Basic information we needed to get going on Net with SNDMSG and READMAIL.

TIP	1
Dial the TIP -	1 a
MITRE: 893-3214-8	1a1
NBS: 948=5951=9	1a2
Establish Rate - type	1 b
e	151
Device Code Extra=Padding = on TI and Terminett	10
ed c e <cr></cr>	101
Establish a Connection -	1 d
81 2 <cr> - for SRI-ARC</cr>	1 d1
81 43 <cr> - for Office-1</cr>	1d2
You are now connected to the computer. The TIP only listens to you when you type the at-sign	1e
e	1e1
To actually send an at-sign to the computer, type two at-signs:	1f
80	1£1
To break a TIP connection, type -	19
@c <cr></cr>	191
You usually want to logout of the computer before you disconnect	11

TENEX	2
The TENEX herald is an at-sign. Wh margin), it means that TENEX is wai	
You may get to the TENEX herald at (Hold the "control" key down while	
To login to the computer, type:	20
login <cr></cr>	2c1
Computer asks: You res	pond: 2c1a
(USER) Name of	your group <cr> 2c1b</cr>
(PASSWORD) (This w	ill not appear) <cr> 2cic</cr>
(ACCOUNT #) <cr></cr>	2010
Then you may use any of the TENEX computer.	ommands and subsystems in that
To enter a subsystem, type the name carriage return. (Remember, <contr a="" and="" back="" of="" subsystem="" td="" tenex).<="" to=""><td></td></contr>	
To use a TENEX command, you may typ the first three or four letters fol The command must be terminated by a	lowed by a space or <escape>,</escape>
Type ? to see a list of commands.	29
To logout of the computer, type the	TENEX command: 2h
logout <cr></cr>	2h1
(After that, to break the connection	n with the TIP you type @c), 21

READMAIL	3
The READMAIL herald is a star *.	3 a
When you type a carriage return at the herald, it will print out your recent messages.	3 b
It will assume you want to read your MESSAGE.TXT;1 file unless you specify otherwise with the command	30
f (filename)	301
It will assume you want only messages that have never been read unless you give it a date with the command	36
d (date)	3d1
RUBOUT, or "DELETE" will cause it to skip over the rest of the message currently being printed, and go on to the next. (It sometimes takes the computer a while to respond to this command).	3e

SNDMSG	
SNDMSG asks for "USERS" (to which to send the message). A message may be sent to any number of people, however, their proper directory names must be used separated by commas (not spaces).	4
If the recipient's directory is at another computer site, follow the directory name with "@host-name". (Remember to type two at-signs if you are coming in through a TIP.	4a
SNDMSG then asks for "SUBJECT" (the title of the message), and then allows you to type the message. Terminate with a <cr>.</cr>	41
You may put carriage returns in the message. At the end of the message type <control=z>,</control=z>	4
To insert a sequential file in the text of the message, type: <control=b> and filename.</control=b>	4
Note: The following control characters may be used when entering the message:	4
<control=a> backspace character</control=a>	4e
<control-b> insert file at this point</control-b>	4e
<control+h> also backspace character</control+h>	4e.
<control*q> line delete (to but not including last <cr>)</cr></control*q>	4e
<control=r> retype current line or item</control=r>	4e!
<control=s> retypes entire text or all items</control=s>	4e
<control=w> deletes last word</control=w>	4e
<control*x> cancels entire text and all items (start over)</control*x>	4e
<control=z> terminates input, sends off the message</control=z>	4e

•	confirms that the message is rec	eeived in the directories to which it responding with:	
	name of directory - OK	-if it made it	58
	- queued	-if it did not make it but will try again later	51
	- can't	-if it did not make it and will not try again (perhaps misspelled	5/

(J30255) 19-MAR-74 13:49; Title: Author(s): Rita Jordan, N. Dean Meyer/RJ NDM; Distribution: /DVN ECW JCN JHB SJM; Sub-Collections: SRI-ARC DEIS; Clerk: NDM; Origin: <JORDAN>TENEX.NLS;7, 19-MAR-74 13:45 NDM;

Please send me the details of the INWG meeting in sweden (or at least the dates). Thanks.

(J30256) 20-MAR-74 07:15; Title: Author(s): Ira W. Cotton/IWC; Distribution: /VGC; Sub-Collections: NIC; Clerk: IWC;

501	urce	mely, current information on petroleum products and other s of energy are needed by various components of DoD to address ms such as:	1
	a,	Fuel allocations	14
	b.	Energy conservation	11
	c.	R&D programming	10
2,	Ki	nds of energy information needed include:	
	a,	inventories	28
	b.	Consumptions	21
	c.	Projected needs	20
	d.	Storage capacities	20
	e.	Distribution capabilities	26
	f.	R&D program progress	21
	g.	Supply statistics	29
	h.	Costs	21

- 3. Current information systems have data bases which contain many items of the energy information needed but they are widely distributed, often lack necessary detail, are difficult to access, and data contained is usually too old to be useful in current energy situation. Also, important information gaps are known to exist.
- 4, What is needed for proper management of DoD energy is an improved information system that addresses each of the problems, satisfies the data needs, and eliminates or minimizes the current information system deficiencies noted above,
- SRI has been retained under AN ARPA

  4. RRH not been retained the third of a RPA contract to study these problems, develop design concepts for improvements, design system modules and component that offer early improvements, test and evaluate these designs, assist in implementating pilot models of the improvements, and develop an overall approach to upgrading the current system capabilities in an evolutionary improvement program.
- 6. During the course of SRI's research project it is planned that meetings and other interactions will take place with many DoD

Notes for Possible Discussion Between DSA and DEO re: SRI DEIS Project

personnel using current energy information systems (DEO, DSA/DFSC, DDC, DDR&E etc.) in order to insure that the designs developed are as realistic and practical as possible. As potential users of any recommended improvements, the DoD individuals interacting with the SRI research project team may also benefit from early knowledge of what is being considered or designed. In this regard, SRI plans periodic demonstrations of design components, these demonstrations to be held in SRI's Rosslyn offices. Various types of problems will be cast in scenario form in order to show the system component or technique functioning on a problem oriented environment, simulated but as operationally realistic as possible.

7. It is believed that the systematic research that is being performed by SRI on this important energy related problem -- improving the way in which DoD's energy data is managed -- should be of wide benefit to several offices and agencies within DoD. your cooperation with members of SRI's project team seeking relevant data will do much to insure that SRI's findings and recommednations have the highest degree of potential feasibility and are sharply focused on real interests of DoD.

Notes for Possible Discussion Between DSA and DEO re: SRI DEIS Project

(J30257) 20-MAR-74 07:37; Title: Author(s): Arlie G. Capps/AGC; Distribution: /RAS; Sub-Collections: DEIS; Clerk: RJ; Origin: <CAPPS>NOTESI.NLS;5, 19-MAR-74 12:29 RJ;

Please consider this note before you proceed with further implementation work.

2a

2b

I have just accidently received a copy of the new NETED draft; the accident resulted from our trying to get NETED running at BBN to teach our secretaries, and the new draft filtering down from through several BBN people to one of our group (a non-computer type) trying to learn the language. He was somewhat distressed to see some changes happening in the spec and he called it to my attention. I was also somewhat distressed, both with the fact of change, and with the nature of the changes. In addition I was perturbed that the new spec had gone out to sites for implementation before the rest of the USING committee had seen it. With that introduction I offer my comments.

The new commands: Verify is all right, though I don't think it is essential to the simple editor NETED was intended to be. Since there are already implementations out in the field, I thought changes were to be discouraged as much as possible. But if you were going to make changes, you could have picked something more relevant to smooth working of the program—like fixing the pointer and print mechanisms, which I consider quite messy to use (see below.) As far as the prompt command is concerned, I find it difficult to believe that the editor was ever conceived without the prompt. If this simple editor is supposed to hold your hand all the way through, one of the most basic things is knowing when it is your turn to speak. Turning the prompt off is a totally unnecessary frill (same argument as above), and making the off state the default is foolish. Most users will never know when to begin.

Assuming that you are not going to remove this command (which I think you should give consideration to), I request that you at least light the presence of the prompt the default state,. feast make the presence of the prompt In addition I think the choice of \*(star) as the command name is poor, since it is too easily confused with the prompt itself. Any alphabetic character would be an improvement.

In the process of trying to teach people here to use NETED. I discovered that the p(rint) command leaves the pointer at the last line typed. I was horrified and wondered why I had never noticed this before. I checked back in the old specs and discovered that this very important fact was never mentioned in the description of the print command. Therefore I feel perfectly justified in complaining about this feature at this late date.

The p(rint) command should leave the pointer exactly where it was before the command was executed. Though some will say that this is a matter of personal preference, NETED has further problems to complicate this. NETED provides no way of knowing where you are in your file except by printing some lines. But in the middle of a complicated edit, you don't want to lose your place. One could

, of course, do P xx, and then N =xx, but large xx and end=of=file exceeded complicate this. I think you should give serious consideration to changing the specification of the pointer placement in the interests of simplicity for the user.

3a

There is no mention in the spec of conventions for line delete and char delete, general abort-what=I-have=just=done. If site-specific conventions are to be used, then this fact shold be explicitly stated.

Why is l(ocate) the only command (involved with moving the pointer) that places the pointer at the top of the file after hitting end-of-file. For consistency (i.e. simplicity for the user) it should match the spec for the other commands.

5

I hope you will now submit your latest spec to the entire USING committee for their further comments.

(J30258) 20-MAR-74 07:38; Title: Author(s): Nancy J. Neigus/NJN; Distribution: /NETED; Sub-Collections: NIC NETED; Clerk: NJN;

More Journal Hassles.

Marica -- I have just tried to submit a doucment as USING #12, nic # 22151 (also USERS # 5 and Nic # 20410) which were reserved by you, for me, several weeks ago. The journal says that there is "No such Number". I imagine the problem is with the two-machine journal.

Quite frustrating.

At any rate, the source file is [OFFICE-1] < UCLA = NMC > DHCDISBAND.NLS. Would you please submit it to the journal as the above-inidicated numbers and distributed to using and users?

Thanks.

More Journal Hassles,

(J30259) 20-MAR=74 14:24; Title: Author(s): David H. Crocker/DHC; Distribution: /BUGS MDK MLK; Sub=Collections: NIC BUGS; Clerk: DHC;

yngvar: jeg prover aa eksperimentere litt med nettet, jeg har ikk provd aa bruke journalsystenet for, det kunne forresten vart inerresant a prove aa faa til en slaga konversasjon, hvis vi ble enige om et tidspunkt kunne f.eks. du linke inn paa min terminal. dette er kanskje uaksepatbelt sett fra et "politisk2 synspunkt, hvordan gaaer det forresten med rbk's tilknyrtning? i tilfelle de er ig gang, nvilken maskin har de valgt? skal hilse fra yngvar kvarna, vi hadde en mini bridgeturnering for ikke saa lenge siden, hilsen torstein.

Message to yngvar lundh from Stanford

(J30260) 20-MAR=74 14:25; Title: Author(s): Torstein Haugland/TH; Distribution: /YL; Sub=Collections: NIC; Clerk: TH;

Ira: Meting August 10-11 in Stockholm. Details on location and hotels are waiting for confirmation from Kjell Samuelson. I will mail out announcements shortly. Vint

(J30261) 20-MAR-74 16:09; Title: Author(s): Vinton G. Cerf/VGC; Distribution: /IWC; Sub-Collections: NIC; Clerk: VGC;

DVN 20-MAR-74 16:34 30262

The Fate of Dreams and Bike

Rus has decided to drop the dram class for the rest of the quarrter since no one but W and I were comming regularly and we had a good foot forward to do it ourselves. He is going to do it again for Prometheus spring quarter.

The law commune is interested in the bikecall W there or Norton Tooby

The Fate of Dreams and Bike

(J30262) 20=MAR=74 16:34; Title: Author(s): Dirk H. Van Nouhuys/DVN; Distribution: /MAB2; Sub=Collections: SRI=ARC; Clerk: DVN;

Scheduled Software Maintenance

This is a reminder that Network Software Maintenance is scheduled between the hours of 0700 and 0900 (Eastern Time) on Tuesday, 26 March 1974. Although software releases are checked out as much as possible in the BBN test cell, there are sometimes problems of scale which are not detected until after a release; hence there is a small but finite possibility that the software will be troublesome for a few hours after the scheduled release. Sincerely, Alex McKenzie (for the Network Control Center)

Scheduled Software Maintenance

(J30263) 21-MAR-74 05:53; Title: Author(s): Alex A. McKenzie/AAM; Distribution: /RADC NLG; Sub-Collections: NIC RADC NLG; Clerk: AAM;

Help

I have a message from you consisting only of a pointer to HJOURNAL, 21997. I have been unable to load or otherwise obtain this file. If you want me to read your message, please either send it in its entirety or tell me how to access it.

(J30264) 21-MAR-74 06:38; Title: Author(s): Ira W. Cotton/IWC; Distribution: /JEW; Sub-Collections: NIC; Clerk: IWC;

Tried and failed

Tried and failed

Dave, I tried to do it and got the same "nos such number "response. Don't know what the problem is so I'm complaining to Dave Hopper. I agree, it IS maddening. I suggest, if you are in a hurry to get the note out, to just submit it with a default number, and we'll use that number in our records here. Just let me know what the number is (or put me on the distribution list for it.) Sorry for the hassle --

Tried and failed

(J30265) 21-MAR-74 08:41; Title: Author(s): Marcia Lynn Keeney/MLK; Distribution: /DHC; Sub-Collections: SRI-ARC; Clerk: MDK;

Address to MacPhail's journalism students from Carlton,

(ma	acphail) Address to MacPhail's journalism students from Carlton	1
	basic SPRITE Home Tech. Assess. talk	1a
	detail on how it relates to journalism:	16
	many different types of media represented by journalism	10
	radio and television	101
	newspapers	1c2
	magzines of different kinds	1c3
	also, many different types of journalism content	1 d
	investigative	101
	current events	1d2
	entertainment	1d3
	informative (general information)	1d4
	instructional	1 d 5
	editorial .	1d6
	What will be the impact of these wired city type services on "1"pph"1, tp"dhthnn"1 jntrn"lhri >	1 e
	This is a difficult one for me, a communication planner, to answer. Perhaps we could spend our time more profitably by my relating to you the areas affecting journalism that are likely to change, and let you interpret how these changes could alter the role of the journalist in the future, and then tell me.	1e1
	Areas relating to journalism that are likely to undergo	
	significant changes in the foreseeable future.	1f
	average disposable income	1f1
	able to afford more information (indeed if the consumption of information will be seen as coming out of disposale	
	income	1f1a
	maybe it should be seen as coming out of the same accounts as food, shelter, etc.	1f1b

information consumed: more selective	1f1c
disparities in average disposable income	1£2
information-rich and information-poor classes in society	1f2a
only if there is a price tag on information, wich the above trend would seem to encourage, or at least promote	1f2a1
cyclical problem: no money => no information => no access to money-earning potential,	1f2b
amount of time people will be spending in their residence	1f3
more time at home -> increased need for comm*ns with outside world	1f3a
less time at home -> more exposure to the world : comm'ns needs will change	1f3b
amount of time spent travelling from one place to another	1 £ 4
more time travelling -> less of a fixed address (decline in importance of Postal Service	1f4a
more time travelling -> geographic remoteness (compensated for by telecomm'ns.	1f4b
changes in education mix of the population	1f5
ability to access information (how to ?)	1f5a
importance of information content and sources (why bother ?)	1f5b
diversity of content offered will change with education mix	1f5c
scarcity of resources ( paper and energy)	1f6
declines in paper and in energy resources point to increasing reliance on telecomm'ns, in the future	1f6a
decreasing costs of telecommunications	1£7
transmission costs are plummeting, but other costs appear to be more important	1f7a
storage costs for information are still high (but dropping)	1f7b

**production costs** high now, no breakthroughs on the horizon	1£7c
this appears to be a major stumbling block for a number of potential wired city type services;	1f7c1
we may have 70 full video channels going into a community, but what do you put on them besides old movies and time-and-temperature charts ?	1f7c2
increasingly telecommunications-sophisticated population	1 £ 8
touch-tone as a data entry device	1f8a
computer-switched calls for reservations, etc.	1f8b
DDD dialing presents no problems; people think nothing of phoning across the contry for Directory Assistance; the distance has become almost invisible to the caller;	1f8c
granted, when he makes the call, the "visibility" of the distance becomes considerably greater, but this in itself reflects the fact that the caller is sophisticated - he knows which are the cheap calls and wich are the more expensive ones.	1f8c1
we're back where we started, because not everyone of our sbscribers is this sophisticated, and the problems we're encountering now may be the forerunners of the problems that the journalism profession will have to face up to or live wth some day in the not to distant future.	1f8d

Address to MacPhail's journalism students from Carlton.

(J30266) 21-MAR-74 15:15; Title: Author(s): Michael T. Bedford/MIKE; Distribution: /MIKE; Sub-Collections: NIC; Clerk: MIKE;

Notes for the Toronto talk for the Dept. of Trans. and Comm.

Notes for the toronto talk to the Dept. of Trans, and Comm.	1
During all of this talk, i am assuming that someone else, either yo or Don has explained the background of BPG, including:	1a
location in company structure	1a1
objectives	1a2
mthods of operation	1a3
etc.	1a4
home ta	1b
background	161
hnhth'l ddlphh rttdx nn the home services what services looked most probable	1b1a
purpose	162
to determine what direction the technological emphasis was taking are there some real problems that must be overcomewhat will the side-effects of some of these services be ?	1b2a
methods (methodology = SPRITE	1b3
what is sprite ?	1b3a
sequential polling and review of interacting teams of experts	1b3a1
identify groups or disciplines with a stake in the future of the these services (that is, their future development) and get them to compare note re their assumption, expectations, and fears re the development of the services.	1b3a2
asking the groups to pool their knowledge and develop some forecasts abot the future of a particular technology (tr'dhthn'llx( nr prnbdrr	1b3a3
How is sprite different from Delphi ?	1b3b
who are the experts ? Sprite recognizes that definitions vary,	1b3b1

	accent on identifying differences rather than on coming to a conclusion	1b3b2
	reliance on comments for developing subsequent round, rather than on the statistical data	1b3b3
aı	reas covered	164
	privacy (with respect to other people)	1b4a
	securtiy (with respect to data)	1b4b
	interpersonal relations (expected changes in how we relate to people)	1b4c
	time (how much more free time, how will we spend it ?)	1b4d
trv1	- comm'ns	10
pı	irpose	101
	to develop a better understanding of what factors motivate businessmen to travel rather than use comunications media, and to understand what aspects of their travel could be substituted for by these same media, or pedia that are bing	
	developed,	1c1a
m e	thods	1c2
	survey of some 40,000 business travelers, traveling between Montreal and (Toronto, Ottawa, and Quebec City), and Toronto and (Ottawa). 9000 replys expected,	1c2a
	cooperation between many different groups, each with a vested interest in the results was necessary. Some of cooperating groups included:	1c2b
	Air Canada, CP Air, CN Rail, Voyageur Bus, Gov't, of Guebec,	1c2b1
pa	rameters around which the questionnaire was based	103
	corridor being traveled (even the idea of a corridor is crucial)	1c3a
	type of company or institution sponsori he trip, and h travelers situation in that company	1c3b
	principle reason or purpose for making the trip	1c3c

secondary reasons for the trip (business and non:business)	1c3d
nature of communication process that will dominate the meeting, ie:	1c3e
bargaining	1c3e1
decision-making	1c3e2
courtesy or persoal relations	1c3e3
security or confidentiality required	1c3e4
duration of the trip	1c3f
types of face-to-face communication that might have been replaced by telecommunication. Examples:	1c3g
showing visual material	1c3g1
talking to a number of people at one time	1c3g2
talking to a number of different groups in the course of the day.	1c3g3
areas for further workwhere has it lead us	1c4
intra-city transportation elements	1c4a
energy consumption: travel vs, communications	1c4b
visual	1 d
conference T.V.	1d1
computer conferencing	1 e
general idea new form of interaction	1e1
asynchronous comm'n, with sophisticated retrieval capabilities	iela
personal touches possible like anonymous messages, confidential messages, etc.	1e1b
input management routines; don't enter this comment until Larry has already read the text once; don't enter this comment until Nov. 28, etc.	1e1c

some specifice examples of how it can improve communiscations	1e2
able to hold conferences "out of time", "out of place"	1e2a
the fact that it is a formal conference tends o keep everyone on the right subjectnot much jumping	
around, chairman can control direction of he conference,	1e2b
it's democraticeveryone gets a voice	1e2c
even though everyone is speaking, you do't have to listen to you can be selective	1e2d
saves listeners' time	1e2d1
encorages speakers to be concise	1e2d2
continus_ally updated written record of proceedings is available	1e2e
to go back in the conference to confirm anything without disrupting proceedings	1e2f
some examples of conf'g. systems we're using	1e3
BNR = used mainly as a message service ad project documentation aid. Very little interactive, simulataneous communication, very easy to retrieve past messagesby	
number, by date, by author, or by content	1e3a
Institute for the F = used mainly as a project development and coordination aid	1e3b
Englebart's ARC - not as useful for cofeencing as the above two, but it has a host of information management rotines that let yo get right into another planner's work and	
observe what he is doing, how he operates, wat his style is, what his priorities are, etc.	1e3c
more detail on the Englebart system.	1e4
Initial reactions to a lot of the people we talk to are skepticalthey wonder how anybody could work in that sort of environment, ie, with someone peering over their	
shoulder all the tme	1e4a
actually the reverse is true, the wrker becomes more productive, rather than less productive the increased	

productivity stems, we believe, from the improved

MIKE 21-MAR-74 15:17 30267 Notes for the Toronto talk for the Dept. of Trans. and Comm.

communications within his community of related planners	or
researchers. He has access to the ideas, thoughts, schedules, procedures, etc. of the community.	1e4b
how to give credit for work done	1e4b1
synergy at work	1e4b2
comunity's structuring of heir own informato must be key importance.	of
key importance.	1 n 4 h 3

Notes for the Toronto talk for the Dept. of Trans. and Comm.

(J30267) 21-MAR-74 15:17; Title: Author(s): Michael T. Bedford/MIKE; Distribution: /MIKE; Sub-Collections: NIC; Clerk: MIKE;

1

This is a test message to check out Network Journal submission,

4

5

Test of NJS

(J30268) 21-MAR-74 15:43; Title: Author(s): James E. (Jim) White/JEW; Distribution: /JEW; Sub-Collections: SRI-ARC; Clerk: JEW;

Test of SNDMSG from Office-1

This is a test to see if title is retrieved, and to test from Office=1 addressing at NIC.

Test of SNDMSG from Office=1

.

(J30269) 21-MAR-74 15:47; Title: Author(s): Jeanne B. North/JBN; Distribution: /JBN; Sub-Collections: SRI-ARC; Clerk: JBN;

## Initial test

Message:			

Test from Case-10

Initial test

(J30270) 22=MAR=74 07:33; Title: Author(s): Jerry D. Burchfiel, Clayton A. Greer, Mil E. Jernigan, Harvey G. Lehtman, Craig Fields, John D. Day, Robert H. Thomas, Alan R. Hill, Abhay K. Bhushan, Robert P. Blanc, Barbara Noble, Leroy (Lee) C. Richardson, Frank G. Brignoli, Elizabeth J. (Jake) Feinler, Michael D. Kudlick, James E. (Jim) White, Michael A. Padlipsky, Kenneth L. Bowles, A. Wayne Hathaway, Jean Iseli, David H. Crocker, Nancy J. Neigus, Stephen M. Wolfe, Ronald M. Stoughton, Jim O. Calvin/USING; Distribution: / NCMT; Sub=Collections: USING; Clerk: USING;

DON AS BRS2 TO HIMSELF AND BRS2

THIS SI DON LOGGED IN AS "NBS-TIP, ARPA, 3, BRS2" SENDING DON AND BRS2 A MESSAGE. BYE

(J30271) 22=MAR=74 07:46; Title: Author(s): Barbara R. Sternick/BRS2; Distribution: /DON BRS2; Sub=Collections: NIC; Clerk: BRS2:

## USING 22-MAR-74 07:54 30272

## Test 2

Message:			
	test	from	Case=10

1

.

-

Test 2

(J30272) 22-MAR-74 07:54; Title: Author(s): Jerry D. Burchfiel, Clayton A. Greer, Mil E. Jernigan, Harvey G. Lehtman, Craig Fields, John D. Day, Robert H. Thomas, Alan R. Hill, Abhay K. Bhushan, Robert P. Blanc, Barbara Noble, Leroy (Lee) C. Richardson, Frank G. Brignoli, Elizabeth J. (Jake) Feinler, Michael D. Kudlick, James E. (Jim) White, Michael A. Padlipsky, Kenneth L. Bowles, A. Wayne Hathaway, Jean Iseli, David H. Crocker, Nancy J. Neigus, Stephen M. Wolfe, Ronald M. Stoughton, Jim O. Calvin/USING; Distribution: / NGRP; Sub-Collections: USING; Clerk: USING;

test 2

Message:

test from Case=10

1 2

test 2

(J30273) 22=MAR=74 07:57; Title: Author(s): Jerry D. Burchfiel, Clayton A. Greer, Mil E. Jernigan, Harvey G. Lehtman, Craig Fields, John D. Day, Robert H. Thomas, Alan R. Hill, Abhay K. Bhushan, Robert P. Blanc, Barbara Noble, Leroy (Lee) C. Richardson, Frank G. Brignoli, Elizabeth J. (Jake) Feinler, Michael D. Kudlick, James E. (Jim) White, Michael A. Padlipsky, Kenneth L. Bowles, A. Wayne Hathaway, Jean Iseli, David H. Crocker, Nancy J. Neigus, Stephen M. Wolfe, Ronald M. Stoughton, Jim D. Calvin/USING; Distribution: / NCMT; Sub-Collections: USING; Clerk: USING;

DON TO BRS2 AND DON

DON LOGGED IN AS "MIT-MULTICS", ETC. TRYING TO GET MAIL TO BRS2. HELLO THERE, BRS2.

(J30274) 22-MAR-74 08:09; Title: Author(s): Don Cantor/DON; Distribution: /BRS2 DON; Sub-Collections: NIC; Clerk: DON;

(Serial) number:		1
(Name)(s) of Travele	r(s): John McNamara	1 a
(Symbol): ISIM		16
(Date) of Departure:	5 March 1974	10
(Number) of days: 5		1 d
(Clearance): Secret		1 e
(Destination): Mitr	e Corporation, Burlington, MA	1 f
	To participate on SADPR-85 Study (Support to ssing Requirements thru 1980s)	19
(Person)(s) Contacte	d: n/a	1h
(Mode) of Travel: P	/c	11
Govt:		111
Comm:		112
Priv: x		113
(Job) Order Number:	99918A85	1 j
(Directed) by or non	-directed: Directed	1k
(Cost) estimated		11
(Air) fare:	n/a	111
(Car) rental:	n/a	112
(Per) diem:	\$125,00	113
(Auto) Personal:	\$72.00	114
(Total):	\$197,00	115
(Advance);	0	116
(Time) and Date of M	eeting: n/a	1 m
(Special) travel arr	angements, instructions to the secretary, etc:	1n

(J30275) 22-MAR-74 08:31; Title: Author(s): Anna A. Cafarelli/AAC; Distribution: /RJC; Sub-Collections: RADC; Clerk: AAC;

DON TO BRS2 AND DON

DON LOGGED IN AS "MIT-MULTICS" SENDING A MESSAGE THROUGH THE JOURNAL TOBARBARA, HELLO THERE, BRS2.

(J30276) 22-MAR=74 08:32; Title: Author(s): Don Cantor/DON; Distribution: /DON BRS2; Sub-Collections: NIC; Clerk: DON;

final words from carl

vint,

I have had a very nice week down here, enjoying the scenery, visiting friends, and playing with the net a little. next week I will be skiing and hiking and otherwise far from a terminal, so I will talk to you first thing next quarter, bye for now, carl

(J30277) 22=MAR=74 12:51; Title: Author(s): Carl A. Sunshine/CAS; Distribution: /CAS; Sub-Collections: NIC; Clerk: CAS;

## I. Introduction

1

The concept outlined here has grown out of several discussions during this week in which Capps, Schmidt, Watson, Brown and I participated, although not all at once. I have undertaken to set the concept to paper so that:

1a

. we may formally concur on the points on which we all agree and that we think the client will accept;

1a1

, we can identify those aspects needing further clarification; and

1a2

. we can pinpoint the matters on which disagreement exists.

1a3

I propose that we revise this outline as we progress in our understanding of the client's problem and as we add to the points on which we agree and further detail those on which we already concur. In this way, I hope we can transform the document into a description of the system we design to meet the client's needs. Hopefully, this document will also contain our perspective of the problem(s) the client is tackling with the aid of our system. However, in this memo, I do not intend to say anything about the client's problems, only to describe a bibliographic storage and retrieval system. A fairly wide variety of problems may find the capabilities of the system of use. We will attempt to narrow the pidd ld pt'h probldr hn dhrbtrhnnr with this bidnet th't will be held concurrently with demonstrations, tests, and experiments in which we hope he will participate.

16

range of such problems in discussions with the client that will II. Basic Concept

2

The system is intended to give a small community of key DoD R&D planners rapid, trustworthy resonses to those questions about energy R&D projects that can be answered on the basis of the status data maintained by organizations such as NTIS, PIC, Engineering Index, AEC, NASA, ISI, SSIE, etc. In performing this service, the system will rely heavily on a group of experts in energy matters who are also familiar with all the major sources of status information on energy R&D projects. This group and the equipment they will use constitute an Energy Problem Analysis Center (EPAC) to which system users will submit their questions.

2a

The EPAC will have two major functions:

2a1

. The provision of rapid answers to the users questions.

2a1a

. The construction and maintenance of an integrated data base of R&D energy project status information that will

allow the most rapid, accurate, and complete answers to be generated to users' questions

2a1b

The users of the system may send their questions to the EPAC in the way that best suits them at the time, be that in person, by mail, over the telephone or by remote terminal over the ARPA network. The questions themselves may be in any of a wide variety of forms, as it suits the needs of the users. The form can be a general statement of an R&D management problem in the energy field with a request that the EPAC team come up with whatever information it thinks would assist the manager. This type of question would call for deductive reasoning by the EPAC experts and would require the use of a good deal of judgement on the requestor's behalf, particularly if he puts a strict upper limit on the amount of material he wants to receive from the search. The other extreme, as far as specificity is concerned, would be represented by the submission, by the requestor himself through his terminal on the ARPA network, of bn.nrdhn'td.hnddx,tdrl rd'rbh dhrdbtdd tn the computer-searchable R&D project status data base accessible on the network. a co-ordinate-index-term search directed to

2a2

III. Implementation of the System

3

It is now visualized that the system can be implemented mainly using computers and programs available soon on the ARPA network. The implementation described below will be achieved through a transition phase, discussed in the next section. The version of the system implementation now outlined is not the one expected after several years of operation: it shows the direction in which we would be heading during the initial operating period in which an integrated R&D project status data base was being accumulated.

3 a

The main elements of the system implementation and their relationships are shown in Fig. 1. The EPAC will contain not only terminals, giving access to the ARPA network, but also terminals or other ways of searching well-recognized, machine-readable repositories of R&D project status information, such as DDC, DIALOG, AEC and NASA. The energy experts at the EPAC would also have available files of similar data that are presently not labeling the bld, rtbh ir thank of the Power Information Center ((PIC).

36

machine-Searchable, such as those of the Power

It is intended that a file of index terms used in describing energy R&D projects be kept in computer memory at OFFICE=1. These index terms could be displayed in a hierarchal structure that would serve to define how they are used or lexically arranged to be in the form of a thesaurus. Those energy R&D project status reports that have been assembled into an integrated data base will

be stored in the Datacomputer and will be selectively accessible over the ARPA network through search queries formulated in Datalanguage. These search queries—logical combinations of allowable index terms—will be put together by the energy experts at EPAC as they explore on OFFICE—i the index terms available and as they choose the most suitable ones for retrieving the data they need. In making this choice, they will be guided by the number of items in the data base that would be returned in response to each term or combination of terms. The Datacomputer will give this information in response to a request for it.

Only after the EPAC expert is satisfied that he will get back from Datacomputer approximately the number of items he deems appropriate and no more, will he call for the actual items. At that, he will probably inspect a sample of the returns to be sure that he is on the right track, before he asks that the full product of the search be transmitted to him. Frequently, this search will merely provide the expert with a reduced number of hopefully more pertinent items for further scutiny, compared with those in the main integrated data base. The string search capabilities inherent in OFFICE=1 will enable the EPAC staff to whittle down automatically the number of items that must be read in full in order to achieve the desired recall and precision ratios.

After searching the integrated data base of energy R&D project status reports, the energy expert at the EPAC may want to check other similar data bases items from which have not yet been incorporated in the one kept in the Datacomputer. He can do this by using the terminals in the EPAC that allow automatic searches of the data bases in question to be conducted. He can also search paper files containing additional data that have not yet been reduced to a machine-readable form. Naturally, he can turn to those sponsoring and conducting programs of special interest to the original requestor for the very latest status information. He would undoubtedly make such a check before giving a final response to the requestor in those events where currency of the data was of the essence.

The nature of the EPAC reply, the manner of its transmission, and the response time would be made as closely reflective of the requestor's needs as possible. Rapid, partial responses to questions demanding some information as soon as possible would be followed up by more detailed and complete answers. The most important feature of this aspect of the service will be the ready availability to the requestor of good estimates of the relationship between response time and recall and precision ratios for the data recovered.

3C

3d

3 e

IV	, Steps Between System Design and Full Operation	4
	There are ten major activities that will characterize the EPAC. The first six have to do with the establishment and maintenance of an operational system based on the design ideas we have already discussed. The last four concern themselves with actual operations and with the answering of requestors' guestions. In the order in which they would be undertaken the first set of six are:	44
	. Acquisition of status reports of relevant R&D projects from known repositories of these data.	4a1
	. Extraction of index terms from available thesauri applicable to the status reports chosen and to the energy R&D field.	4a2
	. Indexing of unindexed reports and checking for completeness of those already classified.	4a3
	. Construction of hierarchal trees and a thesaurus for the selected index terms to indicate their meaning in accessing the status reports.	484
	. Obtaining information on a regular basis that will update the status reports already incorporated into the integrated data base.	4a5
	The four activities that mainly have to do with the operation of the system on behalf of the requestors are:	41:
	. Answering requestors questions by use of the information storage and retrieval tools of the system.	461
	. Monitoring the requestors' questions and accumulating statistics on their:	4b2
	- frequency	4b2a
	- subject matter	4b2b
	- response time required	4b2c
	- type of project involved	4b2d
	decision being made by requestor	4b2e
	- identity of requestor	4b2f

. Assessing of the performance of the system by evaluation of

the degree of satisfaction that the answer evokes from the requestor.	4b3
Familiarizing the requestors with the capabilities of the system and with the contents of its data bases as well as indoctrinating the requestors staffs with the operating procedures for the system.	464
The manner in which operations are conducted at EPAC will rest largely on the degree to which all the status reports that have to be searched are brought into an integrated data base that is maintained current. Since some of the status reports needed will reside in data bases searchable only through systems maintained by others, there will always be a requirement for the EPAC staff to:	40
, have facile access to such systems;	401
. be thoroughly familiar with the indexing techniques used in each such system; and	402
, be aware of the strong points and the shortcomings of these systems,	4c3
As time goes forward every effort will be made to bring all pertinent status data into the integrated data base and to shape this information source to the requestors' needs as reflected in the monitoring of questions.	4d

My Version of the Concept of the ERDC

(J30288) 26-MAR-74 11:12; Title: Author(s): Oliver W. Whitby/OWW; Distribution: /AGC OWW RAS; Sub-Collections: NIC; Clerk: OWW; Origin: <WHITBY>ERDC.NLS;5, 26-MAR-74 11:09 OWW;

BANANAS

AUSGERECHNET BANANEN BANANEN VER; ANGT SIE VON MIT!

(J30289) 26-MAR-74 05:36; Title: Author(s): Don Cantor/DON; Distribution: /BRS2; Sub-Collections: NIC; Clerk: DON;

FOO

BRS2 TO DON AT 9:10 TUESDAY

(J30290) 26-MAR-74 06:11; Title: Author(s): Barbara R. Sternick/BRS2; Distribution: /DON; Sub-Collections: NIC; Clerk: BRS2;

9:15 TUES

DON TO BRS2 AT 9:15 TUES.

(J30291) 26-MAR-74 06:15; Title: Author(s): Don Cantor/DON; Distribution: /BRS2; Sub-Collections: NIC; Clerk: DON;

Jean -- I do not understand why Netcomment and Netgripe are unacceptible as idents. I a am not aware of length limitations for signons.

At any rate, I think that the approach ARC has taken is best: Create a good mneumonic ident and have that be a group ident. Have the appropriate people be members, as well as some other ident (e.g., the ones you have alread chosen (ncmt)) as the central collecting point for that category of mail. That is, Netcomment is the entry point for such mail, It is then distributed to the appropriate people and to Ncmt (in <USING>).

I believe NCMT and NGRP are wholly unacceptible as idents to be used by humans; and contrary to your current assumption, the idents WILL be used by humans, unless you are planning to LIMIT comments and gripes to only those sent thru your special tools.

The special tools are great, we need them, But there are other mechanisms for sending mail and we should try to fit within them.

Dave,

(J30293) 26-MAR=74 11:51; Title: Author(s): David H, Crocker/DHC; Distribution: /FEEDBACK NJN MDK JAKE; Sub-Collections: NIC FEEDBACK; Clerk: DHC;

Reserved Number Journal Bug Status?

Marciaa -- what is the status of the USING 12/Journal bugged note? I decided to wait until the bug is fixed, but would like some idea as to how long it will be. Thanks.

1

Reserved Number Journal Bug Status?

(J30294) 26-MAR-74 11:54; Title: Author(s): David H, Crocker/DHC; Distribution: /MLK JDH; Sub-Collections: NIC; Clerk: DHC;

EXECUTIVE SUMMARY

INTRODUCTION

Under an ARFA sponsored research project SRI is in the process of developing designs for components of an overall Defense Energy Information System (DEIS). One component, referred to here as the Energy R&D component (ERDC), is being tailored to meet the specific needs of the energy R&D community of the DoD. As a part of this particular effort SRI has planned that a pilot version of the ERDC be implemented in order to test the utility of the design and to obtain guidance from the user point of view for further ERDC development.

2a

This document has been prepared by SRI solely for use in ERDC project related discussions with members of the DoD's energy R&D community. For example, the initial pilot test program described herein assumes that selected members of the community would be participants. This and other key features of the plan should be reviewed. The background and major points of the pilot program are covered in the main body and appendixes of the report. Highlights of the problem, the concept of the pilot test program, the pilot system configuration, and what the tests would entail are given below in this summary section. Also included in this summary is a brief discussion of where this ERDC design effort is aimed beyond the pilot program.

26

THE PROBLEM ADDRESSED

3

....A large number of DoD organizations comprising a widely distributed community perform or sponsor energy=related R&D. This community at present does not have "energy" as a principal focus.

3a

....Present information handling and processing systems structured or designed for other purposes, have been judged inadequate by various members of DoD to serve as information systems for DoD energy R&D. With their use alone it is not possible to keep abreast of rapid progress in accelerated

energy R&D programs within the DoD community nor in non-DoD energy research programs as well.

3b

.....Improvements or a new system are needed to provide convenient means to acquire information readily and in a timely fashion == information to aid current decision=making concerning Dod energy R&D matters (typically, priority establishment, program guidance, and advance planning) and information for analyses designed to optimize R&D impacts on energy conservation and operational effectiveness.

3c

## THE CONCEPT OF THE PILOT TEST PROGRAM

4

.... The short and long range objectives of an energy R&D component (ERDC) of the Defense Energy Information System (DEIS) are derived from the November 1975 Report to the Secretary of Defense prepared by the Defense Energy Task Group (DETG) and from additional inputs from DDR&E, ARPA and others in the DoD energy R&D community.

4a

....A data file structure is devised by which data may be organized on significant energy R&D, both DoD and non-DoD, and related to the objectives of the ERDC.

46

....A limited set of data files is compiled by SRI energy and information system specialists and is then entered into the data structure in the form of a computerized data base.

4c

.... Key members of the DoD energy R&D community are identified from which a limited group is selected (Initial User Group) who would make trial use of the data structure and the data bases.

14

.... An interactive computer network is made available to the initial users to permit easy, rapid access to the data structure.

4e

....The pilot test program is implemented and serviced by members of SRI's Energy Problem Analysis Centers (EPACS) currently engaged in the DEIS program overall. They are to provide

interfaces between the users and the test data bases, provide user orientation and training, and receive user reactions.	41
THE SUGGESTED PILOT TEST CONFIGURATION OF THE ERDC (See Figure S-1)	5
The structure of the data base would be as shown in Table S=1.	56
The following individuals from the indicated DoD	-
organizations are suggested to become the Initial User Group:	51
ARPA; Black, Russell, Church	5b1
ARFA; BIGCK, RUSSELL, CHUICH	
DDR&E Ziem	5b2
Army; Warnock	5b.
	5b4
Navy; Petzrick	
Air Force; Yarymovych	5b5
The network to link the users to the data files would be the	50
ARPANET.	
The limited set of test files covering Solar Energy and	
Geothermal Energy will be compiled by SRI and entered in Office=1 (See Figure S=2 for example).	5
SRI EPAC-East in its Washington office would be available to	
provide user training. SRI EPAC-West in Menlo Park, California would compile the test files and enter them in	
Office=1 computer thereby making them available to users	-
through ARPANET.	5
THE TESTS	

The pilot tests of the ERDC would entail:	6a
Users accessing the test data bases to gain experience concerning the degree to which the ERDC would meet their needs in terms of design features such as data structure, level of detail in file content, and network performance,	65
EPAC's compiling user reactions and evaluating them for impacts on possible future design refinements or changes. Experience gained will also aid in development of ERDC implementation plans particularly in terms of schedules and costs.	60
THE FUTURE OF THE ERDC	7
Immediate advances in ERDC development beyond the specific objectives of the pilot program but made possible by its implementation could include:	7 a
Creation of directories of community members by area of expertise as an additional data file,	7a1
Exchange of messages via ARPANET among initial users,	7a2
,Collection and integration of sample items of high R&D interest in an exemplary newsletter for distribution over the ARPANET,	7a3
Maintenance and indexing of minutes of meeting of energy R&D working groups.	7a4
On-line conferencing.	7a5
The following additional capabilities are envisioned for ERDC as it evolves beyond the pilot configuration into a fully operational mode (shown in the diagram Figure S- by the dotted lines).	8

facilities.	8a
Analytical manipulation of ERDC numerical data using the Multics system.	86
Selective dissimination of information derived in analyses utilizing ERDC data bases to members of the DoD community.	80
A time-phased expansion of the user community to include all or selected members of the hierarchy or DoD energy R&D	0.4

(J30295) 26-MAR-74 12:17; Title: Author(s): Rita Jordan/RJ; Distribution: /AGC; Sub-Collections: DEIS; Clerk: RJ;

The following is offered as a substitute "Executive Summary" to that shown in the document I provided you last week, we have attempted to sharpen the focus of the summary and place emphasis on central issues thereby orienting the reader to the body of the report.

Responses to some Data-path Syntax spec comments, especially NIC 30235

Oh yes, please let me know what other <key>s you think should be added. I feel less cautious about including them in the spec. Protection and Version number are obvious, what others?

Responses to some Data-path Syntax spec comments, especially NIC 30235

Jon -- with regard to Paper tape, how about our haiving the following: CARDREAD, CARWRITE, PAPEREAD, PAPERWRITE, with short forms CRD, CWT, PRD, PWT? Somehow, I'm not happy withthem, but can't think of any better.

Buz == Your point is very well taken, I've been going nuts trying to think of a clean solution. The problem with your proposed solution (i.e., DIR[>udd>CNet>anonymous>Owen]FILE(...) is that the "internal" delimeter (>) is not defined; and though a human can parse it easily, a process won't be able to.

I have thought of the following, so far:

DIR[[udd][CNet[anonymous][Owen]FILE[... and

DIR[][udd][CNet][anonymous][Owen]

which both have serious probmes, visually and otherwise, The first requires that the left=dellimeter be a left=bracket character (e.g., slash would not be ok) and the second is still pretty ugly, the an improvement in the original spec.

I am inclined to think we are stuck with the latter as a sub-optimal solution; but would love any other suggestions you may have to improve it. I really would like an NSDP spec'd pathname to be visually attractive. It will make a big difference on its aacceptance, I believe.

Bye the way, another alternative, which I think will not work, is: DIR<>udd>CNet>anonymous>Owen>FILE[...
That is, if the <key> field is illegal, assume it to be another <name> field for the previous <key>. This lets you compress the delimeter characters, but screws up what <name>s you can have. whatchatink?

P,S., It has been suggested that we change the end-of-nsdp indicator from <cr><lf> to <SP>. I thhink that is a good idea.

Responses to some Data-path Syntax spec comments, especially NIC 30235

(J30296) 26-MAR-74 12:19; Title: Author(s): David H. Crocker/DHC; Distribution: /JDB JBP MAP KTP NJN JEW ADO CSK; Sub-Collections: NIC; Clerk: DHC;

1#5%&(+).<?>/!

What is this game of taking the system down in the middle of the day with no more notice than "going down in xxx minutes". I would like to know why, but more importantly, FOR HOW LONG?????? Does that mean "stand-by" or time to split for the day. Do you expect me to place a cross-country call to find out what's going on? Does the existance of Office-1 relieve ARC of any responsibility to play nice on our system? (Thank heaven for Office-1 to pour my anger and frustrations into!!)

1#5%&(+),<?>/1

(J30297) 26-MAR-74 13:12; Title: <>?!"; Author(s): N, Dean Meyer/NDM; Distribution: /JCP WRF JCN; Sub-Collections: SRI-ARC; Clerk: NDM;

2a

MELL

Here is a short note to Yngvar Lundh		
This is the first paragraph. How are things a good talk with Bob Kahn on the subject of		1
I will look forward to seeing you in Stockholm 11th for the INWG meeting.	in August the 10 and	

Vint 2b

Message to Yngvar Lundh

... 117v

(J30298) 26-MAR-74 13:56; Title: Author(s): Vinton G. Cerf/VGC; Distribution: /YL TH; Sub-Collections: NIC; Clerk: VGC; Origin: <SU-DSL>YNGVAAR.NLS;1, 26-MAR-74 13:50 VGC;

Re	quest for loan of hardware during transition to DNLS	
	We have finally placed an order for our high-speed (1200 baud) terminal, a Hazeltine 2000, and a Centronix printer. Both are supplied through C.A.E. Canada, Ltd.	1
	The delivery time for these terminals is estimated (realistically, I'm led to believe) at 60 days, not the 30 to 45 days we had been expecting.	11
	We would like to borrow a 1200 baud terminal from you for this interim period	10
	I understand that you may have a Delta Data 5000 that you could free-up for a two month period. Is this correct, and if so, would it be available to us on a rental basis?	10
	Also, I would like to know the latest word on our possibly borrowing a line processor from you until the Cybernix people are able to manufacture one for us. I have not yet been in touch with them, and your guess as to their delivery time will be more	
	In the form of a P.S. here, what would be the correct procedure	10
	for forwarding design drawings of the Line Processor to our prototype group in our manufacturing subsidiary (Dennis Kastner in Northern Electric, Belleville, Ontario) in order that he look them over and give you an estimate for manufacturing them here?	1:

HELP HELP HELP ! We need a line processor.

(J30299) 26-MAR-74 14:29; Title: Author(s): Michael T. Bedford/MIKE; Distribution: /MEH JCN IMM LHD MIKE; Sub-Collections: NIC; Clerk: MIKE;

Information on 'Files Not On-line'

I'm having a lot of trouble with files not on-line, that were formerly available at arc-sri. I'm thinking to the journal indexes, the output processor directives, etc. The links I set up for arc-sri don't work anymore. Have the addresses been changed, or are the files truly not available?

I know this sounds like a dumb question.

1

Information on 'Files Not On-line'

(J30300) 26-MAR-74 14:38; Title: Author(s): Michael T. Bedford/MIKE; Distribution: /FEED IMM MIKE; Sub-Collections: NIC; Clerk: MIKE;

MIKE 26=MAR=74 15:34 30301

Some questions on protectiona dn recognition of Bell users as a group.

I've compared the protection numbers for some file of other Bell users, and I 've found that I'm able to get into files designated 775200, whereas before I was unable to. Does this mean the system now recognizes us a a group ? If so, is there any quick way of ourn usin SNDMESSAGE to send a message to every member of the group, other than typing out each name ?

1

Some questions on protectiona dn recognition of Bell users as a group.

(J30301) 26-MAR=74 15:34; Title: Author(s): Michael T. Bedford/MIKE; Distribution: /FEED IMM MIKE; Sub=Collections: NIC; Clerk: MIKE;

## NGRP 26-MAR-74 18:45 30302

Date: 26-MAR-74 21:45:35	1
From: I Colony	2
Subject: wed test	3
Type of comment: Gripe	4
Network online address: ic@case=10	5
Phone: (216) 368=2984	6
Degree of urgency: High priority	7
Type of response desired: No response needed	8
	9
Text:	10
test suggestion new.	11
	12
	13

(J30302) 26-MAR=74 18:45; Title: Author(s): NET GRIPE/NGRP; Distribution: / NGRP; Sub=Collections: NIC; Clerk: NGRP;

USING and USERS Administrative Actions

This is a dummy message. The real USERS # 5 is (NIC -- 30304,) which is USING # 12. The Journal system strikes again. Dave.

USING and USERS Administrative Actions

(J30303) 28-MAR=74 11:02; Title: Author(s): David H. Crocker/DHC; Sub=Collections: NIC; Clerk: DHC;

USING # 12 NIC # 30304 D. Crocker (UCLA-NMC) N. Neigus (BBN-NET) 28 MAR 74

USERS # 5 NIC # 30303

. USING and USERS Administrative Actions

There has been increasing confusion, due to the existence of two user-oriented groups (USING and USERS). For example, members of one group (usually USERS) are often left out of distribution lists; and valuable feedback, that might otherwise have been offered by those members, has been lost.

We have therefore decided to merge the USERS membership into USING and disband USERS. Membership to USING will be unregulated. Anyone who wishes to join may.

Additionally, we are changing the name of USING to be USers Interest Group, leaving out the word "Working". (Please do not that the tild that the transfer of the transfer of

Due to the increased size of the group and the proliferation of subcommittees, there has also been a lack of communication among members about group activities. Actions have been initiated by individuals or subgroups that purport to represent the opinion of the entire group when, in fact, many members of the group are unaware of the actions.

Therefore in order to improve the group's coordination, we are hereby requiring that actions, taken "in the name of" USING or having an effect upon USING, first be acknowledged by one or both of us. We are NOT (repeat NOT) concerned, in this context, with making value judgements about the actions; but rather, we wish to guarantee that actions are coordinated. If (when) we try to exercise editorial control, we will do that under separate, equally well=marked cover.

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3a

3b

N,

4

USING # 12 / USERS # 5: USING and USERS Administrative Actions

(J30304) 28-MAR-74 10:59; Title: Author(s): David H. Crocker/DHC; Distribution: /USING USERS MLK; Sub-Collections: NIC USING USERS; Clerk: DHC;

What you've always been waiting for ....

(jerusalem) The Second Jerusalem Conference on Information Technology, 29 July=1 August 1974, Jerusalem, Israel.

Papers are sought on: operational environment of computers, including, not limited to: personnel systems, management information systems, health care delivery systems, financial, process control, manufacturing, and a number of other subjects. Original research, successful computer applications, or state of the art reports are requested, Mms. deadline 31 Dec. \*73. Contact Dr. Herbert Maisel, Director, Academic Computation Center, Georgetown University, Washington, D.C. 20007.

1a

What you've always been waiting for .....

(J30314) 27-MAR-74 09:03; Title: Author(s): Michael T. Bedford/MIKE; Distribution: /PIW; Sub-Collections: NIC; Clerk: MIKE;

Memo for the Record

Authored by Jerry Standig

11

15

Memo for the Record	
Copies of "A Survey of Generalized Data Bases Management Systems" and "Feature Analysis of Generalized Data Base Management Systems" written under the aegis of CODASYL Systems Committee, May 1969 and May 1971 respectively can be obtained by writing to:	1
ACM ORDER DEPARTMENT	1a
1133 Avenue of Americas	1a
New York, New York 10026	1a.
The costs are \$7 and \$8 respectively. I suggest a preliminary phone call to ACM.	11
	10
An acoustical coupler has been made available to Dean Meyer, courtesy Ken Gemsheim.	1
	1
Crypto: Air Force uses KG34 (update of KG13), Advantage in KG13 is that it resets itself automatically when out of synch.	1
The Basic hookup is computer multiplexer KG34 modems (modulator - demodulator) KG34 multiplexer terminals.	1
I'll try to get KG34 documentation. It's available through NSC.	11
Any Federal agency requests secure communications through GSA.	1

It is the current intention that only command and control functions utilize the WWMCCS computer, the Honeywell 6000 series. WWDMS is the DMS being currently prepared to serve WWMCCS and in that sense will replace NIPS. However, OSD and parts of JCS are not command and control oriented and these functions will remain on IBM 360 computers utilizing NIPS. NIPS is MODERN in that it has had 22 releases since 1965 or 6 (started with 1410 emulated on 360 and rewritten to take advantage of 360 features). DoD support of NIPS will continue beyond end PY75 for non command and control government users, IBM markets NIPS (under some other name), to non NMSSC users (Federal power Commission being a recent addition) and accordingly has an interest to maintain the system. For this effort, IBM has a 370 version of NIPS and uses a new terminal (3270).

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Memo for the Record

(J30315) 27=MAR=74 09:41; Title: Author(s): Rita Jordan/RJ; Distribution: /EDR2 RJ; Sub=Collections: DEIS; Clerk: RJ; Origin: <JORDAN>STANDIG=MEMO,NLS;1, 27=MAR=74 09:37 RJ;

Further confusion on feedback idents

It was my impression, correct me if I am wrong, that NCMT and NGRP were only to be used by user-programs that interrogate the user for his comments and then format them and send them to the NIC. If that is true then, then it really doesn't matter what their names are, as long as the implementation is clean and doesn't adversely affect anyone, Maybe the feedback folks should explain exactly what they are trying to implement here, in the interests of eliminating this vast confusion,

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Further confusion on feedback idents

(J30316) 27-MAR=74 10:07; Title: Author(s): Nancy J. Neigus/NJN; Distribution: /FEEDBACK DHC MDK; Sub-Collections: NIC FEEDBACK; Clerk: NJN;

In response to Inez's sndmsg (20MARi3i7) asking about when the New NLS would be available, I've decided to inform KWAC. Best estimates at present center around August, 1974. We realize that is far from our original estimates, but we are finding more and more things that we want to include in New NLS that should make it even better than we originally anticipated. In addition, we are desirous of providing full support for any new system in documentatio, training, and help. It's a bigger job than we anticipated, but it looks well worth it. Jim Bair for the Utility.

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(J30317) 27-MAR-74 11:49; Title: Author(s): Special Jhb Feedback/FEED; Distribution: /KWAC CHI KWAC CHI DCW; Sub-Collections: SRI-ARC KWAC; Clerk: FEED;

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Lick,
The following document was sent to all PI's on September 1, 1973. It
describes in some detail the rationale behind the choice of Tuesday
from 7am to 9am ET for our IMP Software maintenance efforts.
Incidentally, it may be of interest to know that there was almost no
response to this note, and what response there was was favorable.
Regards,
Alex

The original of this document is filed as <mjoURNAL>18799.NLS

As you may be aware, the Network Control Center (NCC) staff at Bolt Beranek and Newman (BBN) has reserved the hours of 7 a.m. to 9 a.m. Eastern Time every Tuesday for ARPA Network software maintenance. Since there has recently been increasing interest in the operational stability of the ARPA Network, this note is an attempt to describe the reasons for the software maintenance requirements, explain the constraints within which such software maintenance must be done, and solicit opinions from you as to improvements in the scheduling of this maintenance.

The ARPA Network is simultaneously a research and development project and an operational entity. From an operational point of view, its clientele is spread from London, England to Honolulu, Hawaii, with a total time zone difference of ten or eleven hours. There is discussion of plans to extend the Network both to the east and to the west. Thus, almost any hour of the day is someone's prime time. The Network Control Center strives to minimize disruptions to operational Network utilization, while at the same time continuing the necessary R&D work. This R&D work covers such areas as: modifications to the Network routing algorithms, expansion of addressing within the IMP subnetwork to permit growth beyond 63 nodes (the current limitation), improving the design of IMP algorithms, provision for the use of lines of differing speeds, provision for singly connected nodes, provision for the use of broadcast satellite communications, preparation for the introduction of the High Speed Modular IMP in various configurations, and so on. These R&D goals may, at some times, come into conflict with the operational aspects of the Network; in particular they may come into conflict when the release of new Network software is required.

It is important to note that all software is checked in a Network test cell at BBN before it is released to the field. Thus, we feel reasonably confident that glaring bugs or operational deficiencies will be detected before a Network user ever "sees" the new software.

This test cell, incidentally, is constructed on an ad hoc basis from machines in transit through BBN (e.g., being checked out before delivery to the field) and at times the test cell contains as many as six or eight IMPs and TIPs, thus making it larger than most of the proposed experimental networks of which we know (of course, it is not always this large). Problems which are encountered after a new software release to the field are therefore generally problems of scale; after all, a network with 35 or 40 nodes and as many Hosts cannot possibly be totally simulated within a test cell containing even as many as six or eight machines, without an enormous expenditure for a much larger test cell it is not possible to be certain that all software releases will be completely problem=free.

Several considerations have led us to choose the particular time (namely, every Tuesday from 7 a.m. to 9 a.m. Eastern Time) to be reserved for new software releases. First, we have chosen to reserve time every week rather than once a month or once a quarter, so that we may make large software changes incrementally. This strategy gives us a smaller number of things to debug, when something goes wrong, than would a smaller number of more massive releases. Second, we would like to release near the beginning of a work week so that all sites will be manned for several days after the release. This increases the likelihood that assistance will be available, when it is needed, to help us diagnose bugs which have intermittent effects. Thus we have chosen Tuesday as the day on which software releases should take place.

On those release days when the release runs smoothly, there are either only very short interruptions in Network service or none at all. Thus, it would appear that on these "good" days the hour chosen for software releases is relatively unimportant. On the other hand, software releases on "bad" days may cause IMPs to crash in such a way that manual intervention is required to get them going again, Further, if one or two machines crash during or immediately after a release, the NCC software team may be able to diagnose a minor bug on the fly and repair it, but this ability is usually dependent upon sufficient availability of site personnel for assistance in reading registers and reporting their contents, restarting machines, etc., in cooperation with the NCC staff. Thus, we would like to choose a time for software releases when the probability of having site assistance available at all sites is maximized, while at the same time not performing releases during the busiest parts of the day. Some sites, of course, are manned around the clock. Unfortunately, a significant fraction of sites (perhaps one-third in the current network) are manned only on an eight hour per day or twelve hour per day basis. In fact, some sites are locked and secured during weekends and night hours so that even hardware repair people have been unable to obtain access. Thus, the rationale for our current choice of 7 a.m. to 9 a, m. Eastern Time for releases is based on the high probability of

U.S. east coast site personnel being available immediately, the probability that U.S. west coast personnel will be available either immediately or within a few hours, and the fact that releases are made from BBN (an east coast site) so that if serious difficulties develop early in the release the west coast sites need not even be involved. Further, 7 to 9 a.m. Eastern Time is within the working day of European sites.

We realize, of course, that as the Network continues to grow, releases will take an increasing amount of time. We realize that the current release time is not within the working day of either continental west coast sites or the current Hawaii site and that further expansion to the west will take release time even further outside the working day of such sites. In addition, we realize that even at 7 or 8 a.m. Eastern Time there may be some east coast personnel attempting to use the net in an operational way. In fact, one such site, Rome Air Development Center, has suggested that the release time be rescheduled to 3 to 5 p.m. Eastern Time, thereby coinciding with the lunch hour on the west coast and the end of the working day on the east coast. While RFC 546 suggests that this particular time may coincide with a fairly high traffic level at two Hosts and, further, the releases would have to be somewhat earlier so as to have site personnel available at those installations which shut down at 4 p.m., the Network Control Center would be willing to consider a modified version of this suggestion if it is better for a large majority of sites. Other sites may have other suggestions. We therefore solicit comments and suggestions from those responsible for the operation of existing or scheduled Network sites. Documentation supporting the rationale for a suggested software maintenance time would be helpful in evaluating the suggestion. Comments should be directed to:

Alexander McKenzie Manager, Network Control Center Bolt Beranek and Newman Inc. 50 Moulton Street Cambridge, MA 02139

or

MCKENZIE@SRI=ARC (via SNDMSG)

or

AAM through the NIC Journal

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An Old Document about Tuesday Mornings

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(J30318) 28-MAR-74 06:16; Title: Author(s): Alex A. McKenzie/AAM; Distribution: /JCRL DCW3 CF; Sub-Collections: NIC; Clerk: AAM;

Scheduled Software Maintenance

This is a reminder that Network Software Maintenance is scheduled between the hours of 0700 and 0900 (Eastern Time) on Tuesday, 2 April 1974. Although software releases are checked out as much as possible in the BBN test cell, there are sometimes problems of scale which are not detected until after a release; hence there is a small but finite possibility that the software will be troublesome for a few hours after the scheduled release. Sincerely, Alex McKenzie (for the Network Control Center)

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Scheduled Software Maintenance

(J30319) 28-MAR-74 07:10; Title: Author(s): Alex A. McKenzie/AAM; Distribution: /RADC NLG; Sub-Collections: NIC RADC NLG; Clerk: AAM;

Tickler for week of 1 April

Form 2s due FRIDAY!!!

(am1) 1 April - Monday	1
0830 hrs. Branch Chief's Meeting	1a
Frank J. Tomaini - JURY DUTY	1b
Due Date - ISI/Tom - TUMSE Letter in regards to Electronic Pocket Size Calculators	10
News Brief items due into Becky Today (KJOURNAL, 19533, 1:w)	1 d
PMP requested in Form 56 - Forward to ESD for Coordination	1 e
Due Date - ISI/Tom - Forward Financing - Grtly Report Input Due ISM	1f
Bobbie: Personnel Strength Rpt, due.	19
(at1) 2 April - Tuesday	2
(aw1) 3 April - Wednesday	3
Due Date - ISI/Tom - Due 3 Apr ISM - Coordination of AFSCR 11-3/RADC Sup 1 - Re: Management of Trip Report	3a
Due Date - ISI/Tom - Contract Maintenance Reports - FY=75 Office Machine & Appliances	3b
ISC Confessions 0830 hrs.	3с
(ath1) 4 April - Thursday	4
0830 hrs. Branch Chief's Meeting	4a
Laboratory Activity Reports due today: Bucciero must have them by 1000, ISM must have them by 1100, and DOT must have them by 1600.	4b
(af1) 5 April - Friday	5
Bobbie: Travel figures due by noon,	5a

Tickler for week of 1 April

(J30320) 28-MAR-74 07:16; Title: Author(s): Roberta J, Carrier/RJC; Distribution: /RADC; Sub-Collections: NIC RADC; Clerk: RJC;

don to brs2 at 2:40 eastern time.

don to brs thurs at 2:40, just trying to see if this works, will log in as you soon, don

don to brs2 at 2:40 eastern time.

(J30321) 28-MAR-74 11:41; Title: Author(s): Don Cantor/DON; Distribution: /BRS2; Sub-Collections: NIC; Clerk: DON;

The purpose of this message is to bid goodbye to the ARPANET community and to announce a change in Liaison for MIT-DMS. I am leaving MIT Project MAC at the end of March to join Xerox (in Rochester and not XPARC). Stu Galley (no NIC ident yet) will be the new Liaison for MIT-DMS. His address is: Stuart W. Galley, Rm 205 545 tech Square, Cambridge, Ma 02139 Tel. 253-1418 (area code 617)

It has been a great pleasure interacting with so many of you. I am certain that our paths will cross again some times in the future. Let me take this opportunity to wish you all and the ARPANET, good luck and sucess.

Abhay Bhushan

A Farewell Note

(J30322) 28-MAR-74 14:03; Title: Author(s): Abhay K. Bhushan/AKB; Distribution: /NLG FTPIG INWG NMG USING USERS PI TU NICSTA; Sub-Collections: NIC NLG FTPIG INWG NMG USING USERS TU NICSTA; Clerk: AKB;

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I tried to send you a message , but the system does not recognize you for some reason or other. All I get is Mcnamara can't. I hope this is not a reflection on you rather than the system

My file AFBITS has a Branch in it called tasks, I think it is at .4. If you load and read it you will see that there is more than enough for a talk with Kenyon. If my weary head and bones stop aching and my overworked intestinal system shapes up I'll be in in the AM to talk to you. Right now I ache and I'm going home.

(J30323) 28-MAR-74 16:27; Title: Author(s): Edmund J. Kennedy/EJK; Distribution: /JLM; Sub-Collections: RADC; Clerk: EJK;

Concerning being limited to entering comments and gripes only thru the special automata:

Yikes! There are already several mechanisms, familiar to people, for transmitting their thoughts, sndmsg and the Journal, for example. The mailbox that receives comments/gripes transmitted by the special automata should also be able to receive them thru these other mechanisms.

Though the current set-up will not prevent that, technically; it will prevent it in reality, due to the arcane mailbox names. That is why I suggested the Sri-Arc model:

Define Netgripes and Netcomments as groups with the following members (for example): JI ARH JOC DHC NCMT (for Netcomments group) NGRP (for Netgripes group);

Then define NCMT and NGRP as individual mailboxes (rather than groups) obe used as the central repository for their categories of info, You can then log in and update them, as per the current constraints; and the world will see mailboxes with nice names.

Does that mae sense? Dave.

More on Gripe and Comment Mailboxes

(J30324) 28-MAR-74 17:30; Title: Author(s): David H. Crocker/DHC; Distribution: /FEEDBACK NJN; Sub-Collections: NIC FEEDBACK; Clerk: DHC;

Abhay:
It has been very nice to have worked with you on the network problems, and i am sorry to see you leave the community. I am sure that you have good reasons for your decisions and hope that you will be happy in your new job. Could you please send your new address and phone number?

(J30325) 29-MAR=74 07:55; Title: Author(s): Jonathan B. Postel/JBP; Distribution: /AKB; Sub-Collections: NIC; Clerk: JBP;

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20-DEC=73 1209=PST ENERGY at SRI=ARC: Message to Russell from Rodden

cc: CERL, engelbart at SRI-ARC Received 20-DEC-73 12:09:16

Intensive discussions and planning sessions are taking place this week at SRI-Menlo in connection with the DEIS project. Detailed plans covering general approach and staffing are being make.

The scheduled project rewiew meeting at Menlo on 29 Jan is one of the items under discussion. At this time it would seem that there is no reason to ask for a delay in that meeting date.

The Phase I conceptual design report is now in the final stages of review, rewrite and editing. We have found it difficult to select the proper terminal point for that report-planned as two volumes-since we are already into Phase II, detailed design. Getting the report out by 31 Dec is further complicated by reduced staff during the holiday period.

State of DEIS Project 20=DEC=73 1209=PST

Distribution: dcr2 cer1 dce deis

State of DEIS Project 20-DEC-73 1209-PST

(J30326) 29-MAR-74 08:52; Title: Author(s): Robert M. Rodden/RMR2; Sub-Collections: DEIS; Clerk: NDM;

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Contract Information 20-DEC-73 1608-PST

20-DEC-73 1608-PST ENERGY at SRI-ARC: Contract information from bob rodden

cc: russell at ISI, CERL, engelbart Received 20-DEC-73 16:08:48

Information recieved from CERL is that contract has been delayed awaiting auditors report. The auditor's report was received today, and a contract modification covering the new work should be forwarded to SRI the first week in January or before.

Contract Information 20-DEC-73 1608-PST

Distribution: dcr2 cerl dce deis

Contract Information 20-DEC-73 1608-PST

(J30327) 29-MAR-74 08:58; Title: Author(s): Robert M. Rodden/RMR2; Sub-Collections: NIC; Clerk: NDM;