

Tardiness

Tardiness of RADC Personnel

11 April 1974

RADC/IS

1. Attached for your information and appropriate action is a copy of the report of a four-day study conducted of the tardiness rate in this Center, together with the annual dollar loss involved,

2. Punctuality is the inherent responsibility of each individual. Supervisors must insure that individuals are fulfilling this responsibility,

WILLIAM METSCHER

1 Atch

Colonel, USAF

Tardiness Rpt

Deputy Commander

TARDINESS REPORT & CAFETERIA PATRONAGE (0815=0845)

Nr. Cafeteria		TARDY					
0815=0845	106	240	3	102	31		
26 Mar	18	86	68	44	2	3	
2 APR	44	55	20	89	7	7	
3 APR	22	75	46	98	9	1	
4 APR	26	111	58	76	19	3	
TOTAL TARDY EMPLOYEES 26 Mar:		204					
TOTAL TARDY EMPLOYEES 2 APR:		178					
TOTAL TARDY EMPLOYEES 3 APR:		229					
TOTAL TARDY EMPLOYEES 4 APR:		267					
TOTAL FOR FOUR DAYS		878					
AVERAGE DAILY TARDINESS				220			

Tardiness

AVERAGE TIME TARDY	15Min	22b
AVERAGE HOURLY SALARY RATE PER PERSON	\$10.00	22c
TOTAL DAILY TARDY HOURS (220x15 min)	55 hours	22d
DAILY DOLLARS LOST (55 x \$10)	\$550.	22e
ANNUAL DOLLAR LOSS (\$550 x 220 days worked)	\$121,000	22f

Tardiness

(J30547) 24-APR-74 13:20; Title: Author(s): Anna A. Cafarelli/AAC;
Distribution: /RADC; Sub-Collections: RADC; Clerk: EJK;

RESERVATIONS AT ILLINI UNION

DR. BENOIT:

I HAVE MADE A RESERVATION FOR YOU TO STAY AT THE ILLINI UNION ON
THE NIGHTS OF MAY 8 AND 9. THE ILLINI UNION IS LOCATED AT
1301 WEST GREEN STREET, URBANA, ILLINOIS. THE ROOM WILL BE HELD
UNTIL 6:00 P.M. MAY 8.

IF YOU HAVE ANY QUESTIONS, PLEASE FEEL FREE TO CONTACT ME
C/O KELLEY@BBN.

CINDY GRAY

SECRETARY

CENTER FOR ADVANCED COMPUTATION

RESERVATIONS AT ILLINI UNION

(J30548) 24-APR-74 14:07; Title: Author(s): Jack William Benoit/JWB;
Distribution: /; Sub=Collections: NIC; Clerk: JWB;

Jon == I don't remember the filename, but it is in BTHOMAS' directory at BBN. As I recall, the filename was pretty obvious, when you do a directory list.

Hope that's enough info. Dave,

1

(J30549) 24-APR-74 14:50; Title: Author(s): David H. Crocker/DHC;
Distribution: /JBP; Sub-Collections: NIC; Clerk: DHC;

The system recognizes TERM SCO lines width <cr> but does not use the info to control printout. That is, it should pause after <lines> number of lines have been printed out (if there has been no type-in) and wait for me to send a character (implying go-ahead),

It is intended to keep text from scrolling past you before you can read it.

Thanks for the support. (Also,,,Dirk did a secondary distribution to me,) Dave,

1

(J30550) 24=APR=74 14:53; Title: Author(s): David H. Crocker/DHC;
Distribution: /JHB; Sub=Collections: NIC; Clerk: DHC;

ESD/RADC/AFBIS Support Request

I have Journalled this request from ESD's L/Col Harvell, Will take any required actions after discussion with DCLP.

ESD/RADC/AFBIS Support Request

REQUESTED ENGINEERING SUPPORT FROM RADC FOR AFBIS

Task - Information System Science

The rapid growth in information systems technology has provided new capabilities faster than it has provided an understanding of how best to use those capabilities. There is an urgent need to develop a systematized body of knowledge on interfacing that technology with the unsophisticated user. Such concepts as source data entry and automation of routine procedures only have meaning for the Air Force if they can be applied and used by the vast majority of Air Force personnel. The purpose of this task is to determine the preferred classes of equipment for typical administrative applications and to develop concepts, guidelines and criteria for indoctrinating all levels of Air Force personnel in the use of that equipment. Emphasis must be placed on applications used by non-technical personnel,

Sub Task 1: Determine the effects of forced use of video terminal equipment by non-typists for preparation of letters, messages and forms. Investigate use of formatting aids and protected fields on such preparation. The product of Sub Task 1 should be a report detailing problems, solutions, learning curves, levels of performance attained and, if possible, personality correlations with performance capabilities. The basic question to be answered is: Can typical Air Force personnel perform these tasks adequately to conduct daily business using equipment?"

Sub Task 2: Determine the optimum mix of text preparation capabilities needed for day-to-day Air Force operations. This should include a definitive assessment of the relative prevalence of forms, letters, messages and documents exceeding ten pages. If more than one set of text preparation capabilities is required, detail both sets. If possible, correlate these desired capabilities with existing stand-alone, shared logic, and computer aided equipment and software. RADC role is formal RT&E support.

Task - Automation of Administrative Procedures and Correspondence Transmission

Current administrative procedures are highly redundant and labor intensive. They generally consist of an underlying information processing activity overlaid with a system of checks and controls to ensure that the activities are, in fact, accomplished. This involves the movement of information from one location to another as well as the manipulation of that information at various points within the system. This task

accomplished. This involves the movement

ESD/RADC/AFBITS Support Request

should demonstrate the feasibility of automating typical administrative procedures or parts of procedures. Products should include (1) benefits achieved in terms of manhour savings, (2) an assessment of which procedural steps are amenable to automation and which are not, and why (3) an exposition of regulatory barriers and hierarchical impediments, (4) a demonstration that adequate administrative controls and audit trails can exist in such a system and (5) an assessment of operator and user response to automated procedures. RADC role is formal RT&E support.

1b1

Task - Information System Security

1c

Specification should address
Prepare appropriate specifications for security devices and equipment needed to handle unclassified and classified data of all levels within the same information system. This ~~specification should address~~ both data base security and communications security. Emphasis should be on low cost components. RADC role is formal RT&E support.

1c1

Task - Archival Storage Tradeoff Comparison

1d

A need exists to store and maintain a body of data that changes rarely, if ever, but which may be needed on short notice for reference or other purposes. Air Force regulations, manuals and technical orders are examples of this category. Because of their bulk, and because the data is not dynamic in the base environment, there is question as to the desirability of computer storage for such data. This trade-off study should assess what data are appropriate for this class of storage and determine the costs and risks associated with each form of storage. Consideration must be given to legal requirements for records and documentation, to accessibility requirements, and to update techniques. RADC role is formal RT&E support.

1d1

Task Mobile Subscriber Communications

1e

This task addresses the development and test of a number of alternative approaches to providing the mobile subscriber services described in the Base Communications Mission Analysis. Each alternative must be capable of being integrated into the AFBITS communication system so that frequent consultation with ESD/MITRE will be required. Various signal structures, frequency spectra, and multiplexing techniques should be examined and at least two alternative approaches carried through breadboard tests. General objectives include frequency conservation, low cost, light weight and small size. Product will be a performance specification for the unit showing the most promise. RADC role will be technical direction on this

ESD/RADC/AFBIS Support Request

project. This activity is unlikely to be completed in FY 75 and intermediate schedules and objectives are open to negotiation.

1e1

ESD/RADC/AFBIS Support Request

(J30551) 24-APR-74 15:27; Title: Author(s): Edmund J. Kennedy/EJK;
Distribution: /JLM FJT ARB RJK DLS(info); Sub=Collections: RADC; Clerk:
EJK;

Streak

Just wanted to get tthis out of my directory,

Streak

Streeaaaaaakkkkkkkkkkk!!!!!!!

in view of numerous inquiries, Management has been asked to establish policy on "Streaking." Management has adopted the following:

1. Streaking will be permitted as follows:

a. Female employees will streak on odd days,

b. Male employees on even days,

c. On pay-day, all employees may streak, subject to the restrictions given in Items two through nine,

2. Girls who have tattoos on the lower half of their bodies, such as "Sock it to me" or "What you see is what you get," will not be permitted to streak (due to inspection regulations),

3. Junior Executives may carry their briefcases while streaking; however, the usual rule applies - Junior Executives may never carry any business papers, but may carry the usual, such as box of Kleenex, lunch, wife's shopping list and Playboy Magazines,

4. Girls with bust size larger than 36B, if any, must wear a bra while in shop area or around any moving machinery. Girls smaller than 36B should not try to impress people by wearing a bra,

5. If you streak in any area where food is served, you must wear two hair nets. These will be available in the vending machine by the cafeteria,

6. In the event your physical make-up is such that your sex cannot readily be determined (such as a flat chest for girls or lnnf h'hr on boys) you must wear a tag stating "I am a Boy" or "I am a Girl." Tags will be attached on girls with a hair pin or paper clip; on boys with a rubber band. (Note: Please return paper clips and rubber bands to Stationery Supply after you finish streaking.)

7. Girls may wear jewelry while streaking, but in no event should they bend over to retrieve it, should it fall, (due to insurance regulations.)

8. No female beyond the seventh month of pregnancy or those wishing to become pregnant may streak,

9. No mixed-streaking in dark hallways, broom closets, or under desks,

Streak

EJK 24-APR-74 15:30 30552

/s MANAGEMENT

3

Streak

(J30552) 24-APR-74 15:30; Title: Author(s): Edmund J. Kennedy/EJK;
Distribution: /JHB; Sub=Collections: RADC; Clerk: EJK;

tickler for the week of 29 Apr

(am5) 29 April - Monday

Due Date - ISIM/E, Kennedy - Suggestion Evaluation GRF-74-975
Integration of Computer Operations to Mgt Procedures,

Col Thayer - Leave

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

Nelson - TDY

Tomaini - Annual Leave

(at5) 30 April - Tuesday

Col Thayer - Leave

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

Due Date - ISI/Tom - FY-76 Mobile Depot Maintenance (MDM)

Form 6's (projected manpower) are due today - Completed,

1300 hrs, Branch Chief's Meeting

Tomaini & Nelson - TDY

Aetna Representative - call x4246 for Appointment - Bldg 14 - 2nd
Floor

(mayw1) 1 May - Wednesday

ISC Confessions 0830 hrs,

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

Bobbie: Personnel Strength Rpt, due,

1 May - Blue Cross Representative - call x4246 for appointment -
Bldg 14 - 2nd Floor

(mayth1) 2 May - Thursday

0830 hrs, Branch Chief's Meeting

Laboratory Activity Reports due today: Bucciero must have them by

tickler for the week of 29 Apr

1000, ISM must have them by 1100, and DOT must have them by
1600.(KJOURNAL, 19513,1:W)

4b

Due Date - ISIM - Unsol. Prop., DO 162=74 "Secure GCOS
Environmental within Multics",

4c

(mayfl) 3 May - friday

5

Bobbie; Travel figures due by noon.

5a

Due Date - ISI/Tom B. = Excess prooperty list(Do not return to
ISM),

5b

Due Date - ISIM/ISIS - Attendance at On-Site Review - Submit Names
Only,

5c

RJC 25=APR=74 07:40 30553

tickler for the week of 29 Apr

(J30553) 25=APR=74 07:40; Title: Author(s): Roberta J. Carrier/RJC;
Distribution: /RADC; Sub-Collections: NIC RADC; Clerk: RJC;

message

On Thursday, April 25, 1974, Congressman Mitchell will be speaking on recent legislation of interest to engineers. A question and answer period will follow his talk. This will be at Trinkaus Manor at 8 PM, sponsored by ASME. All interested are welcomed. A dinner is available at 7 PM at \$4.25. For further information please contact Mr. Dick White, ext. 2151.

1

RJC 25-APR-74 07:45 30554

message

(J30554) 25-APR-74 07:45; Title: Author(s): Roberta J. Carrier/RJC;
Distribution: /RADC; Sub-Collections: NIC RADC; Clerk: RJC;

status of the order for Hazeltine 2000 CRT and Centronix
Printer.....not so good.

to LHD re the screw-up in the cost of the hi-speed terminal; April
25, 1974.

Conversations with our guy in Dorval indicate that the total
purchase price of the hi-speed CRT and printer will be about \$8600
(plus 8%). I had estimated \$5000, based on quote of approximately
\$3000 for the CRT, and a figure of \$2000 for the printer (I can't
remember where I got this figure from.).

Over the two year lease period (which doesn't appear to be
negotiable downward), we'll be paying them about \$7500 plus
maintenance charges.

The annual lease charge is about \$4500 (this must include the
maintenance). If at the end of the two years, we wanted to buy
the thing, 70% of the first year's payments and 60 % of the second
years payments would be applied to the purchase price.

Delivery times are all screwed up yet. Apparently the lower case
option is the bugger causing all the problems; they don't sell
many like that and probably have to order it from the States, or
some song and dance like that. They won't move on it until they
get a firm order. A letter of intent apparently wasn't good
enough, although I don't think our guy in Dorval tried very hard.
(I thought the things had been ordered a month ago, although I
realized the contracts hadn't been signed yet.) We could get an
Upper-Case-Only CRT in abot 15 days. Upper-Lower Case might take
a month (my estimate). An upper-lower case printer won't be
available to us for at least two months. (The Dorval guy figures
CAE's estimate of 60 days is optimistic.)

I'm beginning to think we should scratch the hi-speed printer.
The quality wasn't that good, and it's hellishly expensive for what
we'll be getting. I'm not sure we need it.

Status of things as they stand now ? DMA has signed an
authorization for the whole thing....\$4500 per year for 2 years;
I didn't see it and didn't know abot the higher figures until our
friend in Dorval phoned about some unrelated matter. When I told
hime that sounded awfully high, he got a little concerned,
especially since he already had Don's signature under the
authorization. What do we do now?

MIKE 25-APR-74 08:06 30555

status of the order for Hazeltine 2000 CRT and Centronix
printer,.....not so good.

(J30555) 25-APR-74 08:06; Title: Author(s): Michael T. Bedford/MIKE;
Distribution: /LHD IMM; Sub=Collections: NIC; Clerk: MIKE;

RUNFIL PROBLEM

HOW MAY I RUN THE RUNFIL COMMAND AT OFFICE-1? ALL I NEED TO DO IS
SET UP A DOZEN TAB STOPS IN NLS (WHICH IS VERY TEDIOUS MANUALLY)

1

RUNFIL PROBLEM

(J30568) 26-APR-74 11:47; Title: Author(s): John R. Pickens/JRP;
Distribution: /FEED; Sub-Collections: NIC; Clerk: JRP;

New link for the Tickler file

Since we have the new instructions for the Laboratory Activities Report, and since it is now required weekly, I suggest that the PSO update the tickler.

New link for the Tickler file

(FJT) 22-APR-74 12:16 30511 Lab Activities Report
(JJOURNAL, 30511, 1:w)

1

EJK 25=APR=74 10:31 30556

New link for the Tickler file

(J30556) 25=APR=74 10:31; Title: Author(s): Edmund J. Kennedy/EJK;
Distribution: /RJC FJT; Sub=Collections: RADC; Clerk: EJK;

Feedback.sav

- - - -

The Arpanet new article indicates that FEEDBACK is available at ISI by merely typing @FEEDBACK<CR>. This is not true. It is only available under GLOG service, by typing @<ISELI>FEEDBACK<CR>. To match the published scenario, FEEDBACK must be in <MSGSYS> at ISI.

I hope this problem exists only at ISI. Otherwise, a lot of users are going to discount the usefulness of the program,

At any rate, I'm glad to see the program has been distributed to so many sites. Let's cross our fingers and hope that there is enough use of the system to provide some weight to the arguments in favor of the full-blown system.

Dave,

DHC 25=APR=74 12:49 30557

Feedback.sav

(J30557) 25=APR=74 12:49; Title: Author(s): David H. Crocker/DHC;
Distribution: /FEEDBACK; Sub=Collections: NIC FEEDBACK; Clerk: DHC;

Nancy & Ken:

Please take a look at <MITRE-TIP>JON-FTP-REPLYCODESTATES. It is an
NLS file and contains output processor directives.

--jon.

1

JBP 25=APR=74 13:27 30558

(J30558) 25=APR=74 13:27; Title: Author(s): Jonathan B. Postel/JBP;
Distribution: /KTP NJN; Sub=Collections: NIC; Clerk: JBP;

Ident Changes

Marcia--These are the ID changes in the ARPANET Directory for UCLA-NMC. Hope that the changes are clear. There are 3 categories: 1, Delete person completely; 2, Add telephone or piece of address or network address to complete address of existing person; (Only the information to be changed is indicated,) 3, Add completely new person. Names and (except for Skocypec) idents are indicated for everyone. O.K.? Thanks, Lynn Rossiter and David Crocker,

BECK, Sheri L (SLB)	Delete	1
CROCKER, David H, (DHC)	DCROCKER@ISI (213) 825-4797 or 5-2368	2
KAMOUN, Farouk (FNK)	Kamoun;BIN(1532)@UCLA=CCN (213) 825-2235	3
3771 Boelter Hall		4
KAMPE, Mark A, (MAK)	Phone: (213) 825-4733	5
KLINE, Chuck S, (CSK)	CSK@ISI	6
LAM, Simon (SL)	LAM;BIN(1200)@UCLA=CCN	7
3771 Boelter Hall		8
LANG, Bryna M, (BML)	Delete	9
LAROCHE, Charlotte B, (CBL)	Delete	10
LIEBERSON, Stan (SEL)	Lieberson;BIN(211)@UCLA=CCN (213) 825-4864, or 5-2368	11
"Computer Science Department" should be "University of California"		12
MAXWELL, Craig S, (CSM)	Delete	13
NAYLOR, William E, (WEN)	Naylor;BIN(0211) @UCLA=CCN (213) 825-4864, or 5-2368	14
3804-E Boelter Hall		15
NELSON, Lou C, (LCN)	(213) 825-2381, or 5-2368	16
3531 Boelter hall		17

Ident Changes

OPDERBECK, Holger (HO)	OPDERBECK@SRI=AI (213) 825-7879, or 5-2368	14
POPEK, Gerald J. (GJP)	(213) 825-2971, or 5-2368	15
ROSSITER, Lynn	No hardcopy (213) 825-2368, or 5-2381	16
3531 Boelter Hall		
NEW ENTRY, SKOCYPEC, Diana L. Network Measurement Center 3237 Boelter Hall University of California Los Angeles, California 90024	(213) 825-2543	17
SWITZER, David Kirk (DKS)	DKS;BIN(0628)@UCLA=CCN (213) 825-6030, or 5-2050	18
TOBAGI, Fouad A. (FAT) 3771 Boelter Hall	Tobagi;BIN(1200)@UCLA=CCN	19
URBAN, Michael P.	UCLA=NMC@BBN (213) 825-2368	20
WONG, John W. 3771 Boelter Hall	Wong;BIN(1200)@UCLA=CCN	21

Ident Changes

(J30559) 25=APR=74 14:33; Title: Author(s): David H. Crocker, Lynn A. Rossiter/DHC LYNN; Distribution: /MLK; Sub=Collections: NIC; Clerk: DHC;

Document request

Marcia -- can I get a copy of NIC (19933,)? Journal doesn't let me do a distribute document on it. I guess it is at your machine, rather than Office. Thanks, Dave.

1

Document request

(J30560) 25-APR-74 15:07; Title: Author(s): David H. Crocker/DHC;
Distribution: /MLK; Sub=Collections: NIC; Clerk: DHC;

Re: LabActivities Report...give me a chance, will you?????

1

(J30566) 26=APR=74 05:17; Title: Author(s): Roberta J. Carrier/RJC;
Distribution: /EJK; Sub=Collections: NIC; Clerk: RJC;

Comments on HDCCSECONDDRAFT

I just took a look at the HELPDOG second draft. I think it is coming along pretty well. Basically I like what you are doing, though
I do have a few quibbles of course.

1

In some ways, the document comes very close to the budding INFORMAN report, in that you have taken an issue that I feel is crucial to information management, concentrated on it and developed it in more detail. I am willing to have you proceed on this path if we can come to some closer agreement on what this Help Facility should look like. Information management, of course, must refer to a wider range of material and must present a wider range of access to this material, which I think it does.

2

My initial impression of the mandate of the HELPDOG committee was different from what you have arrived at. I thought HELPDOG was to specify syntax and interfaces for available online documentation, as well as defining the scope and complexity of the content for different classes of users. You touch upon these issues but don't go into enough detail.

2a

Thus my first complaint is that, although I like the approach of the Network Help Facility, I don't believe it is specific enough. If you can provide the details, HELPDOG will be a perfect complement to INFORMAN. Otherwise they repeat each other.

3

The way I see it, you have six pages of introduction and explaining the problem and two pages of ideas and solutions. The questions you begin to touch in the sections on Systems Interfaces and Possible Implementation Approaches are the things that worry me by their absence from the very beginning. There is no structure with which to really understand what you are talking about.

4

For example, what is the Help Facility really? Is it a program? Is it the composite of all the User programs and the site providers? If it is a separate program, where does it live? On all sites? On a chosen one or two?

4a

My vision is as follows (a vision similar to Kirk Kelley's Whole ARPANET Catalog, by the way): The Network Help Facility is a program separate from the User programs and the site providers, it knows how to access the Site providers (through a socket protocol mechanism for example) and through the providers, the information databases at the different sites. It is also accessible by the User programs, also by socket mechanism. The Help Facility program may (probably will) have its own data files as well.

4b

I see this as a separate program because of the size and complexity of what it must do. This is a very very intelligent facility and the program plus data would take up an enormous amount of core and cpu to run. This would exclude its being available on any smaller sites and on some of the larger ones, But it must be available on more than one site for reliability.

4b1

Every service site must have help databases for their services and a Site provider as interface. Every site (Server, User, Access machine) may have a User program. This is what the human actually talks to when (s)he wants information. I think it is wrong to require that they all look the same. A Multics user is not going to want to use a TENEX-like facility or TENEX-like data access scheme and there is no reason why (s)he should have to. All User programs will talk to the Help Facility program in a standard way, but talk to their users as they choose.

4c

The Datacomputer should be used in some way. Specify the details of how and when.

4d

Since the Help Facility program is so large, there must be a charging and accounting procedure for it. The site providers may also charge for data accessing the way they do for other services. These will presumably be charged against the user program, in some mannner hopefully to be specified by the PI committee looking into this. The User program can provide some free help to the user by absorbing it into its overhead costs.

4e

Databases must be freely changeable. That is, certain information is likely to be always changing. The structured framework, the Site provider programs, the Help facility program, must all remain the same, but must be organized so that other things can change. This is the principle of the FTP protocol being strictly defined, but the files being transferred always change. This is a hard problem, but an attempt at a definition should be made.

4f

This brings me to my last point: your implementation schedule. It is very bad, and highly impolitic. If TENEXes are the first to implement the program, it will clearly be biased for running on a TENEX and may be totally unsuitable for any other type of machine or operating system. I am afraid that the system will have to be designed in committee, much as I hate the idea. I think HELPDOG should come up with an initial specification (like an FTP protocol or other

Comments on HDCCSECONDDRAFT

protocol) which should then be presented to systems personnel from all the sites for fine tuning.

4g

I had more comments written next to specific paragraphs in your draft, but what I said above covers them all. If you want more detail and finger-pointing, let me know. As is, my comments apply to every- thing in the spec in general.

5

Comments on HDCCSECONDDRAFT

(J30567) 26-APR-74 08:43; Title: Author(s): Nancy J. Neigus/NJN;
Distribution: /HELPDOC; Sub=Collections; NIC HELPDOC; Clerk: NJN;

Central Funding for a Network Access System

- - - -

Dear Craig:

Your recent decision not to continue central funding for Ants has caused several of us considerable concern. We are not so much worried about the survival of a specific system or project as we are worried about the existence of SOME centrally supported network access system development project, in addition to the TIP.

We are all convinced that the availability of a network access machine more extensible than the TIP is crucial to the ability of ARPA-supported researchers to obtain their computing resources via the Net. But such a machine is new and its precise role is unclear. We know that several efforts (NSW, MST, Speech, CAI, ...) will require a network access system, but do not know exactly what its characteristics should be.

Since TIPS are part of IMPS, the centralized iron control that BBN exercises over TIP modifications is necessary. For many projects, however, more user control is needed. For these projects, there will be distributed development of portions of the network access system. This is already happening for Elf. We believe that a distributed effort is useful as well as inevitable. But, we also

Central Funding for a Network Access System

believe that the effort MUST be well coordinated. The implications
of 21
a failure to tightly manage a distributed development effort have
been 22
demonstrated with Tenex (previous lack of coordination of non=BBN 23
system modifications has led to many site=dependent idiosyncracies) 24
and the host-level Network (no management of Net-wide protocol 25
implementations). This issue should be resolved for an access system 26
BEFORE it begins to suffer from a similar degree of disarray, 27

A network access system is needed as a PRODUCTION tool to support 28a
researchers. As such, the tool needs to be polished, reliable and 29
supported by a service group. It is easy to underestimate the 30
magnitude of effort required to provide high-quality support to a 31
user 32
community which does not include small-computer specialists at each 33
site. Though Arpa usually cannot afford to buy that last 5% of 34
performance, it is critical for this tool. IPTO seems to have 35
accepted the idea with regard to Tenex, Tips and the Subnet, 36

Central funding is required because the Network is not a 36a
realistic free market place. It is not reasonable to assume that a 37
product will stand or fall on its merits unless there are existing 38
alternatives to choose from, money is available for purchasing the 39
product, and potential users have sufficient information for making a 40
choice. We do not believe any of these conditions currently exist on 41

Central Funding for a Network Access System

the Net,

Furthermore, Arpa projects do not have money allocated for buying a front-end system. Unless you want to encourage an extraordinary amount of ad hoc activity, while sites try to get that money from Arpa, it will on the average be a year before the money can be included in project budgets. During that year, sites needing but not having reliable front-end machines will have an uncomfortable sense of insecurity -- if you are not sure you can even connect your terminal to your computer, you are not going to feel very confident about getting your work done.

At this time, we cannot recommend a specific project or system to Arpa. Ants is well-designed, but the project has been very poorly managed and has not met its deadlines; Mark II is not yet available for evaluation. Elf is still being reviewed -- though sites having dealt with Dave Retz seem favorably impressed.

To summarize, we feel that it is extremely critical for Arpa to provide central funding, and an organized approach consistent with the extensibility needed, for the development and maintenance of a network access system. We would like this letter to be the beginning of a discussion with you, either in person or over the Net. Please let us

Central Funding for a Network Access System

know your thoughts,

62

63

Sincerely,

63a

64

Tom Boynton

64a

Jerry Burchfiel

64b

Dave Crocker

64c

Rob Hoffman

64d

Charles Irby

64e

Ken Pogran

64f

65

66

Central Funding for a Network Access System

(J30569) 26=APR=74 14:10; Title: Author(s): David H. Crocker/DHC;
Distribution: /DHC; Sub=Collections: NIC; Clerk: DHC;

brief memo to keep you posted on my talks with the computer people in Dorval.

conversation with Jim Neil re CRT and printer: 26-APR-74

1

he says the CRT (with upper-lower case) is available NOW from CAE; that is, it's actually sitting on the shelf,

1a

the printer is another question; contrary to what Goldenberg told us, the lower case feature has to be built specially. They'll do it, but they'll need 30 - 45 days (min), and they won't even stat on it until they get a firm contract signed,

1b

I told him that I was having reservations about the whole idea of a printer, and that I'd call him back on Tues. with an answer,

1c

The 1200 baud printer doesn't look that good anyway. I'm really getting warmed up for this one.

1d

brief memo to keep you posted on my talks with the computer people in
Dorval.

(J30570) 26-APR-74 14:27; Title: Author(s): Michael T. Bedford/MIKE;
Distribution: /LHD IMM; Sub-Collections: NIC; Clerk: MIKE;

ID Request to Marcia Keeney

Marcia, This is an Ident we forgot to give you, Hope its not too late---

Goguen, Joseph A. (JAG) Goguen;Bin(1200)@UCLA-NMC
 Computer Science Dept,
 3532 Boelter Hall
 University of California
 Los Angeles, California 90024

Phone: 825-2422

ID Request to Marcia Keeney

(J30571) 26-APR-74 17:34; Title: Author(s): Lynn A. Rose/LAR;
Distribution: /MLK; Sub-Collections: NIC; Clerk: LYNN;

Comments on PML-MCM

Authors of PML-MCM--

I read through your report this weekend, and I think it is very good. You clearly have given it a lot of thought, and have come up with a good spec. I do, however, find the writing very dense and think the document could stand some lightening. I would also recommend the following tiny additions:

1. Some mention that the staff jobs for the PML would be full-time; i.e. no network personnel trying to split themselves 3 ways to support systems and judge them as well. This implies that possibilities (2) and (3) for the embodiment of the PML are the same since both require independent machines and personnel, both specify full-time jobs, and the only current knowledgeable network types would come from ARPANET sites.

2. Under equipment needed: hardcopy devices, that is printers, are also needed to test out programs for hardcopy output, e.g. RUNOFFs, TIPCOPy, SENDPRINT, FTP listings.

I will probably have some comments on your section on Catalog Listings when I assimilate it better.

--Nancy

Comments on PML=MCM

(J30573) 29=APR=74 07:05; Title: Author(s): Nancy J. Neigus/NJN;
Distribution: /CONUNION MEJ JI; Sub=Collections: NIC CONUNION; Clerk:
NJN;

Tickler Item

Due Date - ISIM/E, Kennedy - Suggestion Evaluation GRF-74-975
Integration of Computer Operations to Mgt Procedures,

1

Tickler Item

(J30574) 29-APR-74 07:31; Title: Author(s): Roberta J. Carrier/RJC;
Distribution: /EJK RJC; Sub=Collections: NIC; Clerk: RJC;

Tickler Item

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

1

Tickler Item

(J30575) 29-APR-74 07:34; Title: Author(s): Roberta J. Carrier/RJC;
Distribution: /DLD2 RJC; Sub-Collections: NIC; Clerk: RJC;

Tickler Item

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

1

Tickler Item

(J30576) 29-APR-74 07:36; Title: Author(s): Roberta J. Carrier/RJC;
Distribution: /RADC; Sub-Collections: NIC RADC; Clerk: RJC;

SOCKETS

I HAVE NOTICED TWO SITES CONNECTED TO BBN TODAY USING
VERY LOW SOCKET NUMBERS, AS SOCKET CZAR, MAYBE YOU SHOULD
REMIND THE SITES (OR THE WORLD) THAT LOW NUMBERED
SOCKETS SHOULD BE RESERVED FOR SYSTEM FUNCTIONS (IN
PREPARATION FOR VERIFIED MAIL, ETC.)
THE TWO@I SAW TODAY WERE LONDON, USING 102 AND 103 OCTAL FOR
TELNET, AND LL-TSP USING 40 AND 41 FOR TELNET,

/RCC

1
2
3
4
5
6
7
8
9
10
11

SOCKETS

(J30578) 29-APR-74 09:36; Title: Author(s): Jonathan B. Postel/JBP;
Distribution: /RCC; Sub-Collections: NIC; Clerk: JBP;

Problems With Initial JOVIAL Manual COM Run

For reference, the file for the initial COM run has been journalized (,30546,1). Based on the results from it, I'm starting another in (stone,comtest2,1).

We received the com test run last week (25th). It contained an adequate sampling of fonts and formats to allow us to settle on one combination. Since then I have met with Nelson & company and "final" fonts, margins etc, were established see (stone,comtest2,1). I intend to send a second test run (just chapter 2 of the manual) with the agreed upon fonts and see how it comes out.

There were a lot of problems with the output, some anticipated, some a surprise, and others unexplainable. Some of the problems may have to do with the interactions between directives in the test file. Let me try to spell out the more serious ones for you, to see if they can be resolved.

Missing characters:

The following characters were NOT printed when in the slant mode...regardless of type size or font. These are contained in (equi44) on page 23 of chapter 2 and in the list of equations at the end of the file.

\

=

<

>

"

[

]

@

The convention of placing a slash through the numeral zero (0), to distinguish it from the capital letter O is taken in the manual. In the COM output the zero is slightly oval shaped and the letter O is more rounded. The difference is apparent when they are side-by-side, but less apparent when not juxtaposed. Is it possible to get a slashed zero...either by an NLS trick, or by asking DDSI? Nelson says he can live with the current printing of the two characters, but would like the slashed zero if he can get it without too much trouble.

Problems With Initial JOVIAL Manual COM Run

For some reason, the Slanted New Gothic type seems to come out monospaced (first page of the output= ≈ 20). This happened (not intended) both with the $V1=1$ directive in the body and with the Slant directive in the subheading titles...2,2, 2,3, 2,4, etc. I can see nothing in the directives that would cause this. Can you explain or is this a characteristic of this font? The examples in the output processor manual show that it is not.

4c

There also seems to be trouble with the word spacing with the News Gothic font (the first copy of chapter 2), which did not appear with the Times Roman (the second copy of chapter 2). This occurs through chapter 2, regardless of the type size 10, 9, or 8. Could it be related to the monospace problem?...comments??

4d

Margins

4e

In the COM output the left margins appear to be additive, ie $BLM = LM + LMBase$. The manual indicates that all vertical (horizontally measured) margins are measured from $LMBase$. This is also the reading I get from XCOM. Which is correct? The right margins came out OK.

4e1

There is a capability to alternate margins from Odd to Even pages. You can also Justify the text. Are these two Body Positioning options additive? Or does one just put them both in?

4e2

Center directive...does the $PxP=C$ directive center between the Body margins..or between the edges of the page? The later appears to be the case, the former is the desired output.

4f

Problems With Initial JOVIAL Manual COM Run

(J30579) 29-APR-74 12:12; Title: Author(s): Duane L. Stone/DLS;
Distribution: /DVN NDM RN2; Sub-Collections: RADG; Clerk: DLS;
Origin: <STONE>COMPROB,NLS:1, 29-APR-74 12:07 DLS ;

PREVIOUS ATTEMPTED MESSAGE

WELL, I TRIED TO SEND YOU A MESSAGE, I GUESS I SAID
JBP/RCC INSTEAD OF RCC/JBP, ANYWAY, PLEASE READ 30578, FROM
ME TO YOU
/CLEMENTS

1

2

3

4

5

6

PREVIOUS ATTEMPTED MESSAGE

(J30580) 29-APR-74 13:42; Title: Author(s): Robert C. Clements/RCC;
Distribution: /JBP; Sub=Collections: NIC; Clerk: RCC;

I sent this last week via shdmsg, but think it never made it.

Jim, would you consider setting up a couple of additional directories for us. The first is chief of the operations part of RADC staff. The real users will be David Craig, who is our (IS) man on staff, Jim Hyde communication's man on staff, plus a couple of secretaries in the DOT office. They understand that their use will have to be occasional and not too heavy. Its good for us to have people in "high places" pulling with, instead of against us,

<DIMAGGIO>

Fred N Dimaggio

Technical Operations (DOT)
Rome Air Development Center
Griffiss AFB, NY 13441

Phone 315 330-3046

David T. Craig

Technical Operations (DOT)
Rome Air Development Center
Griffiss AFB, NY 13441

Phone 315 330-3046

James W. Hyde

Technical Operations (DOT)
Rome Air Development Center
Griffiss AFB, NY 13441

Phone 315 330-3046

The second is not a user but a class of users. They are the part time temporary, college and highschool help that come and go. They are all now, and will be in the foreseeable future, assigned to the PSO. It doesn't seem reasonable to me to set up separate directories, or even journal idents...,what do you think?

<PSO>

PSO

Information Processing Branch (ISI)
Rome Air Development Center
Griffiss AFB, NY 13441

Phone 315 330-7834

Now that the user population is expanding outside the section and branch, it seems to be a good time to start thinking about group idents. I am thinking of breakouts which reflect a "top-down" view of the organization (and hence the communication channels to some degree). In the branch below, each branch subsumes the branches below it. The groups following the commas are staff offices and not in-line,

RADC, DOT

IS

ISI, PSO

ISIM

AKW

DM

ISC

ISF

DO

The bulk of communication, however is from the bottom-up. To accomodate this, however with the group ident approach, would mean setting up a different group for each of the lowest level groups. This doesn't seem reasonable, particularly if the user population expands to other organizations.

What we really need is a way of representing the organizational structure, and have the system determine the idents of individuals/organizations when a guy distributes to "chain" for example. The system might ask him how many levels up he wanted it to go, echo the idents for user verification and distribute.

(J30586) 30-APR-74 08:53; Title: Author(s): Duane L. Stone/DLS;
Distribution: /JCN JHB EJK JLM; Sub=Collections: RADC; Clerk: DLS;
Origin: <STONE>DOT,NLS;1, 26-APR-74 08:50 DLS ;

Viewspects and 'Substitute' interaction,

I just found, the hard way, that there is an interaction between viewspects and the substitute command. In trying to substitute i.e. for ie, I got nowhere until viewspec w was used to replace x. Is this the way it is supposed to work or is this an accident? If this is the way it is supposed to work - WHY???

1

Viewspecc and 'Substitute' interaction.

(J30587) 30-APR-74 10:05; Title: Author(s): Edmund J. Kennedy/EJK;
Distribution: /FEED RADC; Sub=Collections: RADC; Clerk: EJK;

Comments on IBM Structured Programming Effort

There must be more to it than I see on the surface. I would like to talk with some in Nelson's section. I think it would benefit both of us to better understand the other's area.

Comments on IBM Structured Programming Effort

I have read the IBM Proposal on Structured Programming and the GFG report on their experiences with "modern programming". They essentially cover the same topics...GFG concentrates on programs that they have developed to place structure on existing unstructured programs.

My initial reaction was one of too little-too late. Most of the interesting (to me) development work that both documents alluded to has been done by SRI/ARC. Indeed, the ARC has discovered problems and solved them, which have not yet occurred to IBM or GFG.

My second reaction was that they did not even address the central fact of software development, that of evolutionary changes in system intent, design, etc. The very idea of structured programming presupposes that one can freeze on a functional description and system spec very early in the game. This of course has been demonstrated to be impossible, for any system save the trivial. It has been the eternal cop-out of contractors to declare that it wasn't in the statement of work...and of course it wasn't. I get the sinking feeling that this whole area could lead to very cheap and efficient code which doesn't significantly increase the ultimate users' capabilities.

My third feeling was that given enough time and money they will eventually back into the position of having developed a halfway decent set of software development tools, procedures, etc, but it will be a lashed together system of modules, where the interfaces are more complex than the functional software. In short their whole approach seems ass-backwards, when compared with the ARC's.

Finally, after reading the more detailed task descriptions of what IBM is actually going to do, I felt relieved. There is to be little if any tool development and THEY SHOULD BE PROHIBITED FROM THIS AREA!! They will primarily be conducting studies and putting together requirements, specs, standards. This is undoubtedly necessary, considering the current state of software development tools and practices in the Air Force. All-in-all a very harmless (except for the money spent) exercise.

An interesting side light...IBM did not feel it possible to evaluate the cost-effectiveness of the whole ball of wax. We have come to similar conclusions regarding NLS. They say it better than we have in the past...we should use their words,

Comments on IBM Structured Programming Effort

SUMMARY

IBM states that, "structured programming practice involves several CODING PRACTICES, TOP DOWN DEVELOPMENT, PROGRAMMING SUPPORT LIBRARIES and CHIEF PROGRAMMER TEAMS." These four elements of structured programming are summarized briefly below.

CODING PRACTICES

Includes:

The use of five basic programming Language constructs; IFTHENELSE, DOWHILE, DUNTIL, CASE AND SEQUENCE,..to replace unconditional JUMPS and GOTO's,..one entrance, one exit, in-line code,

Indentation of nested groups of statements,

Benefits:

Code is easier to read, understand, maintain and modify,

Status:

Language

All five basic constructs implemented in macros for S/360 AL and MSP/7 languages.

FORTRAN is not block structured, therefore a preprocessor must be developed

PL/1 has IFTHENELSE and DOWHILE...others are simulated by using GOTO...preprocessor needs to be developed,

COBOL..simulated by procedures...preprocessor needs to be developed,

JOVIAL...same as COBOL

Indentation

Rules for indentation are contained in a Structured Programming Guide,

Relation to AKW:

The NLS language (L=10) contains all of the five basic language constructs,

Comments on IBM Structured Programming Effort

NLS's basic file structure is hierarchcial with indentation the default presentation mode. In addition there are some 30 "viewspec" that allow one to obtain special truncated views of the hierarchcial file. Indentation rules are not formally enforced, but are "natural" given the basic language constructs and the tree structured file system.

TOP DOWN PROGRAMMING

Includes:

Design and organization of the system into a tree structure reflecting the level of control logic and decisions within the program,

Possibly the use of a special design language to express this orgainzation,

An ordering of system implementation from control interface statements downward to functional units,..interfaces first, parts second,

Depends on the idea of segmentation of code, limitation of the size of a procedure, merging of segments during comilation,

Benefits:

Continuous, coherent, visible, working, modular product

Eases integration and testing,

Status:

S/370 AL, MSP/7 have CALL and COPY statements

COBOL has PERFORM and COPY statements

FORTIRAN has CALL only

PL/I has INCLUDE and CALL

JOVIAL has CALL plus COMPOOL

Relation to AKW:

All NLS system and user source code is available to the programmer via copy, assimilate, replace commands,

Comments on IBM Structured Programming Effort

Segmentation can occur at any level in the hierarchcial structure,

PROGRAMMING SUPPORT LIBRARIES

Includes:

- internal libraries
- external libraries
- office procedures
- computer procedures

Benefits:

product visibility, programmer communication improved

Status:

Have mannual procedures, batch oriented...want to develop "on-line terminal library capability",

"Other areas (for development) include the automatic compilation and output of management statistics related to the program development cycle, more levels of library hierarchy and interrelations between libraries, and additional programming support tools such as automatic indentation, segmentation, etc."

Relation to AKW:

NLS has extensive capabilities for handling internal and external libraries in an on-line environment. All of the other areas of development have been addressed by NLS and capabilities exist...superwatch, superdocuments, journal system, ident system, message system, linking of terminals and files..etc..etc..etc..

CHIEF PROGRAMMER TEAMS

Includes:

Chief Programmer, Backup Programmer, Programming Librarian, others...

Benefits:

Comments on IBM Structured Programming Effort

relieves programmer of clerical, administrative and management functions,...provides clearer definition of responsibilities,...takes advantage of senior programmer's system knowledge.

Status:

In use on many projects,...soon all projects.

Relation to AKW:

The ARC first concentrated on augmenting programmers...the individual, the team and now the community via the ARPANET. They have extensive experience in this area.

IBM then explores the impact that this "new" technology will have on the design, management, organization, measurement/estimating and documentation of large software development efforts. A lot of time is spent on documentation in particular. 10 classes of documentation defined in DOD 4120.17M are outlined.

DOCUMENT	AUDIENCE
Functional Description	Staff/Management
Data Requirements Document	User
System Specification	Technical
Program Specification	Technical
Data Base Specification	Technical
Functional Users Manual	User
Computer Operations Manual	Operations
Program Maintenance Manual	Technical
Test and Implementation Manual	
Operations Staff/Management	
Test Analysis Report	Staff/Management

IBM's answer to the documentation problem is...4 of the 10 documents are used by technical people and that the use of structured programming will eliminate the need for flow charts and related documentation. They do not address the other 6 classes of

Comments on IBM Structured Programming Effort

documents, except to say that the top-down approach should also be applied to documentation,

Comments on IBM Structured Programming Effort

(J30588) 30-APR-74 15:00; Title: Author(s): Duane L. Stone/DLS;
Distribution: /EJK JLM FJT RN2; Sub-Collections: RADC; Clerk: DLS;
Origin: <STONE>STRUCPGM,NLS;1, 30-APR-74 14:56 DLS ;

Evaluation of Suggestion by D. Craig

TO: ISM, CDS, IN TURN 1

FROM: ISIM/ E. J. Kennedy 2

NAME AND NUMBER OF SUGGESTION 3

Integration Of Computer Operations To Management Procedures -GRF
74-975 3a

ACTION TAKEN OR RECOMMENDED 4

Not recommended - may be of value at a later date, 4a

REMARKS 5

Everyone in the Air Force has become accustomed to the use of forms and forms are used daily without question. The advent of new text-processing systems has provided a capability to input text, edit and manipulate it very rapidly and efficiently, and finally to output it. Unfortunately, there is a mismatch between the form of the output, which is optimized to the data processing system, and the type of form that we are accustomed to in our daily work. 5a

The Air Force form is rigidly structured to force the information into a framework that is consistent, economical, and presumably easy to use. All that is necessary is to fill in the boxes. The current forms are not always too easy to fill in with a typewriter since there are vestiges of the old methods still there, (i.e. The sizes and geometry of the blocks are often more compatible with the pen than the typewriter) 5b

Nevertheless we are accustomed to seeing forms and are uneasy when the identical information is presented to us in a non-usual format that forces us to search for the information, rather than to look in the block in the upper right hand corner. 5c

Mr. Craig's proposal is an attempt to bridge the mismatch between the 'real and the ideal'. Unfortunately, it is an interim solution that has already, to a large extent, been overtaken. Using the right equipment (i.e. a TYCOM Terminal or a Forms Printer) it is possible to print the computer output directly onto the proper form. 5d

This equipment is already available in Building Three where most of the users of advanced text-processing systems are located. Unfortunately, this does not solve the problem of other users, currently only two, within RADC. It is possible that at some later date when there are more users that Mr. Craig's scheme might

Evaluation of Suggestion by D. Craig

be implemented under limited conditions for a short time before other arrangements can be made,

5e

LIST OF ATTACHMENTS

6

Suggestion GRF 74-975 plus Five Attachments,

6a

THIS SUGGESTION FALLS WITHIN THE SCOPE OF THE COST REDUCTION PROGRAM

7

No,

7a

NAME TITLE AND ORGANIZATION OF THE EVALUATOR INCLUDE TELEPHONE EXT

8

Edmund J. Kennedy, Supervisory Research Psychologist, ISIM, x3857

8a

SIGNATURE TITLE AND ORGANIZATION OF RESPONSIBLE OFFICIAL

9

(MAC's Sig, Block)

9a

TANGIBLE BENEFITS

10

None

10a

INTANGIBLE BENEFITS

11

VALUE OF BENEFIT IS Moderate

11a

EXTENT OF APPLICATION IS Limited

11b

EXPLAIN FACTORS SELECTED IN A & B

11c

The suggestion has potential benefit, at this time, only to the two users in Bldg. 106, and then only if they are unwilling to read identical information unless it is on the proper form and are unwilling to wait until the information is printed on the proper form in Bldg. Three,

11c1

DESCRIBE OLD METHOD (IF DIFFERENT FROM THAT DESCRIBED ON AF FORM 1000)

12

n/a

12a

DESCRIBE NEW METHOD (INCLUDE ADVANTAGES OVER OLD METHOD, CHANGES REQUIRED, AND DISPOSITION OF RESOURCES SAVED, IF APPLICABLE)

13

n/a

13a

Evaluation of Suggestion by D. Craig

(J30589) 30-APR-74 15:48; Title: Author(s): Edmund J. Kennedy/EJK;
Distribution: /RHT2(for Craig); Sub=Collections: RADC; Clerk: EJK;

Distribution lists

- - - -

This is in specific response to a request from Mike and Inez. I have sent out a discription of how to create distribution lists for SNDMSG. You already probably know how to do this for the Journal System which is a separate subsystem, by using the ident Bell-canada. I am at this time testing an alternative to these two ways that combines them. We have not released it becuase of inadequate documentation, but it seems that the need for it is high at Bell.

Submitting sndmsgs through the Journal:

In SNDMSG typeafter the prompt USER: YOURIDENT/RECEIVERIDENT@NIC CR

RECEIVERIDENT = Bell=canada in your case, or any valid ident,

Let feedback know if there are any problems. Jim Bair

Distribution lists

(J30590) 30-APR-74 16:32; Title: Author(s): James H. Bair/JHB;
Distribution: /BELL-CANADA; Sub-Collections: SRI-ARC BELL-CANADA; Clerk:
JHB;

a test of sending messages to group idents,

- - - -

Sorry to keep cluttering up you message.txt files with this garbage,

1

2

3

4

a test of sending messages to group idents.

(J30591) 30-APR-74 16:34; Title: Author(s): Michael T. Bedford/MIKE;
Distribution: /BELL-CANADA; Sub-Collections: NIC BELL-CANADA; Clerk:
MIKE;

Some Elf User Questionnaire responses

- - - - 1

30-APR-74 11:13:25,2812 2

Net mail from site BBN=TENEX rcvd at 30-APR-74 11:13:12 3

Date: 30 APR 1974 1410-EDT 4

From: MADER at BBN=TENEX 5

Subject: Answers to ELF Questionnaire 6

cc: BURCHFIEL 7

- - - - 8

Dave, 9

Here is our answers to the ELF Questionnaire: 10

11a 11

12

13

14

I. Identification 15

16

A. Name of Organization: 16a

BBN=TENEX 17a

18

B. Name, Network Address of Site ELF liason: 18a

19

Eric Mader (MADER@BBN) 19a

Jerry Wolf (WOLF@BBN) 19b

Some Elf User Questionnaire responses

	20
II. Applications of ELF	21
	22
A. Current applications:	22a
	23
Terminal Support	23a
Network Debugging Experiments	23b
Experimental Host-Host Protocol (Kahn-Cerf)	23c
Remoting TENEX Peripherals	23d
	24
B. Intended Applications With Schedule:	24a
	25
MST Intelligent Terminal - Oct. '74	25a
Packet Radio Station - Oct. '74	25b
Speech Signal Processing - July '74	25c
Speech Compression - July '74	25d
	26
III. Hardware	27
	28
A. Current Hardware Configuration:	28a
	29
BBN-11X:	29a
	30
PDP-11/40 with EIS and Memory Management	30a
16K core	30b

Some Elf User Questionnaire responses

KW-11L Line Clock	30c
LP-11S Line Printer	30d
ANTS IMP Interface	30e
DH-11 (16 lines)	30f
	31
BBN-11XB;	31a
	32
PDP-11/40 with EIS and Memory Management	32a
24K parity core	32b
KW-11L Line Clock	32c
ANTS IMP Interface	32d
DH-11 (16 lines)	32e
	33
	34
B, Planned Hardware additions with schedule;	34a
	35
BBN-11X and BBN-11XB;	35a
	36
Kw-11P Programmable Clock	36a
	37
BBN-SPEECH;	37a
	38
PDP-11/40 with EIS and Memory Management	38a
40-48K parity memory	38b
KW-11P Programmable Clock	38c

Some Elf User Questionnaire responses

DL-77D EIA Interface	38d
SPS-41	38e
Telefile DC16H/DD213 disk	38f
A/D - D/A converters	38g
IMP Interface	38h

39

IV, ELF Support Which Site Can Supply

40

41

A. Staff:

41a

42

1 "full time" systems programmer

42a

43

B. Hardware Maintenance:

43a

44

One hardware man with PDP-11 training

44a

45

C. Software Maintenance:

45a

46

1-2 programmers

46a

47

D. Site-specific Software development:

47a

48

Cross-Net debugger, bootstrap

48a

Kahn-Cerf TCP

48b

49

Some Elf User Questionnaire responses

E, Documentation:	49a
	50
Specs and Manuals for above, Willing to help with ELF	50a
documentation,	50b
	51
V, Central ELF Support desired	52
	53
A, Hardware Maintainance:	53a
	54
None	54a
	55
B, Software Maintainance:	55a
	56
New system releases, bug fixes etc,	56a
	57
C, Site-specific software developement:	57a
	58
None	58a
	59
D, Full description of system, installation guide etc,	59a
	60
VI, Special Site Requirements	61
	62
A, Facilities; Reasons; Schedule:	62a
	63

Some Elf User Questionnaire responses

XNCP; for DDT experiment; ASAP	63a
Virtual Memory; for same; ASAP	63b
Ability to run user code; for TCP; ASAP	63c
DH-11 drivers; for terminal support; ASAP	63d
Local File System; For MST, Speech; July '74	63e
Support of scope terminals; for MST; Oct, '74	63f
Multi-telnet; for MST; Oct, '74	63g
Server TELNET; for Speech system; July '74	63h

Vii. Comments

We are willing to share in the development work on
the system.

Eric Mader

30-APR-74 12:22:25,1039

Net mail from site OFFICE=1 rcvd at 30-APR-74 12:22:17

Date: 30 APR 1974 1223-PDT

From: NSA at OFFICE=1

Subject: ELF user svy

Some Elf User Questionnaire responses

----- 78

79

80

81

82

Dave, 83

84

Here's the answers to the ELF questionnaire, Some of the answers
are 84a

quite vague and will be subject to change do to our present
unsettled 84b

position, 84c

85

I, Id, 85a

86

a, National Security Agency 86a

87

87a

88

NSA@office-1 Attn Dennis L, Mumaugh 88a

89

II, Elf appl. 89a

90

a, Monitor ELF developments 90a

91

b, Possible use as front end for net attachment (4Q Cy '74) 91a

Some Elf User Questionnaire responses

III. Hardware

b, PDP-11/45 48k; 2 RK05's; DH11; DECTape; LS11

IV. Support

Unknown

V. Support Rqd

Undecided

VII. Comments

Want to maintain full contact with developments. Any postal mail
 can be sent to the station agent for NSA, ATTN: Dennis Mumaugh,
 Also, would like a copy of the ELF Status Report you outlined in
 your letter to Dave Retz if possible

Thanks much, Dennis Mumaugh, Jess Hill

Some Elf User questionnaire responses

(J30592) 30-APR-74 17:12; Title: Author(s): David H. Crocker/DHC;
Distribution: /DHC; Sub=Collections: NIC; Clerk: DHC;

missing news

There's no news online.

1

missing news

(J30593) 30-APR-74 18:18; Title: Author(s): A. D. (Buz) Owen/ADO;
Distribution: /FEED; Sub-Collections: NIC; Clerk: ADO;

Memo=1

Authored by Jerry Standig

MEMO for Record

1

The Data Access System complex sells for \$295,00; rents for \$25/month.

1a

TP Networks: The 2701 is the control unit for the 2741 terminal (13,6 cps); the 2260 is the control unit for the 2260 (CRT) terminal. The 1053 is a line printer. The 3270 (CRT) terminal is an upgrade of the 2260 (larger screen, light pen, just more control for the user). The lead time to order all but the 3270 is 2-3 months. The 3270 lead time is 5 months.

1b

Manuals have been ordered and should arrive in 2-3 weeks.

1c

Apparently no performance studies on have ever been made on NIPS.

1d

MIDMS (Machine INDEP DMS) originally named CDMS (COBOL DMS) was written for DIA to be used in the 360. It never was reprogrammed for Honeywell WNWCCS. The Intelligence community at DIA now again using NIPS. Project MIDMS apparently dead.

1e

WWDMS: Query capability exists. Plan calls for syntax check of query in on-line mode with execution in batch mode. Current version referred to as B=2 DMS. B=3 planned for during April; probably be available end of summer. Capabilities considered to be far less than NIPS. My source believes that NIPS is the most powerful DMS today.

1f

Memo=1

NIPS: Fairly easy to use. Major drawback seems to be that each major module has its own command language (report writer, maintenance, etc.), each oriented toward job it has to perform,

19

There's apparently a large effort underway to evaluate Honeywell WWMCCS. This is sensitive in that the contract went to IBM. In fact, it's so sensitive, I've forgotten who told me,

1h

TP: TPMON (TP monitor related to I/O) and TP (SUPR) TP (supervisor) are proper parts of NIPS and included in NIPS documentation. The application becomes interactive with 2260, 3270, etc. by somehow going through TPSUPR which goes through TPMON and on to the terminal - becoming interactive with the user,

11

DPS/DDPS: Data Presentation System is NIPS compatible. It runs on the UNIVAC 1106. On-line DPS is somewhat NIPS compatible. Believe it or not the user manual contains some 2000 pages,

1j

April 2, 1974

2

by Jerry Standig

3

Memo-1

(J30595) 1-MAY-74 08:55; Title: Author(s): Rita Jordan/RJ;
Distribution: /RJ EDR2; Sub-Collections: DEIS; Clerk: RJ;
Origin: <JORDAN>MEMO,NLS;5, 4-APR-74 12:40 RJ ;

Standig-Memo-6

Authored by Jerry Standig

MEMO FOR THE RECORD

1

April 26, 1974

2

GM's initial MULTICS system is for Financial Management with emphasis on security. If successful, MULTICS will be considered for spare parts control system. No thought now given to use MULTICS for manufacturing control processing. Equipment arrived at GM but probably not yet operational,

2a

Eric Lamont was Honeywell salesman. Phone No. is (313)424-3596. I'll be in touch.

2b

Maj. General Robbins, A.F. Director of Data Automation (in control of Pentagon MULTICS) and Mr. Cotton (V.P. at GM) working together to induce Honeywell to "Shape the Product."

2c

I get the impression that the Delta Data 5200 (CRT with graphic capability); in TEMPEST test mode to be used with MULTICS. Delta Data has local office.

2d

Jerry Standig

2e

Standig=Memo=6

(J30596) 1-MAY-74 08:57; Title: Author(s): Rita Jordan/RJ;
Distribution: /RJ EDR2; Sub=Collections: DEIS; Clerk: RJ;
Origin: <JORDAN>STANDIG-MEMO=6,NLS;2, 29-APR-74 05:45 RJ ;