other terminals that deid the same thing 17c6d

where are all of the terminals ?It would seem that it is important that some of them be available to the new trainees 17c7

.1a 17c8

28 NOV 18

AHI 18a

Since you're not here, I'll have a staff meeting all by myself. First, Col Danielian stopped by Monday morning (on his way to see Bill Moore). He says that the new owners of the BR-700 are just tickled pink. There is to be an exercise the middle of next week (he was uncertain of the exact date) to involve the Airlift Readiness Center. They would be using the BR-700 to demo its capability to support such an exercise. He will be in Calif. attending the Fall Joint Computer Conference at Disneyland. He would like us to call Bob Logan and confirm the date of the exercise and be down there if possible. I'm not sure that its that urgent but you may feel differently. 18a1

Procurements in the mill: 18a2

TYCOM buy was signed off by FT monday 18a2a

Forms Printer was also signed off by FT 18a2b

Both of these can be hancled by Tom Lawrence, we should try to push them through the center and get them on the way to AFSC. Last time they were held up by Runniger because he thought he might like an similair one for himself--don't let this happen again. 18a2c

Staff Meeting Notes 7JUL72--27MAR73

The BR-700 extension was signed by Bethke. I haven't gotten the form 36 back from the PR unit yet. Tom Bucciero is checking on it, but you may have to remind him every day. The contract folder is on the top of my desk as will be the two terminal buys. 18a2d

I haven't started the SRI package yet, except for rough draft of work statement. I am probably the only one that can handle it. It looks like the current contract with SRI will last another couple of months. 18a2e

Discussions have progressed on a DNLS course here at RADC. Initial thinking was the 14 & 15. I told DVN that I would probably be away then (on my way home I hope) but to hold it anyway if that was a convenient time for them. MFA will probably be giving the course. She has relatives on Long Island and might not be adverse to coming the week before Christmas. Either week is alright by me--just make sure Tom has at least one of the IMLAC's running. DVN will be sending you a message to confirm the exact dates. 18a3

I have submitted "cash award" writeups for both Jim and Tom. You might check and see how they're coming. 18a4

I am leaving the Trinkaus Manor new years party with Jo. You can count me in or out --we are capable of flipping either way. John Paliarno suggested that we might just go up for dinner and maybe sit at the bar (in the cocktail lounge) or go bar hopping afterwards. I'm game for any thing you guys agree on. 18a5

I have not had time to start the Time Accounting thing. The document is on my desk describing it --you might try to institute it while I'm gone. 18a6

I have not been able to follow up on the discretionary fund proposal. Again a hard copy from the SRI line printer is on my desk if Gabe needs a more legible copy. 18a7

Well I'm of the the southland, see you the 18th. 18a8

13 nov 19

dm-1 will probably be discussed today 19a

work on a number of files such as confessions suggestions pr schedule etc. 19b

continue personnel discussions 19c

Staff Meeting Notes 7JUL72--27MAR73

hold coffe meetd 19d

hold meet on ahi evaluation this week 15 nov 8:30 19e

i want us to rework plan like we pitched at mini confessions 19e1

we need to write up our minitutes of meet with gabe with our planned course of aiction a barnum and co. 19f

need discretionary propalsal for ahi in early this week 19g

talk to roc on status of dm-1 tests 19h

resolve su task on reynolds talk to ft and dick 19i

have to institute practice of room sign off sheets 19j

check on status of modeling course might be worth some of us to audit 19k

you should check over all courses being offeered wirh this in mind 19k1

have roc assign guys to assure su reports paper work is done 19l

try to remember to use marcel on ahi 19m

lets get her set up with dictating equip. 19m1

30 oct. 20

make sure to send mitre a ccopy od zerox reoort in soft ware of ahi 20a

16 oct. 21

have taled to ft on room 21a

will this mean that bill and frank l will move to the next room 21a1

i told f t i thought so he wants a final plan and he,ll approach front office 21a1a

should discuss room and move overall 21a1b

chck on status of job descriptions of guys like j cavano and rich with f t 21b

make decsion on borden with f t and ston e 21c

hold a meet of coffe club 21d

Staff Meeting Notes 7JUL72--27MAR73

need a position paper on dm-1 for f t and cp 21e
 need to resolve position on dave,s cat l 21f
 send memo to bb on recommended phone line approach 21g
 check on status of a report submmited by brown for publication under
 s. u. contract 21h
 complete j cavano traing report 21i
 should decide with f t if we should make j a ee or not 21ii
 D Ward will be here 18 oct shpuld prepare for meet 21j
 col danielian and we have agreed to fund the br 700 for an addional 4
 months at wich time it will be up to the user to pick it up 21k
 a virgina craster from the avioncs lab will be here on 26 oct 21l
 she is involed in software dev and is intersted in cooridinating
 with us f t should be aware of her visit 21li
 need to resolve use of lou 21m
 lets review daves task this week lets say wed pm at 3 21mi
 must make a list of pr,s 21n
 you need a chart in nls design one and guys can update it for you 21ni
 i want status on mtst,s when lease is up and what our plans are 21o
 give reports to roc from s. u. on others 21p
 hold a proect engineers on s u contract 21q
 it is clear we are beginning to hace same old problem no interst
 and su prof are going off on their own 21qi
 i want to see and disscuss dm-1 test plan 21r
 it,s time for task updates 21s
 isi confessions are this week 19 oct. 21t
 program call with center staff will be 14 nov . 21u

Staff Meeting Notes 7JUL72--27MAR73

on this we are going to need better charts to support ft when he gives the pitch. 21u1

we have a survey of courses in make sure everybody sees it. 21v

9 oct. 22

chck on status of job descriptions of guys like j cavano and rich with f t 22a

sdv will be here on tues at 10 pm on dm 22b

we will establish products list with f t on tues so roc and you can only think of what charts should look like 22c

b mulhauser will be here on 12 and 13 oct. 22d

major grasso may be here on 13oct to see ahi 22e

sri will be here on 27 oct. to give IS a status report on ahi 22f

make sure stone gives some guidance to doug for this report 22f1

lets take doug to plaza etc he loves pizza 22f2

we need charts that better show of our program lets ask sri for help. 22f3

ray has observed a lot of activity on advisor should let al and roger know 22g

should let col danielian know that bb and cp will not be here on 16 and 17 ? 22h

check if week of 16 is okay for traing 22i

have taled to ft on room 22j

will this mean that bill and frank l will move to the next room 22j1

i told f t i thought so he wants a final plan and he'll approach front office 22j1a

2 oct. 23

check with f t on f lamonica course switch 23a

Staff Meeting Notes 7JUL72--27MAR73

establish a position on dm 1 this week and det to cp for chat with
 auerabach 23b

check with f t on status of borden 23c

lets speed up traing schedule so as to have guys on for the 3
 propolsal in on 1 nov. 23d

see if f t or cp will call jtsa and ask to have proposal sent to our
 procurement to keep f sliwa here at the ranch 23e

complete j cavano evaluation form 23f

check with f t if we should change him and f l to ee orplanned or
 leave where they are 23f1

make sure you put notes from meet with f t on mitre work 23g

remind roc that the german scintist is to be here 12 october 23h

remind ft we could use that room left by kortz 23i

we need write ups on tn or technical accomplishments.due date is 22
 sept. 23j

taleked to goel on phone he indicated he would be able to come down
 to disscus his program with us 3rd week in oct. 23k

call d ward 23l

data query :c p suugested that we talk our procurment he said they
 signed a similair agreement in the past he did not think we would
 change honeywell mind 23m

have to prepare write up on d daughtry this week for cat. l 23n

call is out for programs for lab dir efforts . 23o

25 sept. 24

h powers needs a answer on invite to tipi pitch at esd on 8 nov. 24a

call is out for programs for lab dir efforts . 24b

we should at least consider if we have any progams that need
 support. 24b1

have to prepare write up on d daughtry this week for cat. l 24c

Staff Meeting Notes 7JUL72--27MAR73

data query. 24d

f t taled with c p and he wants a brief taling paper to use in a
 disscussion withhhonweywell 24d1

have roc and stone review traing requirements 24e

call d ward 24f

taleked to goel on phone he indicated he would be able to come down
 to disscus his program with us 3rd week in oct. 24g

keep up the push on the task write ups its beginng to work 24h

discuss with stone ahi pitch for next thursday. 24i

ahi is the special topic on 28 sept. 24i1

only guidance ive heard is emphasize device planned
 utilazation. 24i1a

we need write ups on tn or technical accomplishments.due date is 22
 sept. 24j

remind ft we could use that room left by kortz 24k

remind roc that the german scintist is to be here 12 october 24l

must resolve stl 5.0decision in relation to dm-1 24m

i owe b bethke either guidance on what to say to reilly or not to
 call him this week 24m1

18 sept. 25

must resolve stl 5.0decision in relation to dm-1 25a

i owe b bethke either guidance on what to say to reilly or not to
 call him this week 25a1

we need write ups on tn or technical accomplishments.due date is 22
 sept. 25b

discuss with stone ahi pitch for next thursday. 25c

ahi is the special topic on 28 sept. 25c1

Staff Meeting Notes 7JUL72--27MAR73

only guidance ive heard is emphasize device planned
utilazation. 25c1a

confession are this thursday for us 25d

lets use ahi to plan topics at least for ahi group. 25d1

data query is back in our lap bring it up to ft. 25e

we have a invite to tipl pitch at esd on 7 8 nov. 25f

they want any special topics to be sugested to them by 25 sept. 25f1

due date on attendees is 31 oct. 25f2

multics specs for dar services are being devloped at esd this week 25g

a barnum is going down on that and other matters 25g1

first question is should we send any body to help write the
spec? 25g1a

sholud b rzepka go down for a day to fill them in our our
progress and plams in dm 25g1b

a capt ? at 4460 or 4461 is the point of contact. 25g1c

dr nelson will be here next week on 25 sept. at 3 pm 25h

ft hopes that we disscus with him trw involment in security as
they have the testing peice of ibms program 25h1

both cp and ft think evaluation is a role we should play in
security 25h2

ge was never paid for their consultant work on advisor ? 25i

keep up the push on the task write ups its beginng to work 25j

28 august 72 26

make sure rocs group submits form 30a this week 26a

he will need a copy of the format 26a1

establish seminar dates for isf on our techincal progams 26b

Staff Meeting Notes 7JUL72--27MAR73

if they are ever to help us sell our ideas thry should have better understanding of our programs 26b1

need better defintion of our goals both in ahi and dm 26c

should make this high priority item as part of program call 26c1

complete your personal dev plan 26d

hold s u p e ting on sryacause contact 26e

personnel conference periods 26f

meet with d ward 26g

schedule one more go around with rocs group on program call 26h

14 august 72 27

establish seminar dates for isf on our techincal progams 27a

if they are ever to help us sell our ideas thry should have better understanding of our programs 27a1

need better defintion of our goals both in ahi and dm 28

should make this high priority item as part of program call 28a

7 august 72 29

follow up on col danilian trip 29a

talk to f t on dm-1pitch 29b

make decion on sagamore conf 29c

send memo to col thayer on increasing interst in transaction prosser 29d

major schell? 29e

schedule roc first cut on program call this week as he is gone next tow weeks 29f

complete your personal dev plan 29g

hold s u p e ting on sryacause contact 29h

personnel conference periods 29i

Staff Meeting Notes 7JUL72--27MAR73

meet with d ward	29j
24 july 72	30
meet with f t on data management manpower	30a
do j cavano traing evaluation	30b
meet with d ward	30c
remind f t that you are off next week	30d
news brief items are due	30e
personnel conference periods	30f
hold s u p e ting on sryacause contact	30g
10 july	31
sri has invited us to take patrt in i show of the net in wash in fall tell ft	31a
f allen will be here 24 25 july to discuss our ahi prograss and his plans in relation the mission anlis being done by mitre	31b
personnel conference periods	31c
reply to isf memo on tns and tech achomments	31d
hold s u p e ting on sryacause contact	31e
trip report data services	31f
radc history 11 july to isi	31g
talk to col thayer on airman	31h
check on exuporrt arrivaked	31i
7 july 72	32
reply to col isf traanistion memo	32a
f t insists all men read tech planning guide part 2 real conceptual systems	32b
sig achievements 26 june	32c

Staff Meeting Notes 7JUL72--27MAR73

(J15264) 23-MAR-73 7:41; Title: Author(s): McNamara, John L. /JLM;
Distribution: /DLS; Sub-Collections: RADC; Clerk: JLM;
Origin: <MCNAMARA>STAFFMEET.NLS;9, 22-MAR-73 10:37 JLM ;

Purpose of this RFC

1

Network users have expressed interest in holding NLS classes at sites on the Network, instead of at SRI-ARC. This RFC solicits comments from the Network community on the desirability of doing on-site classes.

1a

A brief outline of course contents is included at the end of this RFC, together with some logistic information which we feel is necessary to conducting a useful class.

1b

Please review this information, and let us know whether such a class would be useful if conducted at or near your site. We are eager to participate in this way, because we know it will be useful to us to have the benefit of consultation with experienced Network users.

1c

As we have to schedule our people's time in advance, we are tentatively considering making trips to Washington D.C. during the first week of May, and to Boston during the first week of June, for the purpose of conducting classes. We will consider other arrangements, however, if they would be more satisfactory.

1d

Please respond by April 15 to Marilyn Auerbach (MFA) at the NIC, (415) 326-6200 extension 3722 .

1e

NLS Class Information

2

The class is a comprehensive introduction to the use of NLS over the Network. The class generally runs for two to three days, depending on the composition and interests of the participants.

2a

For purposes of planning, the following information will be useful:

2b

1) We have found the optimum class size to be six, with an upper limit of ten.

2b1

2) We need a room large enough to hold the number of students, with a teletype-type terminal and appropriate connections for each student, a flip-chart stand and a large blackboard.

2b2

Class Outline - TNLS Course

3

We have held NLS classes approximately a dozen times. In all,

nearly a hundred people have attended these classes. While we feel that the training has been helpful, we also recognize that teaching the class at SRI-ARC tends to overlook special problems of working through the Network and special interests of other sites.

3a

The people who conduct the class are experienced in working out procedures for using NLS in work environments. Therefore, please accept the outline below as a flexible one, one that can be tailored to fit particular applications or needs.

3b

Part I: Elementary Concepts

3c

1. Introduction to NLS
2. Sending a Journal Message
3. TENEX/NLS Interfaces
4. Basic File Manipulation
5. Basic Text Handling
6. Addressing Data Within a Statement
7. Elementary Text-Editing

3c1

Part II: Entering and Using Information

3d

1. NLS Data Structures
2. Structure Editing and Text Editing
3. "Viewspecs": Controlling the Appearance of On-Line Output
4. Submission and Retrieval of Journal Items
5. "Partial Copies": File Updating
6. Use of the NIC On-Line: "LOCATOR" and "NIC/QUERY"
7. "Strucrels": Relative Data and Statement Addressing
8. "Directives": Controlling the Appearance of Off-Line Output
9. Adjusting NLS Control Characters to Your Terminal

3d1

Part III: Sorting and Searching

3e

1. Sort and Merge
2. Content analyses

3e1

15266 Distribution

Braden, Robert T. , Pepin, James M. , Wessler, Barry D. , Melvin, John T. ,
 Madden, James M. , Young, Michael B. , Padlipsky, Michael A. ,
 Stevenson, Schuyler , Deutsch, L. Peter , Davidson, John ,
 O'Sullivan, Thomas , Seroussi, Sol F. , Bradner, Scott , Thomas, Robert H. ,
 Thomas, John C. , Romanelli, Michael J. , Stoughton, Ronald M. ,
 Owen, A. D. (Buz) , Fink, Robert L. , Meir, Jaacov ,
 North, Jeanne B. , Crocker, Steve D. , Lawrence, Thomas F. ,
 McConnell, John W. , Ollikainen, Ari A. J. , White, James E. (Jim) ,
 Hathaway, A. Wayne , Foulk, Patrick W. , Winter, Richard A. , Van Zoeren,
 Harold R. , McKenzie, Alex A. , Winett, Joel M. , Bhushan, Abhay K. ,
 Pyke, Thomas N. , Wilber, B. Michael , Feigenbaum, Edward A.
 Bernstein, Art J. , Liddle, Dave E. , Showalter, A. Kenneth ,
 Aufenkamp, D. D. , Barber, Derek Leslie Arthur , Schipper, Tjaart ,
 Van Sylke, Richard M. , Aupperle, E. M. , Lipinski, Hubert , LeGates,
 John C. , Hargraves, Robert F. , Shephard, C. D. , Brown, Maurice P. ,
 Ashenhurst, Robert L. , Martin, Reg E. , Leichner, Gene , Falk, Gil ,
 Iseli, Jean , Donnelley, Jed E. , Kantrowitz, William , Wolfberg, Michael S. ,
 Feinroth, Yeshiah S. , Hurt, James , Hearn, Anthony C. , Stein, James H. ,
 Shoshani, Arie , Harslem, Eric F. , Metcalfe, Robert M. (Bob) ,
 Reussow, Bradley A. , Reins, E. R. (Dick) , Kadunce, Daniel L. ,
 McCutchen, Samuel P. , Petregal, George N. Odom, Dan , Monroe, Brenda ,
 Reynolds, Dorothy A. , North, Jeanne B. , Cutler, Pam J. Klotz ,
 Barnett, Barbara , Golding, Stan , Chipman, Steve G. , Barden, John P. ,
 Ginsberg, Martha A. , Watkins, Shirley W. , Connelly, Linda M. ,
 Troxel, Janet W. , Rosewall, Connie D. , Webster, Linda M. , Coley, Anita L. ,
 Mostrom, Carol J. , Enslow, Philip H. , Sanford, Edwin A. , Dunn, Robert M. ,
 Reid, Joseph B. , Misencik, William T. , Sakai, Toshiyuki , Pouzin, Louis ,
 Lundh, Yngvar , Hinckley, Robert H. , Zelkowitz, Marvin , Cowan, Donald ,
 Pepper, Marianne , Dixon, Louis F. , Lee, Ted , O'Malley, Michael ,
 Kirstein, Peter , Farber, David J. , Twyver, Dave Greening, Travis L. ,
 Silberski, Robert , Keeney, Marcia Lynn , MacNeill, Diane M. , Martin, W. A. ,
 Air Force Global Weather Central (DN) , Bassett, Margaret A. (Maggie) ,
 Smith, J. A. , Boone, Leina M. , Jones, Diana L. , Colman, Harold ,
 Neigus, Nancy J. , Sack, Terry , McHale, Frances A. (Toni) , Young, Helen D. ,
 Gilliard, Lucille C. (Lucy) , Falk, Gil , Collins, Ed J. , Blunck, Gary ,
 Heafner, John F. , Beaman, Kathy , King, David J. , Moody, C. Jane ,
 Lemaro, Maria E. , Pitkin, Sue , Fitzsimmons, Jerry , Hicks, Gregory P. ,
 Maxey, Gloria Jean , Peeler, Roberta J. , Fields, Craig , McCauley, Ermalee R. ,
 Iwamoto, Margaret , Larson, Dee , Doane, Robert E.

NWG/RFC# 488
NLS Classes at Network Sites

MFA DVN MDK 23-MAR-73 10:23 15266

(J15266) 23-MAR-73 10:23; Title: Author(s): Auerbach, Marilyn F. ,
Van Nouhuys, Dirk H. , Kudlick, Michael D. /MFA DVN MDK; Distribution:
/NSAG NAG NLG; Sub-Collections: SRI-ARC NSAG NAG NLG; RFC# 488; Clerk:
MFA;
Origin: <AUERBACH>RFC.NLS;2, 23-MAR-73 10:14 MFA ;

DCE 26-MAR-73 9:13 15267

Visit Log: 2 Mar 73, Joe Markowitz and John Strayhorn, Project
Cambridge and Stew Robinovitz, U of Michigan

ATTEN jcn rww mdk jake kev chi / FYI bc dls pr: Possible
community subscribers; interest in IMLAC setup soon; interest in
adding to Resource Notebook; related to Parker (115268,) and
Licklider (115269,).

Visit Log: 2 Mar 73, Joe Markowitz and John Strayhorn, Project
Cambridge and Stew Robinovitz, U of Michigan

They were visiting Stanford, to work on arrangements for a cooperative project for sharing social-science applications-system resources via computer networking. Licklider had urged them to drop by and get acquainted with us -- see notes on my subsequent discussions with Ed Parker of Stanford (115268,) and with Lick (115269,).

1

Parker later explained that some of the participants might use TYMNET. Mention here made that if Michigan would need to get onto the ARPANET, need to develop more interest at Michigan.

1a

(Jake, Mike) They would like to enter some of their reference data into NIC, esp. that which would reasonably go into the Resource Notebook. I told them to get in touch with Jake (Elizabeth) Feinle,r, who has the job of upgrading the form and content of the Resource Notebook.

2

(CHI, KEV) The Cambridge pair would like to go about getting their IMLAC set up to use DNLS. Their contact should be: Ken Victor (I think).

3

Joe mentioned an activity on "closely coupled man-machine systems". Lick would know more; also mentioned a fellow named George Lawrence (ARPA, HRR office under Kibler -- who are the sponsors of the Cambridge group.)

4

15267 Distribution

Norton, James C. , Watson, Richard W. , Cox, Bonnar , Stone, Duane L.
 , Kudlick, Michael D. , Rech, Paul , Feinler, Elizabeth J. (Jake) ,
Victor, Kenneth E. (Ken) , Irby, Charles H. ,

DCE 26-MAR-73 10:17 15268

Phone Log: 21, 22 Mar 73, Ed Parker of Stanford re ARPANET,
TYMNET, social-science collaborative community, SPIRES on ARPANET

Direct tie to (15267,), Project Cambridge etc.

Phone Log: 21, 22 Mar 73, Ed Parker of Stanford re ARPANET, TYMNET, social-science collaborative community, SPIRES on ARPANET

From two telephone discussions: he called on 21 Mar 73; we had to cut it short, so I called back on 22 Mar for the rest.

1

His reason for calling was to learn about our TYMSHARE-ARPANET business; he was after learning about the possibilities of tying together some collaborators where some might be on the ARPANET and some might only have access to TYMNET. On the first call I could only tell him that this wouldn't be a matter that involved our current negotiations with TYMSHARE; that he should feel free to deal directly with them.

2

Second call: He had talked with Max Beere at TYMSHARE. Pending acquiescence from IPT, TYMSHARE would be very happy to use a second port on "our" IMP, interfacing to one of their standard-mini TYMSAT nodes, into which they would program the necessary interface. Ed mentioned a rough quote of like three man months for T-S to do the job. I reflected nothing but approval of the possibility; but made sure that Ed understood that our activity with TYMSHARE was specifically aimed at just NLS service, and also that we hoped to make use of TYMNET to have greater range of subscribers who could access the NLS Utility.

3

He gave me more information about the joint social-science facilities plan which was the subject of the visit described in (15267,):

4

Four special facilities are each going to make a simultaneous pitch to NSF (each sending a proposal to Don Aufenkamp) for the necessary support to become tied together for useful resource sharing: Project Cambridge of MIT, Harvard (et al); the University of Michigan (I missed what the special facility there was); the special computer facility at UCLA, under Bill Dixon (I think it is the Heath Sciences Computing Facility, see XDOC -- 7734,) which has developed an extremely powerful set of capabilities, currently (I believe) running on a specially outfitted 360/91; and Stanford's SPIRES data-base and retrieval system.

4a

Each group will independently pursue its method for getting connected with the others; three of them are already in close proximity to IMPS/TIPS, but there is as yet no clear understanding of the prospects for being able to use the ARPANET; it might end up that some are on the ARPANET, and one or more must use TYMNET and couple through to the ARPANET.

4b

NOTE: Ed said that Vint Cerf is working towards getting the Comp Center at Stanford connected to the ARPANET.

4b1

Phone Log: 21, 22 Mar 73, Ed Parker of Stanford re ARPANET,
TYMNET, social-science collaborative community, SPIRES on ARPANET

There is to be a meeting of the group in Boston on April 6,
in association with the April 5 EDUCOM meeting; they hope
after that to be ready to send their proposals in to NSF.

4c

I expressed my interest in the possibilities of SPIRES being
on the ARPANET. I told Ed that we were beginning to look
around for an appropriate system onto which to move our
heavier data-base storage and processing. He said that he
would be delighted if some collaboration could come about. He
knows that we aren't aiming to conquer the large-base world as
well as be able to be fast and flexible in the office- or
group-sized working-information bases. We left this topic for
later discussion.

4d

4e

15268 Distribution

**Norton, James C. , Watson, Richard W. , Cox, Bonnar , Stone, Duane L.
 , Kudlick, Michael D. , Rech, Paul ,**

DCE 26-MAR-73 11:47 15269

Phone call to Licklider: JCN visiting him on 5 Apr, and NLS
Utility services

Tie to Project Cambridge, and Items (15267,) and (15268,); a
brief touch on SEAS NP; a new, distributed, Bio-Cybernetic
project from ARPA HRRO (Kibler)

Phone call to Licklider: JCN visiting him on 5 Apr, and NLS
Utility services

Jim's visit would be welcomed. Jim to contact him by phone
earlier in week for final arrangements. (617) 253-7705 He had no
time preference now.

1

I explained that besides having Jim get better acquainted with
some of our regular colleagues, I'd like to have him explore in
particular the prospects for Lick's making specific plans to use
NLS Utility services, and to be ready to apply to IPT for the
necessary portion of its subscription.

2

I went on to say that in particular we'd be interested in the
SEAS-like activities that his DMG might well find valuable.

2a

It turns out that they are participating rather heavily in
the Automatic Programming project at MAC (aiming some of
their modelling techniques for instance at the dynamics of
programming and software execution).

2a1

He said, "we are taking a broad interpretation to the
'automatic' nature of the project .." which I took to
mean that they could consider the sort of Workshop
approach, too (but we need to follow up another time to
see what he, and others in the AP Community, feel about
this).

2a1a

I know that in the past he has told me of a number of
clever things that they have been doing to facilitate
programming, things that I wouldn't have thought fell into
the 'automatic' category; I take it that are among other
things his group is pushing on with similar clever
tricks -- all of which seems to invite their integrating
our stuff into their programr's domain.

2a1b

Lick said that he thought there were some very
interesting and promising results beginning to come out
of the AP program.

2a1c

He suggested that maybe we consider a double-session
workshop (one session at his place, and another at ours) to
explore the two types of approach toward facilitating
software engineering. I begged off for the time being,
unless it appeared that there was some real prospect of our
selling some hunks of our early Utility service to
SEAS-like groups, so that this workshop would be in support
of that activity -- I told him that for the time being our
first commitment was to getting the Utility subscriptions
filled, and and being ready to provide the service.

2a2

Phone call to Licklider: JCN visiting him on 5 Apr, and NLS
Utility services

I mentioned another possible NLS-Utility application being his SUR-coordination job. He said that there is some possibility that this job might revert back to Al Newell at CMU, who was more the architect for the project anyway, and who appears to be finding more time available now.

2b

But, Lick is perhaps getting another distributed-project coordinator job; this one is sponsored out of ARPA's Human Resources Research Office (directed by Col. Kibler), and will be monitored by George Lawrence (Sp?): Project title is like "Bio-Cybernetics," and it will apparently be a likely candidate for Community Workshop support. (Perhaps this is the new project cryptically mentioned by Joe Markowitz -- 15267,4)

2b1

I asked whether they had any IMLACs ready for DNLS yet; apparently not, he mentioned that they were having problems with their computer systems -- they have installed a paging box, and are still in the unstable stage.

3

Lick also volunteered that he'd like to introduce Jim to the Cambridge Project, of which Lick was one of the primary instigators, and in which he continues to have a very strong influence.

4

This is a social-science data-base (and special application programs??) activity designed to be shared collaboratively between a number of social-science research groups. Initially I guess the collaborators were all in the Boston area, particularly Harvard and MIT.

4a

An ex-Lincoln-Lab psychologist, Dowe Yntema (Sp??), is director (he happened to have been my office mate during the six-week Summer Study Group in '63 that kicked off project MAC).

4b

We had three visitors on 2 Mar, two of whom (Joe Markowitz and John Strayhorn) represented this project and one (Stew Robinovitz) was from the University of Michigan; there is a plan afoot to tie the University of Michigan, Stanford University, and UCLA into a network that will allow them to collaborate on social-science projects (to the extent of sharing data bases and programs); and this provides a very fertile situation for the Community Workshop pitch. There are to be a set of proposal going to NSF for supporting this -- see (15267,1) and (15268,4).

4c

15269 Distribution

Norton, James C. , Watson, Richard W. , Cox, Bonnar , Stone, Duane L.
 , Kudlick, Michael D. , Rech, Paul , Irby, Charles H. , Victor,
Kenneth E. (Ken) , Lehtman, Harvey G. ,

DCE 26-MAR-73 12:25 15270

Phone call to Bert Sutherland: JCN visiting him on 5 Apr, and
NLS Utility services

Phone call to Bert Sutherland: JCN visiting him on 5 Apr, and
NLS Utility services

Jim's visit would be welcomed. Jim to contact him by phone
earlier in week for final arrangements. He had no time
preference now.

1

I explained that besides having Jim get better acquainted with
our regular colleagues, I'd like to have him explore in
particular the prospects for Bert's making specific plans to use
NLS Utility services, and to be ready to apply to IPT for the
necessary portion of its subscription. They are part of the SUR
Community. I also plugged for considering some SEAS-like usage,
e.g. moving the TENEX code onto NLS, or some such. Open for
talking.

2

15270 Distribution

Norton, James C. , Watson, Richard W. , Cox, Bonnar , Stone, Duane L.
 , Kudlick, Michael D. , Rech, Paul ,

AAM 23-MAR-73 14:25 15271

More on TENEX LINKing

Sent to MDK RST RHT

More on TENEX LINKing

MDK 22-MAR-73 8:15 15257

Tenex Linking

Location: (LJOURNAL, 15257, 1:w)

1

In reference to the message to me from MDK (above)...
I don't still have a copy of my original gripe, but it was meant to apply at least as much to the documentation of the link mechanism in the TNLS Users Guide as it was to the link mechanism itself. [The problem I had at the time I griped was not the spoiling of output, but the spoiling of input, since I didn't know enough to do a Control-C before answering the person who linked to me. A subsidiary problem was that I wasn't even the intended recipient of the link; the NIC person who linked to me was just casting about trying to find Dave Walden.] An additional complaint is that apparently Network users at NIC aren't allowed to use the REFUSE command which Mike mentions (even if they are, its not mentioned in the documentation). On the other hand, most of what Mike says seems perfectly reasonable to me.

2

15271 Distribution

Kudlick, Michael D. , Tomlinson, Ray S. , Thomas, Robert H. ,

AAM 23-MAR-73 14:25 15271

More on TENEX LINKing

(J15271) 23-MAR-73 14:25; Title: Author(s): McKenzie, Alex A. /AAM;
Distribution: /MDK RST RHT; Sub-Collections: NIC; Clerk: AAM;

AJR 23-MAR-73 11:44 15272

MSG TO ERM2

HELLO ERIC, THIS IS A JOURNAL MESSAGE

1

15272 Distribution
Mader, Eric R. ,

AJR 23-MAR-73 11:44 15272

MSG TO ERM2

(J15272) 23-MAR-73 11:44; Title: Author(s): Rosenfeld, Al J. /AJR;
Distribution: /ERM2; Sub-Collections: NIC; Clerk: AJR;

AJR 23-MAR-73 11:52 15273

MG TO ERM

MSG TO ERM TO SEE IF THIS WORKS

1

15273 Distribution
Mader, Eric R. ,

AJR 23-MAR-73 11:52 15273

MG TO ERM

(J15273) 23-MAR-73 11:52; Title: Author(s): Rosenfeld, Al J. /AJR;
Distribution: /ERM2; Sub-Collections: NIC; Clerk: AJR;

msg to john barden

hello john, how are things ?

1

15274 Distribution
Barden, John P. ,

AJR 23-MAR-73 12:06 15274

msg to john barden

(J15274) 23-MAR-73 12:06; Title: Author(s): Rosenfeld, Al J. /AJR;
Distribution: /JPB; Sub-Collections: NIC; Clerk: AJR;

Candidate for Utility Manager (reply to (15241,1))

For the second or third time let me throw in the name of Mike Plesset for a job at ARC. He is still at and dissatisfied with the job he had when he came up last. He is eminently qualified and interested in ARC, there might be a problem paying for him.

1

Mike Kudlick, I think, still has a copy of his resume.

2

15275 Distribution

Norton, James C. , Kudlick, Michael D. , Watson, Richard W. ,

DVN 23-MAR-73 9:10 15275

Candidate for Utility Manager (reply to (15241,1))

(J15275) 23-MAR-73 9:10; Title: Author(s): Van Nouhuys, Dirk H.
/DVN; Distribution: /JCN MDK RWW; Sub-Collections: SRI-ARC; Clerk: DVN;