(J31025) 23-AUG=74 16:47; Title: Author(s): Special Jhb Feedback/FEED; Sub-Collections: SRI-ARC; Clerk: FEED; Origin: <FEEDBACK>FEED.NLS;30, 30-JUL=74 11:42 FEED;

Feedback to 23 Aug 74

For the record

(NLSControlCharacters) **	1
CD =	1a
(journal)	2
ILA 23=AUG=74 05:17 31022 Bug in TNLS text scanning Message: Problem in Using TNLS in scanning for text using the search ends up at the beginning of the file at the correct position. All indications are that the was properly located and any changes go at the beginning.	in the e rather then se text string sing of the
	2a
EJK 26=JUL=74 12:24 30949 Dimaggio directory Message:	2)-
	26
NDM 3-JUL-74 13:38 23520 Message from Kennedy: bug report Location: (MJOURNAL, 23520, 1:W)	
	20
Comments: [ACTION]	2c1
SRL 4=JUN=74 08:57 23229 Missplaced bug	
Location: (MJOURNAL, 23229, 1:w) ****Note: [ACTION] ****	
**************************************	2d
MEH 30=MAY=74 08:39 23162 Office=1, Line Scanner bug, request to fix. Location: (MJOURNAL, 23162, 1:w) ****Note: [INFO=DNLY] *****	
	2e
Comments: Jim: This is the request to Tymshare to Line=Scanner bug that pervents Bell Canada from in cassette through their Mux link, John Swarbrick (T	puting ymshares
Service Mgr) said they would correct ASAP.	2e1
(messages) (ixbb)	3
(JULY)	3a

3-JUL-74 0619-PDT NSA: sndmsg ctrl codes	
Distribution: FEEDBACK Received at: 3=JUL=74 06:19:48	3a1
we have been having trouble getting "S to print back the	
entire (or any) message after inserting a file, Any suggestions?	3a1a
Jess Hill	3alb
3=JUL=74 1511=PDT FEEDBACK: sndmsg control codes	
Distribution: NSA, feedback Received at: 3=JUL=74 15:11:34	3a2
Jess Hill, "S is intercepted by NLS when you leave it to Go to Exec. (NLS is calling the Exec then and "S doesntget throughBBN thing). However, "R still works for retyping up to the last CR. This problem will be corrected in a New	3a2a
NLS to be offered in the Fall, Jim	3020
4=JUL=74 0526=PDT NAPKE: IBM Tapes Distribution: FEEDBACK, mattiuz, napke Received at: 4=JUL=74 05:26:16	3a3
Could tell me at what address to send the tape?	3a3a
Do you if the tape could be ruined by the customs peoplelike do they have some sort of magnetic detecting equipment? I forhot at word at the beginning of the previous sentenceit's "Do you know if" not "Do you if",	3a3b
Penny	3a3c
4=JUL=74 0733=PDT NAPKE: IM Tapes	
Distribution: FEEDBACK, mattiuz, napke Received at: 4=JUL=74 07:33:55	3a4
I forgot to mention something this morning when I sent you a messageso here goes. We were planning to use the DEX program to convert the TEXT FILE (ince the contents of the tape has been dumped into OFFICE=1) to an NLS file. The tape we are send ing you will contain level adjusters (u's and d's) and when to start a new statement (1). Do you see any problems in using the DEX program?	3a4a
penny	3a4b
	-

8=JUL=74 0849=PDT MEYER: SORTREV

Distribution: BAIR AT ARC, feedback, feedback at ARC Received at: 8=JUL=74 08:49:05	3a5
Jim: SORTREV now works from new NLS at ARC. So does SORTMES. You may find SORTMES more appropriate, ==Dean	3a5a
8-JUL-74 0944-PDT MATTIUZ: Jim, do you thing it would be a good idea if i got all the messages we have send lately, that is penny, you and I, on the IBM transfer and Journalize them for the record and in order to help future users when perhaps doing the same? Maybe you are doing this already? Distribution: FEEDBACK Received at: 8-JUL-74 09:44:20	3a6
I didn't realize i was only at the subject, short message and long subject, ah ha,	3a6a
INEZ	3a6b
8=JUL=74 1229=PDT MATTIUZ: new directory Distribution: FEEDBACK, BAIR, mattiuz Received at: 8=JUL=74 12:29:27	3a7
Jim, on June 6 i sent a message about geting a new directory set up for Mike Katsoulis and he has been here for a month and cannot work in his own spacewas there a problem? Could you let me know as soon as possibleINEZ	3a7a
8=JUL=74 1359=PDT STONE: Shared Screen Problems Distribution: FEEDBACK, kennedy Received at: 8=JUL=74 13:59:41	3a8
I tried a shared screen using the directions in the <userguide> file, I was flipped to the exec and told ILLEGAL INSTRUCTION JSYS DBLST = 104000,,404 at CEC+20 = 51117</userguide>	3a8a
I was using an IMLACtring to link to another IMLAC with advise. Is this fixable??	3a8b
8=JUL=74 1436=PDT STONE: Shared Screens Distribution: FEEDBACK, kennedy Received at: 8=JUL=74 14:36:01	3a9
Attempted shared with J Norton, on host 2 with the Tasker initiaating the connection. I could see his actions, but he got nothing from me. Looks like shared screen doesn't work in any mode any more. Would be nice if it were working	

3a13

within the next month or so, since we are contemplating a couple of demos related to the NSW project 3a9a Any chance of getting it fixed?? 8=JUL=74 1825=PDT FEEDBACK: IBM data Distribution: MATTIUZ, NAPKE, feedback 3a10 Received at: 8-JUL=74 18:25:33 Hi, The u's, d's, !'s etc, will probably come out as text, There is a timing problem: I will be back east from the 15th to the end of the month on business, and, if you would believe, getting married! So, address it to the programmer as well: Elizabeth Michael (or Jim Bair) Augmentation Research Center Stanford Research Institute menlo Park, CA 94025 I'll be out of touch after the 20th for awhile, driving 3a10a across as honeymoon...... Au revoir, Jim 8=JUL=74 1834=PDT FEEDBACK: tape and customs ... Distribution: NAPKE, feedback 3a11 Received at: 8=JUL=74 18:34:46 Penny, Those Canadian guysare pretty tough, but I dont think it will have any trouble coming this way.. They only X ray stuff you handcarry. I presume it will a regular 8 or 3a11a so in, reel? Not a cassette or something, Jim 8#JUL=74 1840=PDT FEEDBACK: IBM tape dialogue Distribution: MATTIUZ, feedback 3a12 Received at: 8=JUL=74 18:40:53 Inez, That certainly was a big subject (punny intended, haha) Thats an excellent idea, but frankly I dont know when I' could get to it. Could you remind me in early august when I get back? Incidentally, I finally did a similar thing ... bought a house. Couldn't have one built because costs have skyrocketted to \$50 per sq foot here, but found a nice little thing here in Menlo Park. How are you enjoying yours? 3a12a Au revoir, Jim

Hi, Noted your difficulty and will try to get hopper to

8=JUL=74 1844=PDT FEEDBACK: Shared screen probs.

8=JUL=74 18:44:29

Distribution: STONE, KENNEDY, feedback

Received at:

look at it, but to be honest, not much effort is being vesteed in oldnls now. Perhaps the NSW demo will carry some wait (haha). See you soon, Jim	3a13a
10=JUL=74 1828=PDT BAIR: Dex tape Distribution: MATTIUZ, bair, feedback Received at: 10=JUL=74 18:28:53	3a14
Hi, We are still working on it, can't find anything wrong so far. It would really help if you still had the original DE file around or we could retrieve it from achive if you recall the file name. I believe the NLS filename is CRED, we unfortunately can't tell anything from that. We'll keep trying to determine the difficulty, we have some equipment problems that we have to iron out here too. Au revoir, Jim	,
11=JUL=74 1153=PDT BEDFORD: how to identify users listed in Exec's SYS command? Distribution: FEEDBACK, mattiuz Received at: 11=JUL=74 11:53:20	3a15
I would like to know how to identify users listed in the output from the SYSTAT commandit would help if one is in trouble and would like to link to someone for helplike, would HELP be able to help; could WWMCS provide any info the journal systemetc.?	
16=JUL=74 0709=PDT NSA; lost files Distribution; FEEDBACK Received at: 16=JUL=74 07:09:52	3a16
Hey!!	3a16a
What gives!!! Seems we lost a couple of files the past 2 days,	
Are you in FLAKEY mode?? If so, would you give us warning. The files we lost are CONTX,NLS (probably a PC too) and	3a16b
CAREY, NLS, Any help you can give us will be appriciated,	3a16c
Thanks, Jess Hill, Steve Walker, etc.	3a16d
16=JUL=74 1052=PDT MATTIUZ: ibm tapes Distribution: FEEDBACK, napke, mattiuz Received at: 16=JUL=74 10:52:04	3a17
Jim, after the conversion is made, where will the data be?	

bell directory as an exec (txt) file? 3a17a ---Inez 16=JUL=74 1100=PDT MATTIUZ: dex tape Distribution: BAIR, FEEDBACK, mattiuz 3a18 Received at: 16-JUL-74 11:00:24 Jim the txt file for that tape was called "cred.imm" and the 3a18a dex was just "dexworkimm" Is this whated you need to know? Unfortunately, i always delete them once the conversion is done, However if yo can get them from the archive that would be great Inez 3a18b 16=JUL=74 1925=PDT NSA: Missing File Distribution: FEEDBACK 3a19 Received at: 16-JUL-74 19:25:53 I was on last night (15 July) from 1830 (your time) until 2000. I was working with a file called CAREY. The system died about 1915 and came up in a few minutes. This morning (16 Jul) we discovered several files missing and requested a restore. The version of Carey which was restored was the one prior to the 1915 problem, unfortunately I did a lot of work on the file between that time and 2000. Is it possible to restore that file as of 2000 15 Jul, I did an update at that time just before logg g off. Thanks for you help . 3a19a Steve Walker 17 JUL=74 1113 PDT NSA: "X in TNLS Distribution: FEEDBACK 3a20 17-JUL-74 11:13:13 Received at: we have been experiencing a large number of sperious "X's past few days. At this time we are unable to determine if this is line noise (terminal to tip) or if it is originating at OFFICE=1. If you have any info or advice (or can fix it) please let us 3a20a know. 3a20b Jess Hill, Steve Walker, Steve Noga 17=JUL=74 1509=PDT BAIR: file restore Distribution: OPER, MARTINEZ, feedback 17=JUL=74 15:09:06 3a21 Received at:

opps, that should be <nsa> not nasa, Thanks, Jim</nsa>	3a21a
18-JUL-74 0638-PDT NSA: lost files Distribution: FEEDBACK	3a22
Received at: 18=JUL=74 06:38:06	3622
File INTELM, NLS was worked on yesterday (17 Jly), All info past 8 Jly is gone,	3a22a
Steve Noga	3a22b
19=JUL=74 0636=PDT STONE: "exceed capacity" while using inmes Distribution: FEEDBACK, meyer at SRI=ARC, bair at SRI=ARC Received at: 19=JUL=74 06:36:07	3a23
A couple of us have gotten the exceed capacity signalnormally associated with too long of a statement in NLS. I think its being caused by a message received from LArry Crain at Gunter. I would like to save this and supsequent messges received from BBN, but inmes will only save those up to the one from Crain. Is there a way around this? Can one selectively delete messages at TENEX level? HELP!!	3a23a
19=JUL=74 1021=PDT STONE; exceed capacity using inmes Distribution: FEEDBACK, meyer at SRI=ARC, bair at SRI=ARC Received at: 19=JUL=74 10:21:25	3a24
I was able to get the message file in by doing an insert sequential, but then spent an hour editing rearanging etc. to get into readable NLS structure.	3a24a
22=JUL=74 1045=PDT NAPKE: IBM tape Distribution: FEEDBACK, mattiuz, napke Received at: 22=JUL=74 10:45:13	3a25
The tape was sent to San Francisco Air Expresson Fridaye afternoonJuly 19/74. Has anybody contacted you yet that there is a aprocal at the airport? If not could send somebody to the airport to get the tapeThe identification code that you should in order to collect the tape at the airport is AEO20718. The tape is addressed to Elizabeth Michael. Could have kindly let me know what happens?	3a25a
Thnak you,	
Penny Napke	3a25b

23=JUL=74 0820=PDT CARRIER: SENDPRINT

Distribution: FEEDBACK, carrier, meyer, bair Received at: 23=JUL=74 08:20:16	3a26
we are asking SENDPRINTto wait at page breaks. but the leading spaces in the first line of the disappear. Tried on two different terminals. S eating them. ==Dean and Bobbie Carrier (RADC)	new page
23=JUL=74 1520=PDT BEDFORD: some questions on nls procedures:	
Distribution: FEEDBACK, mattiuz, bedford Received at: 23=JUL=74 15:20:34	3a27
1.) to get to the NEXT occurrence of a string yo command A: [LIT] ; is there any provision f to the last occurrence of that same string?	or getting
2.) any luck on arranging for us to identify sub ourselves?	-groups for 3a27a
24-JUL-74 0707-PDT CAVANO: archive malfunction	
Distribution: FEEDBACK, bair Received at: 24-JUL-74 07:07:59	3a28
The archive system has failed to archive my file after successful notification from TENEX, Could something I am doing wrong or does the system ar files w/o removing them form directory??	there be
29=JUL=74 0737=PDT BAIR at SRI=ARC: update file Distribution: LEE AT OFFICE=1, bair, hopper, fe	edback at
OFFICE=1 Received at: 29=JUL=74 07:37:46	3a29
Susan, Yes You have to have the file loaded to u	pdate it, 3a29a
29=JUL=74 0811=PDT LEE: Update File Distribution: FEEDBACK, BAIR AT ARC, HOPPER AT Received at: 29=JUL=74 08:11:16	ARC 3a30
Just for the record, the prompt following update misleading = people see the F: and assume it wan of the file to be updated = better noise words w that a person would see something like = Update name F: or something = I suppose this is taken c the new system so this can be filed awayThank	ts the name ould help so file to new are of in s for a
quick answer	3a30a

29=JUL=74 1244=PDT LEE: Update File

Distribution: HOPPER AT ARC, BAIR AT ARC, FEEDBACK Received at: 29-JuL-74 12:44:20	3a31
You're right = the F: only appears after you start to type a filename = I wasn't paying attention!! I don't think the problem of not being able to type a filename beginning with f is worth spending that much time on since it'll be o.k, soon in the new language, Have you had a chance to look at that addressing problem I reported Friday = that's probably more important = but then maybe I'm overlooking something there! It was the deal where addresses without periods were being accepted etc Thanks	3a31a
29=JUL=74 1825=PDT FEEDBACK: NLS procedures Distribution: BEDForD, feedback Received at: 29=JUL=74 18:25:17	3a32
Mike, 1) Ther is no provision for search to the last occurance of a LIT. 2) The identification of subgroups within an allocation group is not part of the Tenex software. We cannot make changes unless approved by ARPA and agreed by all Tenex systems Owners. At present we have no plans for pushing this change. If you let me know specifically what you want to do there may be a way around it. Jim	3a32a
29=JUL=74 1827=PDT FEEDBACK: lost files Distribution: NSA, feedback Received at: 29=JUL=74 18:27:52	3a33
Steve Noga, If the problem with lost fils has not resolved itself or the files restored, send me your phone number so that I can call you for discussion of the problem. Thanks, Jim Bair	3a33a
29=JUL=74 1830=PDT FEEDBACK; archive Distribution: CAVANO, feedback Received at: 29=JUL=74 18:30:52	3a34
Hi Joe, Archive has to be run by an operator, and is periodically, I think you might have hit one of the longer periods. If the files still arent gone after you have archive/deleted, then let me know, Ciao, Jim	3a34a
29=JUL=74 1833=PDT FEEDBACK: sendprint Distribution: CARRIER, meyer, feedback Received at: 29=JUL=74 18:33:39	3a35

Bobbie, We are working on the problem...it is a hard one, Need to know if this is your first use of the feature or if the stop at page end has worked before and this is a new bug. Jim

3a35a

3b

(jun)

28=JUN=74 1321=PDT NAPKE: IBM Tapes
Distribution: FEEDBACK, mattiuz, napke
Received at: 28=JUN=74 13:21:04

3b1

we could shorten the record length to 1000 that is one thousand characters. How aout that? The blocking factoe would still be one, OK?

3b1a

penny

3b1b

28=JUN=74 0935=PDT BAIR: User progs lowercase & inrun Distribution: SHEPPARD, feedback Received at: 28=JUN=74 09:35:24

3b2

Bob, You will notice that the description of Lowercase says something about instituting as a content analyzer. That means after you load the program you invoke it by user viewspec i instead of executing it (hopefully).

INRUN has a note about Buffer pages required, Many programs require more than the default 4pp. You Go to programs Buffer size... Then just hi a 7 or 8 to be on the safe side. This increases the executable user qprograms buffer and let's you load the program into core. Note that if you load more than one program, you can also exceed the buffer size, so it's wise to keep track of the pages you are usi or rese" the program suffer after you complete execution. Hope this does the trick, J (excuse typos...noisy line), (ressssel = reset)

3b2a

28=JUN=74 0834=PDT BAIR: IBM Conversion Distribution: NAPKE, feedback, mattiuz Received at: 28=JUN=74 08:34:41

3b3

bit, and didnt take a terminal with me.

J1m	3D36
27=JUN=74 0757=PDT SHEPPARD: Loading user program 'inrun' Distribution: FEEDBACK, JIMB Received at: 27=JUN=74 07:57:08	3b4
I am not able to load this program from NLS, I get message 'loading user program' 'loading outside of allowed area' 'format error, word 41 55 block type 447356'	3b4a
can you assist?	3b4b
	3040
27=JUN=74 0652=PDT SHEPPARD: HELP Distribution: JIMB, NORTON, FEEDBACK, sheppard Received at: 27=JUN=74 06:52:02	365
I am tryin g to run a program that is in the <user =progs=""> directory and am having some trouble. This is due to the fact that I am a new user of nls. Can you assist? I am trying to run the job 'lowercase'</user>	
on a file, however when I type 'gpg' then type 'GPE' the job does not do what I think It should do. In fact, it does not even effect my file, Can you give me the steps needed to run this program on my file?	3b5a
	3000
26=JUN=74 1448=PDT FERGUSON: login mess Distribution: MARTINEZ, FEEDBACK Received at: 26=JUN=74 14:48:03	366
Bob, would you please put the file <mrtinez>login,;1 in as the system login message, (and also give me a call), thanks ferg</mrtinez>	3b6a
26=JUN=74 1353=PDT NAPKE; IBM tapes Distribution: FEEDBACK, mattiuz, napke Received at: 26=JUN=74 13:53:38	3b7
I have some answers to your questions, Jim.	3b7a
1) you have a choice of 2 tape densities 800bpi or 1600 bpi 2) the fixed record length is 2000 characters per record, 3) there is a blocking factor of one, 4) Tomorrow I will play around with the file to set it up to be tapedthen i can tell you the total number of blocks on the tape.	3b7b
navers on the edbes	3070

	2620
Penny	3b7c
26-JUN-74 1134-PDT KENNEDY: exercising a terminal	
Distribution: OPER, feedback Received at: 26-JUN-74 11:34:41	3b8
Thank you for the fast accurate response,	3b8a
26-JUN-74 1039-PDT OPER: EXERCISING A TERMINAL	
Distribution: KENNEDY, FEEDBACK	3b9
Received at: 26=JUN=74 10:39:07	309
IN RESPONSE TO YOUR MAIL OF 6/26/0759 THE PROGRAM YOU ARE REFERING	
TO IS CALLED <netsys>TTYTST.SAV AND CAN BE ACCESSED BY</netsys>	
CALLING IT FROM THE EXEC.	
THANX	
BOB MARTINEZ TYM/OFFICE=1	3b9a
1 (1982년 1일 1982년 1일	
26=JUN=74 0759=PDT KENNEDY: COMMAND TO EXERCISE A TERMINAL Distribution: OPER, FEEDBACK	
Received at: 26-JUN-74 07:59:29	3b10
SOME TIME AGO I STUMBLED ON A COMMAND USED TO EXERCISE A TERMINAL BY PRINTING OUT THE WHOLE CHAACTER SET LINE AFTER LINE WITH EACH LINE DISPLACED BY ONE, IE; ABCDEF ETC.	
@/ABCDEF ETC. CAN YOU REFRESH MY MEMORY? WILL YOU??	3b10a
26=JUN=74 0606=PDT NAPKE: a short question concerning IBM tapes	
Distribution: FEEDBACK, MATTIUZ, napke	25.44
Received at: 26=JUN=74 06:06:41	3b11
If the tape is EBCDICwhere do the ASCII non-printing characters fit in. I think I missed a point there, Could you elaborate?	
Am gathering the rest of the information you require, Hopefully, you will receive it later today,	3b11a
24-JUN-74 2033-PDT BAIR at SRI-ARC: IBM Tapes Distribution: MATTIUZ AT OFFICE-1, NAPKE AT OFFICE-1, bair, feedback at OFFICE-1	
Received at: 24-JUN-74 20:33:35	3512

Hi. Looks like everything has a reasonable probability of working, so send me the tape. We do need some additional 1) What is the tape density? 2) Are there any non-printing ASCII characters you know of? 3) What is the fixed record length? 41 YES, we do prefer the tape without labels. 5) What is the blocking factor? 6) What is the total number of blocks on the tape? That should do it. Note that we are assuming fixed length. Jim 3b12a 24-JUN-74 0853-PDT BAIR: Net trouble Distribution: CARLSON AT ISI, NORTON, FEEDBACK, WATSON AT SRI-ARC Received at: 24=JUN=74 08:53:14 3b13 Bill, A double check shows that there was Net trouble at the time you were trying to log in. should be OK now. Jim Bair 3b13a 24-JUN-74 0840-PDT BAIR: No response from Office-1 Distribution: CARLSON, JACOBS, FEEDBACK, norton, watson at SRI-ARC Received at: 24=JUN=74 08:40:19 3b14 Bill, Thanks for the message ... it is difficult to know when certain Network ports are not responding. In some cases it is a function of the interaction between the Net and Tenex. Did you receive a dead refused response? Or just no header? Anyway, it should be OK now, Even computers have it rough on Monday mornings ... Ciao, Jim Bair 3b14a 21=JUN=74 0456=PDT MEYER: DEX Tape from BELL=CANADA Distribution: FEEDBACK, BAIR, mattiuz, meyer Received at: 21-JUN-74 04:56:58 3b15 Jim: My apologies. I gave both paper tape and cassette that Bell gave me to Jim Norton. They're probably sitting on his desk. -- Dean 3b15a 20=JUN=74 1723=PDT FEEDBACK: IBM tape conversion Distribution: MATTIUZ, NAPKE, bair at SRI=ARC, feedback Received at: 20-JUN-74 17:23:26 3b16 Penny and Iez, I will get right on the problem first

thing...the info you provided should do the trick, thanks, Jim

3b16a

20=JUN=74 1719=PDT FEEDBACK: Dex tape Distribution: MATTIUZ, meyer, feedback, bair at SRI=ARC Received at: 20=JUN=74 17:19:37

3017

Inez, No I haven't received the tapedid you mean that Dean Meyer brought it with him? when he came to Calif. this week? When I get that I should be able to get one of our programmers to look for the problem..of course that no assurance that he will find it!!

Au revoir, Jim

3b17a

20=JUN=74 0816=PDT MATTIUZ: tape and dex Distribution: FEEDBACK, mattiuz Received at: 20=JUN=74 08:16:47

3b18

Jim, I sent a tape to you by Dean = after Converting it into nls by the dex process, the beginning of the tape ended up at the end of the file.

If yo remember this happened to me before and you asked to have the upon another reoccurrence, The file in my directory is "CRED" if you want to look at it after you have seen the tape...let me know if you have received it and what you think...thaks

3b18a

----Inez

3b18b

20=JUN=74 0800=PDT NAPKE: IBM tapes Distribution: FEEDBACK, mattiuz, napke Received at: 20=JUN=74 08:00:48

3b19

Inez showed me the message from feedback (1 think Jim...that is from Jim)....where you asked a few questions about IBM tape, I have a few answers...first of all the tape is EBCDIC = 9 track, the records are fixed length....at the beginning of each record there is a descriptive word telling you the length of the record in characters. If you would like a specific length for each record..there is no problem arranging this. It is difficult to say how how many computer words thefe will be as we have variable length records right now and the data will have to be massaged to create fixed length records......Right now it is about 130,000 words. The IBM people can also create a tape without tape labels if you wish.

As far as the time frame is concerned.....we would like the

data in NLS as soon as you can do it after we send you the tape.

Is there anything specific you guys need on the tape to be able to read it??

3b19a

19-JUN-74 1252-PDT FEEDBACK: Inquiry Distribution: NORTON, feedback Received at: 19-JUN-74 12:52:56

3b20

Jim, I took care of the question about the Journal indexes from stone/liuzzi. The last update of the master catalog seems to be about 26 May, however. The links from userguides do work now.

Incidentally, since I didn*t get the chance to ...here*s to a good trip (as if any of yours were ever any other way...)

Best, Jimescesc

3b20a

18=JUN=74 1828=PDT BAIR: Journal Indexes Distribution: STONE, LIUZZI, feedback Received at: 18=JUN=74 18:28:16

3b21

Stoney, The journal indexes are accessable via the link (userquides,arclocator,1:x) etc. as they should be. I updated the links so that the since Jan 74 gets you to a catalog that includes late May but not much more recent than that. I didn't find anything by Ray, but its worth a second look. Good luck, Jim

3b21a

18-JUN-74 1159-PDT LIUZZI: Links to Journal Catalogues
Distribution: NORTON AT SRI-ARC, FEEDBACK, bair
Received at: 18-JUN-74 11:59:45

3b22

Can you give me links to the more recent Journal catalogues? If they don't exist on Office 1 yetI'll search on the ARC machine, we need to find an article by Liuzzi (RAL) on WWMCCS....Guick reply would be appreciate Thank Stoney

3b22a

17-JUN-74 1736-PDT FEEDBACK: IBM transfer Distribution: MATTIUZ, feedback Received at: 17-JUN-74 17:36:24

3b23

Inez, Yes it worked.Some editing changes were nvcessary after it got into NLS, but nothing too major. Jim says that we can't do this unless some financial arrangements are made, but this once we will make an exception. We will

3b27

have to have a tape mailed but need to know more about it first, How many computer words long is it? Is it EBCDIC 9 track ? Does it have any special pointers denoting records or anything like that? In addition, what is your time frame. . . it would take us about two weeks minimum to complete it once it was received. Note that this is an experiment 3b23a Jim 17=JUN=74 1021=PDT MATTIUZ: ibm transfer Distribution: FEEDBACK, mattiuz 3b24 Received at: 17-JUN-74 10:21:27 any news on how the experiment work for NASA Ames? 3b24a we opted to wait for the resultsinez 14=JUN=74 2054=PDT BAIR: runfile Distribution: UCSB, feedback 3b25 Received at: 14=JUN=74 20:54:31 John Pickens, You should be able to run runfiles now .. I have changed the directory permissions. Let me know how it glad to help. 3b25a Jim Bairesc 14=JUN=74 0945=PDT UCSB: RUNFIL Distribution: FEEDBACK, pickens at UCSB 3b26 Received at: 14-JUN-74 09:45:55 3b26a Jim Bair, what I want to do is set up 8 or ten tab stops plus a few other terminal parameters in NLS every time I enter it. The process requires several minutes of time and a pound of wasted energy every time i have to do it. The runfile command makes it simple. And it implies no extra load on your system, Why can't I have it 3b26b forever?? 3b26c John Pickens 13-JUN-74 1517-PDT FEEDBACK: runfile Distribution: UCSB, feedback

Received at: 13-JUN-74 15:17:38

Dear John Pickens,
My mistake, Ithought it was available to you, but as you
correctly surmise,, it's not available to net users. I'm
not sure what you are trying to do but, if it's repetitive
editing the substitute command should help. If that cannot
be applied to do the trick, then let me know and I will make
a directory change that will permit you to use the runfile
command for a short period. (like a week).
Although it's not necessary to fill me in, I'm interested in
what you are doing. Let me know what I can do.
Sincerely,
Jim Bair

3b27a

11=JUN=74 1653=PDT UCSB: rnfile Distribution: FEEDBACK Received at: 11=JUN=74 16:53:56

3b28

attn jim bair on my account runf<esc> just gives ? that capability is apparently disabled for network users, why?

3b28a

john pickens ident jrp

3b28b

11=JUN=74 1230=PDT SHEPPARD: login problem Distribution: FEEDBACK Received at: 11=JUN=74 12:30:09

3b29

i seem to have a problem with login, i first loged in but had problems with my tip connection and was disconnected, later when I reached Office=1 i login again but find that it is offquota because i am still in the system, however, systat will not tell me what the older job was. Also, i can not Attach to the older job because it cant be found. the problem is systat tells me I am not there but groupstat tells me I am.

3b29a

10=JUN=74 1214=PDT BAIR: IBM data transfer to Office=1 Distribution: FEEDBACK, norton, bair at SRI=ARC Received at: 10=JUN=74 12:14:02

3530

Jim, Inez wants to transer less than 100 pp of abstracts from IBM equipment to Office=1. If the thing Elizabeth is doing for the Air Farce works via NASA AMES can we offer the same service to Bell but perhaps a at a fee? I imagine they will be additional need if we set the mechanism for the

3b33c

transfer this time. Jim	
cc of last msg:	
Inez, I talked with our programmer who is working on a	
transfer for someone on the ARPA Net. They are trying it	
experiemntally this week. If it is successful (through NASA	
Ames) I'll let you know by next week. Can you wait that long? If so we can then see if there is some way Bell can	
employ the same mechanism. Jim	3b30a
cmploy che same medianasmi vam	2000
7=JUN=74 0833=PDT BAIR at SRI=ARC: file protection	
Distribution: CAVANO AT OFFICE=1, bair, feedback at	
OFFICE=1	
Received at: 7=JUN=74 08:33:47	3b31
joe, There's a complete description of file protection in	
NLS in (gjournal, 23273,1) that has been distributed to Stone	
and the Other architects for further distribution, It	
should tell you how to do what you want,	3b31a
Sugar care les usa ca de mile les alues	
6=JUN=74 2304=PDT BAIR at SRI=ARC: IBM to Office=1 data	
transfer	
Distribution: MATTIUZ AT OFFICE=1, bair at OFFICE=1,	
feedback at OFFICE=1	3b32
Received at: 6=JUN=74 23:40:48	3032
Inez, I havent been able to contact our programmer who has	
worked on a similar transfer. She should be back on Fri.	
There is a way to convert tapes by using a program at NASA	
AMES. Not sure if its available for non Network people.	
Also, have you considered conversion to ASCII through a	
commercial computer outfit in Montreal or elsewhere? We	
don't have the facilities at ARC or Office=1. Will let you	3b32a
know more ASAP, Best, Jim	30324
6=JUN=74 0741=PDT MATTIUZ: new ident and new directory	
Distribution: FEEDBACK, mattiuz	
Received at: 6=JUN=74 07:41:18	3b33
	3b33a
Jim, we require two things here: Only an ident for	30334
Phil R. Marquette	
Bell Canada	
620 Belmont St.	
Room 1105	
Montreal, Guebec	
H3C 3G4	24.224
TEL: 514=870=5733	3b33b

eNew Directory with the 300 page llocation for:

Mike Katsoulis Bell Canada 620 Belmont St. Room 1105 Montreal, Guebec. H3C 3G4 TEL: 514=870=2713

3b33d

(wat initial password will you set up for him?) also what directory can Phil work from with only an ident? would it be ny one f ours?)

3b33e

thanks INEZ

3b33f

5=JUN=74 1511=PDT HOPPER: Execute Logout Distribution: FEEDBACK Received at: 5=JUN=74 15:12:00

3634

Is fixed. The protection of the group data file was set incorrectly.

This will undoubtedly happen again (as it has in the past) so make a note of it if you feel like it. (too many operators/programmers around)

3b34a

4=JUN=74 1902=PDT FEEDBACK: Eecute logout
Distribution: FEEDBACK, ferguson, bair, ferguson at SRI=ARC
Received at: 4=JUN=74 19:02:02

3b35

Still does not work, ... what gives? You figmo or something?

3b35a

4=JUN=74 1302=PDT FEEDBACK: Dex Distribution: FEEDBACK, mattiuz Received at: 4=JUN=74 13:02:18

3536

If the tape was created fromanother system, it probably doesn't have the p(ope(codes on it to permit the program to function properly. Some of those codes are delimiters which are necessary for inputs. We can look at the file if you wish; what is its name? Jim

3b36a

3=JUN=74 1514=PDT MATTIUZ: cassette/dex Distribution: FEEDBACK, mattiuz Received at: 3=JUN=74 15:14:05

3b37

After ruuninf in a tape and converting by dex i loaded the file and got a message indicating input error - no delimiter read, what does this mean? by the way the tape was from

	another system:honeywell, i am sure this has something to do with itthanks inez	3b37a
	2=JUL=74 1501=PDT FEEDBACK: Login ident problems Distribution: NSA, feedback Received at: 2=JUL=74 15:01:11	3b38
	Steve walker, we just brought up some new software that is designed to improve protection and permit only subscribing clients to login. It looks like it has some bugs in it which we are trying to fix. Thanks for letting us know, Jim Bairescesc	3b38a
	1=JUL=74 1957=PDT NSA: Login Ident Problems	
	Distribution: FEEDBACK Received at: 1=JUL=74 19:57:21	3b39
	None of the Idents we had been using are valid now at login. They are still good on entering NLS so no real problem. The following Idents are the ones we're currently using: STW,	
	JNH, SPN, TEH, Thanks, Steve Walker	3b39a
	1=JUL=74 1355=PDT FEEDBACK: DEX tape and problem	
	Distribution: MATTIUZ, feedback Received at: 1=JUL=74 13:55:53	3b40
	Inez, we are having some considerations about the hardware interface of the tape to computer. So there are two	
	questions: 1) What was the exact tape machine you used to playback the	
	tape into Office=1? 2) Did you try it more than once with the same error? Consistency is very important, because if the problem occurs randomly rather than every time you try it, then it sounds like noise, which is next to impossible to correct. It seems like I'm always doing this, but I do apologize fr	
	taking so long on these thingsit is really hard to get together wint the programmers. AU revoir, Jim	3b40a
	1=JUL=74 1348=PDT FEEDBACK: IBM Tape Distribution: NAPKE, feedback, mattiuz Received at: 1=JUL=74 13:48:36	3b41
,	penny, OK,,,but bair in mind (ho ho) that those will be statements in your file, and that that's a pretty long thing to edit and address. The software will handle it without sweat however, (After all this dialogue and work on your	
	part, I hope we can get the transfer to work!!) Jim Bair	3b41a

(May)	30
30-MAY-74 2024-PDT MATTIUZ: JOURNAL SENT ON MAY 29 RE NEW IDENT AND ARCHIVED TAPES Distribution: FEEDBACK, MATTIUZ Received at: 30-MAY-74 20:24:25	3c1
JIM, COULD YOU PLEASE TELL ME BY SEND MESSAGE WHERE I CAN GET THOSE TWO ITEMS YOU SENT ME AS THEY SEEMED TO HAVE DISAPPEARED FROM MY FILELOTS OF WEIRD THINGS WERE HAPPENING HERE TODAY AND MAYBE THERE IS A CONNECTION. THANKS	3c1e
INE	
INEZ	3c1b
30-MAY-74 1409-PDT MATTIUZ: ARCHIVED FILES Distribution: FEEDBACK, MATTIUZ	
Received at: 30=MAY=74 14:09:47	302
SOMETHING IS FUNNY HEREWHEN I TYPED "INT ALTMODE SPACE AND THE FILE NAME" IT SAYS THAT MY FILE IS NOT ARCHIVED. IF YOU TYPE "INT SPACE AND THE FILE" IT THEN TELLS YOU IT IS ARCHIVED AND WHERE TO FIND IT THIS SHOULDN'T HAPPEN SHOULD IT ? OIF THE ALTMODE IS USED INCICATION IS YOUR FILE IS THERE,.OTHERWISE IT IS NOT	3c2a
30=MAY=74 1405=PDT MATTIUZ: DIRECTORY	
Distribution: FEEDBACK, MATTIUZ Received at: 30=MAY=74 14:05:08	3c3
JIM, SOMETIMES IT SEEMS AS IF THE SYSTEM THINKS I AM SOMEONE ELSE AS I KEEP GETTING FILES THAT DON'T BELONG TO ME IN MY DIRECTORYTODAY ONE OF THEM WAS "TELNETSCRIP ETC" FILE . MAYBETHAT IS WHY FUNNY THINGS HAVE BEEN HAPPENING LATELY.	3c3a
30=MAY=74 0228=PDT UCSB: Clowns!!	
Distribution: FEEDBACK	
Received at: 30-MAY=74 02:28:04	304
Don't you clowns read journal entries under ident FEED? Gads, what	
ridiculous response to the user community,	3c4a
jrpenic	3c4b
30-MAY-74 0143-PDT BEDFORD: inputting the contents of a file	
to sndmess How to for Message ?	

	ibution: FE ved at: 30				305
name, when	and then gi I check the	ves me the message I so	here, and it asks and of file automent to myself, event to myself, event of doing wrong	atically; erything is	3¢5a
interact thoughts Distr		link between			306
RUNFI	LE type oper	ation as soc e the conter	at to call a prog on as you realize on of an interact present ?	that you ionIs	3c6a
RUNFILE	4 0138=PDT (How Do ?) ibution: FE ved at: 30		nput from termina. ford 38:23	during	3c7
follo		umber of mil	col F that did the llisec's, you want	t it to pause	3c7a
the gues Distr		EDBACK, dock		not, that is	3c8
me.		as soon as	bug, It did the possible, Thanks	for letting	3¢8a
Distr	4 1444=PDT ibution: FE ved at: 29	11 200 EV920 EV2			309
WHEN I FIR	ST LOG IN) M	EAN? IT DOES	ALL" MESSAGE (WH	THAT I HAVE	
AND		LINE "YOU HA	AS TOLD: "NO MESSA AVE A MESSAGE" !)? VIRGINIA KALLAL (C		3c9a

3c12b2

3c12b3

Received at: 28=MAY=74 13:30:25	3010
Jim, how about some info on the private command in the journale.g. how is it recorded etc	3c10a
28=MAY=74 1329=PDT MATTIUZ: archived tapes Distribution: FEEDBACK, mattiuz Received at: 28=MAY=74 13:29:23	3c11
Jim why are tapes archived forever? SAY we wanted a file deleted completely but it is already archivedis it real necessary for it to be there forever?	ly
Inez	3c11a
28=MAY=74 1327=PDT MATTIUZ: new ident Distribution: FEEDBACK, mattiuz Received at: 28=MAY=74 13:27:48	3c12
Jim, could you please arrange to anve a new ident set up for	or
PRM. Phil is with us for the summer and is using the system	
already.,,thanks Inez	3c12a
Inez,	3c12b
The question about archive is a good one. The reason they stay there forever is because the tapes are writter sequentially, with each file that is archived added to the reel of tape in chronological order. Once a tape is used up, the record ring is removed to ensure that the files are not errased. The only people who can restore file from archive are the people who have the password the directory from which the file came. But we have no way of going back to a particular place on the tape to errase a file without endangering the rest of the tape,	a to
I am in the process of preparing a detailed description of the protection mechanism that has recently been built Sorry it's taking awhile to get it together. In the Journal when you set a Journal item to private by typing the "PRivate" command, only those persons on the	

28=MAY=74 1330=PDT MATTIUZ: private journal

Distribution: FEEDBACK, mattiuz

protection codes == it's pretty safe,

more information:

distribution list can load or read the file. The mechanism for this interacts with Tenex to use the file

We'll be glad to set up the ident for you, but will need

Full name Address Phone number He will receive Journal mail in hardcopy unless you request a directory for him...it will be mailed to the 3c12b3a address specified for the ident system,

27=MAY=74 1315=PDT BEDFORD: report of apparent error trap to ARC personnel Distribution: FEEDBACK

3013 Received at: 27=NAY=74 13:15:08

Twice today, on apparently completely different circumstances, I got a message; DEFERR called with other than GSTACK == no linkage found to GSTACK (please reprot this to ARC programming personnel) ILLEGAL INSTRUCTION RO = Illegal instruction was executed and I got bumped off, I

don't know wat this means, but it wasn't too troublesome, and I thought I'd bettter do like the message says

27-MAY-74 1020-PDT BAIR at SRI-ARC: Letter program Distribution: FEEDBACK, sheppard at OFFICE=1, norton at OFFICE=1 Received at: 27=MAY=74 10:21:11

3014

Hi Bob, Jim tells me that you are having some difficulty with the letter program, , a tough one to try without documentation, Maybe a quick review would help. The commands are: Go to Programs Get rel file: LETTER Go to Programs Execute program: LETTER When the program asks fro filename, use a link address or default to the file you're in. Give it a CR for your ident, and the ident of the receiver, eg. JHB Answer the other questions. use the command: Output Device Teletype to print out the formatted letter at your terminal. well, I hope this helps. . let me know if it dosn't solve the problem. Take care, Jim

3c14a

24=MAY=74 1603=PDT BAIR: Journal Indexes Distribution: FEEDBACK, stone, kennedy Received at: 24-MAY-74 16:03:50

3015

3c13a

3c18a

3019

delivery?

It turns out that no indexes have ever been updated at Office=1. What's there gott moved over by default as a result of the transfer to that machine. We are rectifying the situation, and hope to have a complete master index and catalog available by June first. Sorry about not having it there, but I thought the programs were being run. Thanks 3c15a for letting us know. 22=MAY=74 1026=PDT BAIR at SRI=ARC: Mouse Distribution: FEEDBACK, stone at OFFICE=1, bair Received at: 22-MAY-74 10:25:24 3016 The mouse you sent us back (the last one) is one we had already modified and sent you!! What's the deal, should we send it back to you so that you can trade for the proper 3c16a mouse or was that intentional?? Jim 20=MAY=74 1616=PDT FEEDBACK: Funny date in Journalmail Distribution: FEEDBACK, mckenzie at BBN, keeney at SRI-ARC Received at: 20-MAY-74 16:16:59 3c17 Hi Alex, Yes the computer really slipped upfor a while there...went back to the beginning of time. That date was the convention agreed upon to start all computer clocks. Apparently that's when the first thing that was like a cmputer appeared....folklore. Anyway, the clock is backin the correct century. Regards, Jim Bair 3c17a 20=MAY=74 1559=PDT FEEDBACK: Ident things Distribution: FEEDBACK, keeney at SRI=ARC Received at: 20=MAY=74 15:59:38 3c18

Please let me know, thanks, Jim

17-MAY-74 1429-PDT BAIR at SRI-ARC: Archived file deletion
Distribution: FEEDBACK, edwards at OFFICE-1
Received at: 17-MAY-74 05:24:19

How about all of RADC including the buchh of new idents?

Hi, Did You ever change RN2 (Dick Nelson) to on=line

Fred,
Sorry for the delay in anwswering your inquiry, Initially I
thought
it would take some programming so I postponed action until I
returned
from the East coast (a 2 week trip), However, as it turns
out there
already exists a command to delete and undelete files from

vour archive directory. The Exec command is "ADELETE", and the converse is "UNADELETE". I'm glad you asked the question...that is a very useful Capability. 3c19a Jim Bair 16=MAY=74 0448=PDT Mailer: Distribution: FEEDBACK 3020 Received at: 16=MAY=74 0448:09=PDT mail for hhughes, mac@MIT=MULTICS not deliverable because: Cannot locate mailbox for "hhughes, mac"; please check spelling of user name. 3c20a 3c20b -----16=MAY=74 0447=PDT Mailer: Distribution: FEEDBACK 3c21 16=MAY=74 0447:57=PDT Received at: mail for hughes@MIT=MULTICS not deliverable because: Cannot locate mailbox for "hughes"; please check spelling 3c21a of user name. 3c21b 15=MAY=74 1754=PDT FEEDBACK: little storms have about msg notification Distribution: FEEDBACK, mattiuz, bedford Received at: 15=MAY=74 17:54:31 3c22 Mike, Me thinks it already tells you gobbles up CPU enough when you do a systat. You can type mess CR at any time for the msgs since you signed on. The Bair, (Delete have from subject, and insert enough before gobbles =en retro 3c22a editing). 15=MAY=74 1745=PDT FEEDBACK: Logout msg immediately after Distribution: FEEDBACK, mit-dmcg 3023 Received at: 15 mmay = 74 17:45:13 That msg must have have been one of those unpredictable random errors, If it happens again let us know and we can 3c23a try to trace it.

3=JUN=74 1134=PDT FEEDBACK: Extra files and interogate

Distribution: FEEDBACK, mattiuz Received at: 3=JUN=74 11:34:01

3c24

Inez, Telnet is a network subsystem that enables youto go through Office=1 to other hosts on the Network. It automatically creates a file call Telnettypescript which is an exact record of what you did during that transaction. If you did not use Telnet then someone logged in as you did. Or maybe it was created by accident.
When you used interrogate, you said you typed int <alt>
space filename. It then tries to find a file with a space in the name, with an <alt> you do not type any spaces. The space is a substitute for the altmode.
I will send the Journal item to you again. Let me know if there are any further with problems with this. Best, Jim

3c24a

3-JUN-74 1125-PDT FEEDBACK; Runfile and sndmsg Distribution: FEEDBACK, bedford, mattiuz Received at: 3-JUN-74 11:25:02

3c25

Mike,I order to input something from the keyboard while a runfile is running, try control shift * or the equivalent on your terminal followed by the number of millisecs. Please try on an experimental basis.

In order to input any file (sequential) to a sndmsg, use control b and enough of the filename! to be recognized uniquely, eg, "message.copy;2" esc, When you type control r, you will see only that which you typed in after the file specification. However, control s should retype the entire contents of the msg field including the file.

On recording links: we currently do not have a specifi*Ov!2*;*specific way of doing this, But I am going to see if I can find a way, perhaps using some of our experimental programs.

3c25a

3=JUN=74 0945=PDT SHEPPARD at OFFICE=1: execute logout instruction in nls
Distribution: FEEDBACK
Received at: 3=JUN=74 09:45:49

3c26

this instruction does not seem to work? could it be me ? i get "illegal instruction " plus some other stuff,

3c26a

3=JUN=74 0845=PDT MATTIUZ: execute logout command Distribution: FEEDBACK, mattiuz Received at: 3=JUN=74 08:45:54

3027

this is not wroking in nls.....we are directly taken into the exec level when this command is given with a message teelling us we have used an ellegal command.

3c27a

(author)

FEED 11=JUN=74 12:42 30875 Feedback Response Location: (MJOURNAL, 30875, 1:W) *****Note: Author Copy*****

4a

FEED 4=JUN=74 18:37 30840
Bug at Office=1, tertiary distribution
Location: (MJOURNAL, 30840, 1:w)
*****Note: Author Copy*****

4b

Comments: Jim, If you haven't already would you please look at this? (Dean, the ident for Office=1 is FEED, dir is Feedback @ Office=1 for sndmsg. Thanks.)

4b1

FEED 29=MAY=74 16:08 30830
Response to IMM about Archive, Privacy and an Ident Location: (MJOURNAL, 30830, 1:W)
*****Note: Author Copy*****

40

FEED 20=MAY=74 17:34 30774
Items for NIC attention
Location: (LJOURNAL, 30774, 1:w)
*****Note: Author Copy*****

40

FEED 20=MAY=74 17:10 30773
Interaction of substitute and viewspecs.
Message: Ed, The substitute command is designed to be controlled by the current viewspecs. This gives the user a powerful way to control its effect. If you want to have it work on all of the entity specified merely ensure that viewspec w is in force. See Section 5, page 15 of the TNLS User*s Guide, statement 10c. Copy to all RADC because this is probably notcommon knowledge.
*****Note: Author Copy****

4e

FEED 20=MAY=74 16:55 30772 Missing news Message: there's no money. Please ask ARPAfor further details. ****Note: Author Copy****

4f

FEED 3=APR=74 11:20 30396
Problems with Group File Protection and Possible solutions
Location: (JJOURNAL, 30396, 1:w)
*****Note: Author Copy*****

49

491

Comments: Action required by Bell-Canada, other inputs welcome,

FEED 30=MAR=74 15:35 30369
Response to
Message: Duane, Your Journal msg of 25 mar is being attended to .
You will be notified of further developments, Thanks for the input, (JHB)
*****Note: Author Copy*****

4h

FEED 27=MAR=74 11:49 30317

New NLS availability

Message: In response to Inez's sndmsg (20MAR1317) 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 documentatic, training, and help. It's a bigger job than we anticipated, but it looks well worth it.

Jim Bair for the Utility.

*****Note: Author Copy*****

41

FEED 2=MAR=74 16:24 30167 Response to Fedback problems from Bell Canada Location: (HJOURNAL, 30167, 1:w) *****Note: Author Copy*****

41

Comments: (This short message will also act as a test of the Journal distribution problem to ident PAN, NOTE also that there was a bug in the Journal system about two weeks ago affecting regular delivery that was fixed, and has not recurred to our knowledge).

411

FEED 25=FEB=74 19:00 30141
Name delimiter Problem
Message: Mike: The problem you experienced (re == ,30127,) with a

statement name not working within one particular statement was due to an inadvertant change of the name delimiters to NULL from (and). (Command = Execute Name delimiter followed by those you want effective in that statement). I have reset them so the name address should work now. Thanks for your inquiry.

*****Note: Author Copy*****

4k

Comments: (Submitted 25 Feb at 7pm PDT)

4k1

FEED 15=FEB=74 15:28 30096

Message: Mike: Neither the system or you are overlooking anything, we simply havent completed the software set up necessary for the group protection to work yet. We will let you know when the groups are defined to the System. Thanks for your inquiry and sorry for the inconvenience.

*****Note: Author Copy*****

41

(UTILITY) Items acted upon by Utility staff (Those from feedback = solution, explanation or action)

NDM 17=MAY=74 11:14 23030

RADC Inter=Office Memo Format

Message: Duane: No way to do that simply with directives. SRI's

standard format is similar, so I wrote a user content analyzer

program which does approximately that, It's called SRIFORM, We

may be able to modify the format slightly to get just what you

want. Take a look at en program and let us know if you guys need

help modifying it, (Note: it does a special thing for statements

with bullets, i.e. starting with . Or =) You can update a file,

reformat it with the program, do an output device printer, the

unlock the file. ==Dean

5a

EJK 17=MAY=74 03:40 30764 Message to activate the 'System', Location: (LJOURNAL, 30764, 1:w)

5b

JHB 16=MAY=74 11:29 23021 Feedback about Tenex Scrolling Location: (LJOURNAL, 23021, 1:w) *****Note: info only*****

50

WEC 3=MAY=74 08:34 30633 Critique of Introductory NLS Course Location: (LJOURNAL, 30633, 1:w)

5 d

Comments: This is a letter of about 50 lines so it can be printed at your terminal.

541

LAC 3=MAY=74 08:28 30632 Remarks on nls course Location: (LJOURNAL, 30632, 1:w)

50

Comments: these are a few comments and Observations on the NLScourse given 2=3 May at SRI=Wash

5e1

EFF 3=MAY=74 08:26 30631 course comments Location: (LJOURNAL, 30631, 1:w)

5£

Comments: Betty's Comment

as a sequential file ,

5f1

JRP 1=MAY=74 10:06 30597 Grumble, grumble Message: Doesn't anyone read this? Where is the response to my message re. RUNFIL????????????

5 9

JRP 26=APR=74 11:47 30568
RUNFIL PROBLEM
Message: 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)

5h

Dear Mr, Pickens,
Please accept my most humble apologies for not responding to
(30568,) or (30597,), Some explanation about the human (not
machine) error. I mistook your ident for another similiar
ident that I have sent things to in the past and then responded
by sndmsg. That is a problem when no name is included with the
ident.
In the meantime (we aren't usually this slow) you may have
answered your question, but if not: use the command RUNF<esc>
CR RUNFILENAME<esc> CR. That works if your runfile is set up

If you need assistance doing that

5h1

please let me know.
Again, sorry for the lack of responsiveness. Jim Bair

ADO 30=APR=74 18:18 30593 missing news Message: There's no news online,

51

EJK 30=APR=74 10:05 30587

Viewspecs and "Substitute" interaction.

Message: I just found, the hard way, that there is an interaction
between viewspecs 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???

51

DLS 22=APR=74 06:23 30503 Default settings for new NLS users Location: (JJOURNAL, 30503, 1:w)

5k

MIKE 10-APR-74 14:43 30449
This is a resend of a March 26 to MEH (JJOURNAL, 30299,1)
Message: We would like your reaction to this proposal.

51

15=MAY=74 1737=PDT FEEDBACK: Program problems Distribution: FEEDBACK, bedford Received at: 15=MAY=74 17:37:02

5 m

Mike, It should work if you, Go to Programs Output Compiler L10 CR FILENAME CR with the CM positioned at statement .0 (have the file updated and loaded). It should automatically create a REL file which you then execute by Go to Programs Get Rel file FILENAME. If it is a content anal, then Go to programs Institute FILENAME CR as Content anal. Exceed capacity means you have put more characters into some buffer than it is programmed for, Either set your program buffer size to more or send us a copy of your program so that we can better determine what's going on. good luck, Jim PS. Thanks for the thanks

5m1

15-MAY-74 1610-PDT FEEDBACK: Library services at the NIC Distribution: FEEDBACK, hughes at MIT-MULTICS, norton,

hhughes mac at MIT=MULTICS Received at: 15=MAY=74 16:10:02

5n

Herb: There have been major changes in the NIC recently by ARPA. These changes will virtually eliminate service as it is now known. This will be formally announced this week through the System, with copies sent through the mail to key people at each site. Thus, the answers to your questions are very different than they would have been a few weeks ago. Yes, we would like to have any documents for our hardcopy collection that you would like to share with us. They would of course be indexed in our Journal indexes, but that will be available only to people that are on line. Since there will be no service via the NIC after 1 July, it would not be useful to establish any kind of abstract library (there is none now). However, if you wish to purchase part of the Utility service from us, we would be glad to discuss any possibiliites. The service currently sells for a minimum of \$10 to 40 thousand per year which includes user support as well as computer service/time. If you are interested or have any further questions, please feel free to contact Jim Norton or myself at SRI (415) 326-6200 ext, 3614. Thanks for your inquiry, Jim Bair (Head, User Development)

5n1

15-MAY-74 1459-PDT FEEDBACK: Dexwork file deletion Distribution: FEEDBACK, mattiuz Received at: 15-MAY-74 14:59:44

50

Inez, I'M a bit confused by your problem. The DEX process automatically creates a dexwrk file to complete the conversion. Did you actually receive some error msg when you tried to do the conversion? Something else must have gone wrong. Do you have any idea what? For eg, did you delete only the permanent copy and not the PC? Anyway, with the automatic creation of the dexwrk file no error msg should be necessary. Jim

501

55

15=MAY=74 1019=PDT BAIR at SRI=ARC: For the record telecall Distribution: FEEDBACK, Dair, FERGUSON Received at: 15=MAY=74 10:18:32	5 p
From Hugh Lapinski, 854=6322. Forum uses previous versions of same filename, extension to maintain the same conference record ongoing. Trim was naturally delting versions preceding thee last 2.	
Dir FUTURE was set to NO TRIM.	5p1
05/15/74 0949=edt HHughes, MAC at MIT=Multics: Net mail from site MIT=MULTICS	
Distribution: FEEDBACK Received at: 15=MAY=74 06:48:07	5 q
i have several questions, we have here at project mac several documents that we think of interest, Do you have a hardcopy library and if so could we send	
you copies to be numbered and placed in the library, We noticed for example that the tenex documentation has nic numbers	591
second related question we have prepared abstracts of MAC technical memos for journal entry into the NIC	
is there already a library of abstracts. If so what kind of stuff is in it and would it be appropriate for us to put ours into	
it?	
or would it be better to simply create a mit=multics file of documents and abstracts available to everyone	5 q 2
thanks Herb Hughes	5q3
9=MAY=74 1124=PDT MATTIUZ: dex Distribution: FEEDBACK, mattiuz Received at: 9=MAY=74 11:24:43	5r
Jim, earlier i deleted my dexwrk file before completing the dex work on other files i had taped. Ofcourse the system did not do	
the dex conversion on these files until i realized what 1 had done and then had to undelete the dexwrk one Should there not be an error message issued to us when you try to do dex without	5-4
an existing dexwrk file in your directory?Inez	5r1
6=MAY=74 2107=EDT Vint Cerf at AMES=TIP: Net mail from site BBN=TENEX Distribution: FEEDBACK	
Received at: 6-MAY-74 19:06:23	58

Jim:

will gripe if I have trouble. Thanks for checking again. Vint	551
4-MAY-74 1327-PDT BEDFORD: a couple of prob's re Content	
Analyzer	
Distribution: FEEDBACK Received at: 4=MAY=74 13:27:38	5t
Received dei 4=0AI=14 13:21:30	36
Jim, I still don't have the knack for storing a compiled	
version of a program in a REL file;	
Could you outline once more for me what I'm supposed to do,	5t1
Also, I would like to know what is happening when I print a structure with the Analyzer on, and get a message saying "Exceed capacity".	
Thanks,	5t2
?	5t3
3=MAY=74 1433=EDT MCKENZIE at BBN=TENEX: Date of my last	
journal message	
Distribution: FEEDBACK, Keeney at SRI=ARC Received at: 3=MAY=74 12:19:19	5u
Received dri Sauktard 12:13:13	34
Dear Feedback,	
What the (expletive deleted) is going on? Yesterday I sent a	
Journal Description	
message about Scheduled Software Maintenance through the	
Journal,	
Today at least "LAFORGE" and myself got copies dated	
16=NOV=1858,	
Try looking at (LJOURNAL, 30610, 1:w). Regards,	
Alex McKenzie	5u1
NACH DESCRIPTION	201
3=MAY=74 1238=PDT MEYER at SRI=ARC: MESSAGE.TXT Files	
Distribution: FEEDBACK, ferguson, bair, jimb at OFFICE=1	
Received at: 3-MAY-74 12:37:32	5 v
Ferg: Bad protection (we fixed it) was BAIR at Office=1,	
Don't know what's changing it, I mentioned we had trouble	
sending from Office=1 to hopper at arc (in same message dist).	2- 10
Thanks for help (for Bair too), See you Wednesday PM,Dean	5 v 1
3=MAY=74 1035=PDT STONE: Off line delivery of Journal docs	

haven't tried guest because office=1 was not responding on Monday May 6 at 1800 hours, Will try again later this week and

Distribution: FEEDBACK, keeny at SRI-ARC Received at: 3-MAY-74 10:36:01

5W

The recently created RADC idents..,mclean, stinson, laretto, nelson, and kesselman are all getting hardcopy delivery from the journal. Please change their delivery to on-line...This should be the default in the future for anyother directories/idents unless we indicate otherwise...thanks

5w1

Stoney

5w2

3-MAY-74 1027-PDT FERGUSON at SRI-ARC: ScrewyMESSAGE.TXT files Distribution: FEEDBACK, meyer, bair, jimb at NIC, ferguson Received at: 3-MAY-74 10:27:41

5x

Dean,
If what you say about unusual protection (like 775200) on
MESSAGE files
is true, a person will not be able to SNDMSG to him. Did this
occur at
ARC or OFFICE=1. Either Me or JIMB should write a program
which
prints out the protection of all the MESAGE files, and then we
can fix
up the bad guys. Dean please let me know ASAP, which system
this was.

Jimb, please contact me an perhaps you can write the program
is you have
time.
Ferg

5x1

1=MAY=74 1434=PDT FERGUSON at SRI=ARC; cop of mess to yogen dajaj (su=dsi)
Distribution: FEEDBACK

Received at: 1-MAY-74 14:33:24

5 y

Yogen,
This is in response to your message of Apr. 25 concerning
getting hung
up when trying to link to a terminal which was "NOT LOGGED IN".
You can in fact link to a terminal which is not yet logged
in.
However, if you link t a job that is currently HUNG (either
logged in
or not logged in) you will get hung also. The situation which
you
apparently ran into was someone having gotten hung on his (or
her)
terminal during the login sequence. Thus, when you tried to

5ac

link you got hung. This should, I hope explain what happened. If you have any further problems, don't hesitate to ask. 5y1 Ferg (Bill FERGUSON@ARC) 1=MAY=74 0733=PDT BEDFORD: a suggestion for more information in the systat command Distribution: FEEDBACK, mattiuz 5z Received at: 1-MAY-74 07:33:47 why not have the system indicate whether or not the user has received any new messages since he last signed on ? (ie. YOU HAVE A MESSAGE) NO charge for these little brainstorms of mine (not to be confused with storms in little brains) 521 1=MAY=74 0713=PDT MIT=DMCG: YOU WILL BE LOGGED IN 5 MINS Distribution: FEEDBACK Received at: 1=MAY=74 07:13:26 5a@ GOT ABOVE MESSAGE IMMEDIALTLEY AFTER TYPING IN MY IDENT. VERY DISCONSCERTING. 5a01 30-APR-74 1205-PDT BEDFORD: thanks for the help on our recent flurry of requests Distribution: FEEDBACK Received at: 30=APR=74 12:05:21 5aa I realize that we've really been bombarding you with all sorts of different requests over the past few weeks; We appreciate attention; you've been most helpful, 5aai 30=APR=74 1146=PDT FEEDBACK: Processing Suspended Distribution: FEEDBACK, bedford, mattiuz, norton Received at: 30=APR=74 11:46:38 5ab Mike,, Processing is currently suspended when the load average is over 4 and the process that user calls requires more 11 seconds of CPU since the last interaction, we are working on a better way of controlling system load, but for now this is designed to keep the lad down to a reasonable level. this explain it or do you need more info/explanation? Jim Bair (lad = Load) 5ab1

30-APR-74 1139-PDT FEEDBACK: Distribution lists Distribution: FEEDBACK, mattiuz, bedford, norton

Received at: 30=APR=74 11:39:46

I am sended you a copy of this via direct sndmsg. If anyone receives a "queued" etc., the system will continue to try to send the message until it gets through, for as long as five days. The copy I have sent to all Bell using this technique was queued but it should get through. 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 Jouranl System whiich 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. submiting shdmsgs through the Journal: In sNDMsG typeafter the prompt USER: YOURIDENT/RECEIVERIDENTONIC CR RECEIVERIDENT = Bell=canada in your case, or any valid ident. Let feedback know if there are any problems, Jim Bair

30-APR-74 1019-PDT FEEDBACK: JWORK PC Close fail Distribution: FEEDBACK, postel at ISI Received at: 30-APR-74 10:19:59

5ad

5ac1

Jon, The Jwork file is created by the journal in the process of journal operation by you. Something slipped to cause the system not to be able to finish its use of the file and update the partial copy. So, you may have trouble with future journal submission. If you do, control c, reset, delete all versions and PCs of JWORK and then go back into NLS. Be careful that you dont complete a long process and then find out it wont go. Hope this answers your question. Jim Bair

5ad1

30=APR=74 1007=PDT FEEDBACK: Group distribution Distribution: FEEDBACK, bedford, norton Received at: 30=APR=74 10:07:30

5ae

Mike, Group distribution is to the identt Bell=Canada, which should deliver a copy to every using at Bell. The sndmsg dist is alittle different. I sent you a description of how to set a distribution list some time ago. Would you please checkto see if you have it either via sndmsg or Journal? If you cant find it I'll look to see where it went. Thanks, Jim Jim Norton may be able to help you a little on his visit therethis week.

5ae1

30=APR=74 1002=PDT FEEDBACK: Msg distribution Distribution: FEEDBACK, ucla=nmc Received at: 30=APR=74 10:02:59

Saf

5aji

5ak

Dave, Sorry about the confusion on msgs. In trying to get responded to as fast as possible, I send the responses to the address listed in the FROM field. In this case there also was a msg about multiple user dirs, that I sent to you for info, The spelling one was from someone at your site? Anyway, I'll try to be more specific in addressing in the future. Jim Bair 5af1 30-APR-74 0933-PDT FEEDBACK: Guest at Office-1 Distribution: FEEDBACK, cerf at ISI, suadsl Received at: 30=APR=74 09:33:23 Sag Vint Cerf, Double checking on the guest dir problem...has it cleared up? The double checker (Jim) Sag1 30-APR-74 0604-PDT MATTIUZ: dex mixup Distribution: FEEDBACK, mattiuz Received at: 30-APR-74 06:04:37 5ah Jim, this happened twice but i have already got rid of the data so the next time if it happens i will snd you all the info....Inez 5ahi 30=APR=74 0603=PDT MATTIUZ: group ident Distribution: FEEDBACK, mattiuz Received at: 30-APR-74 06:03:15 Sai Jim, When using this feature, we should have to put in only the name Bell when the system asks for Users in sndmess, is that right? I tried it and the mess was sent but i tried to see if i got any messages it said nomess. . How do i sue this feature? 5a11 29-APR-74 1047-PDT BEDFORD: "PROCESSING SUSPENDED"..... Why do? Distribution: FEEDBACK, mattiuz Received at: 29=APR=74 10:47:48 5aj What is it that causes processing to become suspended, as indicated by the systems response to a Control T ? Inez has noticed this a couple of times when using the Cassett or DEX...programs, and I just had it happen when printing something with the conent analyzer on. Isn't there some way you could get a notice to the user; When using the Cassett

program, you can waste a lot of time, reading in data to a

system in which processing has been suspended.

Distribution: FEEDBACK

Received at: 29=APR=74 09:58:12

29-APR-74 0958-PDT EDWARDS: DELETE OF ARCHIVED FILES

HAS A DELETE COMMAND YET BEEN IMPLEMENTED TOLET A USER GET RID OF OLD FILES WHICH ARE IN "ARCHIVE" AND NO LONGER WANTED? IF SO HOW DOES IT GO? IF NOT IS SUCH A COMMAND CONTEMPLATED? FRED EDWARDS

5ak1

29=APR=74 0951=PDT DOCB: "YOU=WILL=BE=LOGGED=OUT" MESSAGE Distribution: FEEDBACK Received at: 29=APR=74 09:51:57

5a1

I'M SURPRISED AT SOME OF THE TIMES THAT MESSAGE ("YOU WILL BE LOGGED OUT IN FIVE MINUTES IF YOU CONTINUE TO DO NOTHING") APPEARS; I.E. TIMES WHEN I'VE NOT BEEN IDLE FOR ANY LENGTH OF TIME, SUCH AS TODAY RIGHT AFTER I LOGGED IN IT HAD PRINTED "IDENT" BUT I HADN'T HAD TIME TO REPLY). IS THIS NORMAL, AND CAN YOU TELL ME WHEN TO EXPECT THE MESSAGE? THANK YOU (AND THANKS FOR YOUR PROMPT REPLY TO MY PREVIOUS QUESTIONS). V. KALLAL

5al1

26-APR-74 1844-PDT NORTON: MUX and DEX
Distribution: FEEDBACK, hardy at SRI-ARC, norton
Received at: 26-APR-74 18:44:08

5am

Martin: I agree with Jim Bair. The Bell Canada troubles with getting DEX input via the high speed line are important. WE (you or Rod?) should try to look at it. We've been a little slow about responding to this item, so if next week some one of you calls Mike and looks into a trial run, etc it would be of great help. I know you're busy with lots of stuff., but a little time on this would really be appreciated. Mike's got lots of other problems including slow servic from the computer on his m d. Maybe we can slove this one and he'll feel he's getting a

5am1

26-APR-74 1408-PDT UCLA-NMC: responses from FEEDBACK, Distribution: FEEDBACK Received at: 26-APR-74 14:08:26

little more ahead of it, Thanks Jim Norton

5an

I just got Login, Link-to-operator, and spelling responses. Only the first enquiry was generated by me. I will try to track down the authors.

5an1

If an author gives you an ident, you might want to send responses thru the journal as FEED/author@OFFICE.

5an2

Dave Crocker (DHC)

5an3

GROUPS of Users - How Do ?

Distribution: FEEDBACK Received at: 26=APR=74 13:53:13 Sao How can I send a message (or journal document) to the Bell Canada users without typing in all their names. It's not the typing I mind so much, it's trying to remember who they all are, 5ao1 Thanks. 25-APR-74 2354-PDT FEEDBACK: Journal indexes Distribution: FEEDBACK, hardeman at OFFICE=1, beck, hopper Received at: 25-APR-74 23:54:53 5ap TThe indexes seem to be there, but Beau, PLEASE could you get he most recent there? The lastest seemed to be early March. User are really asked for this. Jim 5ap1 25=APR=74 2352=PDT FEEDBACK: Journal indexes Distribution: FEEDBACK, bedford Received at: 25=APR=74 23:52:41 5ag Mike, hello again. The userguides and indexes should be

26-APR-74 1353-PDT BEDFORD: Sending Messages of Journal Items to

25-APR-74 1846=PDT SU=DSL: GUEST account and USC=ISI Distribution: FEEDBACK Received at: 25-APR-74 18:46:27

in the transfer process from ARC to Office=1. Jim

5ar

5aq1

JIM*

Just tried to log in as guest and the damn system complained that null password was invalid, Then looked for USC=ISI directory and found it missing! Left not for Jim Norton at SRI just because he was handy, but thought you might look into it, Vint Cerf (CERF@ISI)

available now, altough they may not be as current yet as we'ed like. The link, (userguides, arclocator, 1:xm) should give you all you need. Sorry for the problem, we still have some bugs

5ar1

25-APR-74 1527-PDT SU-DSL: A POSSIBLE BUG IN THE EXEC Distribution: FEEDBACK Received at: 25-APR-74 15:27:56

Sas

HI! I MAY HAVE DISCOVERED A BUG, I TRIED TO "LINK"
TO A TERMINAL THAT WAS NOT LOGGED INTO THE EXEC,
BUT WHICH WAS CONNECTED TO OFFICE=1. IFOUND ITS NUMBER BY

LOOKING AT "SYST",
THE SYSTEM THEN JUST HUNG UP ON ME! IT
REFUSED TO RESPOND EVEN TO CTRL=C.THE
FIRST TIME THIS HAPPENED WAS WHILE I WAS ON THE
TI=SILENT 700.THE ONLY WAY TO QUIT WAS TO LOGOFF
AT THE TIP(A NAUGHTY THING TO DO!). IN ORDER
TO CONFIRM THIS BUG I REPEATED THIS, WHILE ON
A 2741. THIS TIME I GOT A MESSAGE TELLING ME
THAT I WAS INDEED LINKED TO THE SPECIFIED TERMINAL,
BUT ONCE I PROCEEDED TO SEND SOME TEXT AFTER ";"
THE SYTEM DIDN*T RESPOND WITH A PROMPT AFTER A <CR>, AND AFTER
THAT NO CONTROL
COMMANDS WOULD BRING IT BACK INTO THE COMMAND MODE.

IF THE "LINK" COMMAND DOESN"T PERMIT LINKING TO TERMINALS NOT LOGGED INTO THE EXEC, IT SHOULDN'T ATLEAST HANG UP, I DON'T THINK ITS DUE TO THE IDIOSYNCRACIES OF THE TERMINALS (ALTHOUGH THE 2741 IS WIERD), I'D BE INTERESTED IN KNOWING WHAT THE PROBLEM IS, YOU CAN SEND ME A MESSAGE AT THE SU=DSL, MY NAME IS YOGEN DALAL.

5as2

5as1

25-APR-74 1333-PDT MITRE-TIP: jwork Distribution: FEEDBACK Received at: 25-APR-74 13:33:39

5at

i was in mls and used the journal to submit message after the journal system said completed i quit the mls, at that point the system said "<MITRE=TIP>JWORKJBP,NLS;1 cannot be closed", What does that imply?
--jon. (Postel @ isi ot JBP in the journal)

5at1

25-APR-74 1320-PDT OPER: RESTORED DIR.
Distribution: FEEDBACK, POLLACK, FERGUSON, JIMB
Received at: 25-APR-74 13:20:08

5au

ON A LINK I RECIEVED WORD FROM USER FUTURE (HUBERT LIPINSKI)
THAT
HIS DIRECTORY HAD ALL TXT FILES DISAPPEAR, A CHECK OF HIS DIR
SHOWED
IN FACT ALL FILES WERE GONE EXCEPT MESSAGE, TXT AND THAT WAS
DELETED,
WE RAN AN OCTAL DUMP WHICH WAS ANALYZED TO SHOW EVIDENCE
POINTING
TO A DELETION AND EXPUNGE OF THE FILES RATHER THAN SOMETHING
MORE EXOTIC, LIPINSKI COULD NOT EXPLAIN WHAT HAD HAPPENED (HE
DIDNT
KNOW THAT ANYONE HAD DELETED THE FILES) AND HE MENTIONED THAT
USERE CROCKET HAD ALSO HAD SOME TXT FILES DISAPPEAR. ONCE I

RECIEVED
THE GO AHEAD FROM FERG AND JIMB I RECREATED ALL HIS FILES FROM OUR
BACKUP TAPE STORAGE, MOST PLAUSABLE EXPLANATION FOR THE
DISAPPEARENCE
SEEMS AT THE MOMENT TO BE INADVERTENT OR MALICIOUS DELETION,
OUR NORMAL DAILY DELD WAS PROBABLY BEHIND THE EXPUNGE, FEEL
FREE TO
CONTACT ME IN MORE INFO IS DESIRED,
THANX
BOBM
TYM/OFFICE=1

5au1

25-APR+74 1038=PDT BEDFORD; moving control marker to the beginning of a statement from somewhere in the body of the statement,...+HOW DO 7

Distribution: FEEDBACK

Received at: 25=APR=74 10:38:07

Sav

If I'm making changes within a statement, using the [literal string] capability, how do I tell the damn marker to back up to the beginning of the statement?

The counterpart of > , which moves the marker to he end of the statement, is <, which moves the marker to the beginning of the File Header statement, no matter where I start from, Help please.

Thanks.

5av1

24=APR=74 2025=PDT ILLINOIS: neted Distribution: FEEDBACK Received at: 24=APR=74 20:25:58

5aw

Howcome there is no NETED at OFFICE? -- Dave Grothe

5aw1

24-APR-74 1739-PDT MITRE-TIP: ident passwords Distribution: FEEDBACK Received at: 24-APR-74 17:39:46

5ax

is it possible to create a sense of security for those paranoids who wish some mild assurance that their work is under their own control. what i have in mind is passwords on idents, so that at least one can be sure that messages are not being sent in ones name with out ones knowledge. --jon. (postel @isi or jbp in the journal)

5ax1

24-APR-74 1735-PDT MITRE-TIP: message of the day Distribution: FEEDBACK Received at: 24-APR-74 17:35:57

5ay

can anything be done to eliminate typing the message of the day at me after i seen it? this loginn is the fourth time ive seen the "feedback" message and the 'n'th thime ive seen the "new exec" message, ==jon, (postel @ isi or jbp in the journal)

5ay1

24=APR=74 1446=PDT SU=DSL: advertisements after login Distribution: FEEDBACK Received at: 24=APR=74 14:46:27

5az

Gents:
How about reversing the order in which announcements come out so that
the latest come first, I am tired of sitting through all the old ones
to find out if there are any new ones,
CERF9ISI

5az1

24-APR-74 1409-PDT DOCB: QUESTIONS ABOUT MAIL AND MESSAGE FILES Distribution: FEEDBACK Received at: 24-APR-74 14:09:28

568

1) IS THERE ANY WAY TO AVOID THE LISTING OUT OF THE "SYSTEM" LETTERS

THAT COME IMMEDIATELY AFTER LOGIN ? FOR EXAMPLE, I'VE SEEN THE

LETTER FROM MARTINEZ (4=15=74) ABOUT THE NEW EXEC SO MANY TIMES I

ALMOST HAVE IT MEMORIZED, I'VE TRIED TYPING "C,"O,"X, ETC, TO ABORT

THE PRINTING, BUT THERE'S NO RESPONSE, IT SEEMS.

2) SIMILARLY, IS THERE ANY WAY TO ABORT THE PRINTING OUT OF A LONG

MESSAGE AFTER YOU TYPE "MESSAGE" ? (I.E. SUPPOSE AFTER YOU SEE

THE BEGINNING OF THE MESSAGE YOU DECIDE YOU DON'T WANT TO LOOK

AT THE REST OF IT?

3) IS THERE ANY WAY TO LOOK AT ONLY PART OF YOUR MESSAGE TXT; 1 FILE?

SO FAR THE ONLY WAY OF LOOKING AT THE MESSAGE FILE THAT

FOUND IS TO "COPY MESSAGE, TXT; 1 TTY: ". BUT THEN YOU HAVE TO

LOOK

AT THE WHOLE THING, ISN'T THERE SOME WAY OF SKIPPING PAST

A GIVEN
(SAY, THE ONE THAT'S CURRENTLY PRINTING OUT) LETTER?
4) IS THERE A WAY OF EMPTYING THE MESSAGE FILE (BESIDES

DELETING IT)?
IS THERE A WAY OF EMPTYING (OR DELETING) PART OF THE MESSAGE

BUT NOT THE WHOLE THING? (I.E. CAN YOU EDIT IT? I'VE TRIED

AND TRIED TO GET THE MESSAGE FILE INTO NLS TO WORK WITH IT,

CAN'T SEEM TO DO IT. (I ASSUME THAT'S BECAUSE "TXT" FILES

PROPERLY STRUCTURED FOR NLS ?))
5) IS THERE A LIMIT TO HOW LONG THE MESSAGE FILE CAN BE? IF SO,

THE LIMIT AND WHAT HAPPENS WHEN THE ACCUMULATED MESSAGES GET

LONGER THAN THE LIMIT? (DOES IT PREVENT PEOPLE FROM SENDING YOU MAIL

PLEASE SEND REPLIES TO ME VIA SNDMSG TO DOCHOOFFICE=1.
THANK YOU,

VIRGINIA KALLAL (STATION AGENT FOR DOCB),

24=APR=74 1004=PDT UCLA=NMC: Signon messages Distribution: FEEDBACK Received at: 24=APR=74 10:04:39

I belong to that select group with "group" directories, so that signon messages are printed EVERY time I log in. That means that I have been getting a THIRTY LINE PRINTOUT every time I have logged on the past several days,

I strongly recomment that signon messages
a) Not have a title line
b) Only contain pointers to the full text.

Dave Crocker (DHC thru Journal).

24-APR-74 0950-PDT NBS-TIP: System messages at login time Distribution: FEEDBACK Received at: 24-APR-74 09:50:03

How can I suppress the printing of system messages? I frequently log in several times a day and don't care to see them all each time. Ira Cotton, NBS

5601

5ba

5ba1

5ba2

5ba3

5bb

5bb1

24-APR-74 0858-PDT OWEN at USC-ISI: FEEDBACK Distribution: FEEDBACK Received at: 24-APR-74 09:00:45

5bc

I HAVE YET TO RECEIVE ANY FEEDBACK FROM FEEDBACK CONCERNING MY INQUIRY TO THE CHANGE IN THE GUEST PASWORD. VERY CONCERNED ABOUT THE LACK OF RESPONSE AS THE INQUIRY WAS MADE BY INDIVIDUALS FROM ARPA. NOT NICE TO FOOL WITH FATHER PAYCHECK. I WOULD APPRECIATE HEARING FROM SOMEONE.

> ALAN R. HILL SDAC-TIP

5bc1

24-APR-74 0829-PDT OPER: USER INQUIRY Distribution: FEEDBACK Received at: 24=APR=74 08:29:05

5bd

LAST NIGHT UCLA=NMC LINKED WITH THE INQUIRY ON HOW TO "FIND OUT WHAT THE JOURNAL THINKS MY NETWORK ADDRESS IS (IS THERE AN IDENTIFICATION SUBMODE LIKE THERE USED TO BE?)."

5bd1

SINCE WE CANNOT DEAL WITH THIS I AM FORWARDING IT TO FEEDBACK. THANX BOBM TYM/OFFICE=1

5bd2

24-APR-74 0717-PDT BEDFORD: L=10 capability for Bell Canada Distribution: FEEDBACK Received at: 24=APR=74 07:17:23

5be

We've got what I feel to be a real problem here, in not being able to deve an L=10 capability here. I thought we would be able to free=up some of Penny's time, but she appears to be fully booked up by the other group reporting to Ken Hoyle here. I think Fenny's got enogh smarts to pick it up rapidly once she got a chnace to expose herself (nice talk, eh ?) to it; this initial exposure (there I go again ...) is going to be difficult to fit into here schedule, I was wondering if I could learn some of the basics of the language on my own, then sit down with her to outline some of it, showing her that it's not all that difficult. Once she stated to pick it up, she'd quickly progress past my level.

Other alternatives include:

1.) learn while linked to someone (like Dean M.); this has proven to be slow, unreliable, and frustrating

2.) bringing someone (like Dean M.) here, or sending Penny

somewhere (like Washington) to pick it up; this wuld be both expensive and time-consuming (seeing as how Penny can't get any free time anyway). 3.) forget abot developing an L=10 capability in=house, and rely on existing capabilities in your group to handle problems as the arise on a one sot basis. Could you give me a call (collect) to discuss some of these alternatives ? 5be1 23-APR-74 1536-PDT MATTIUZ: bad files Distribution: FEEDBACK Received at: 23-APR-74 15:36:27 5bf Jim, forget the previous message on bad files. I don't now how but all is well again ... thanks Inez 5bf1 23=APR=74 1354=PDT BAIR: allocation quota Distribution: FEEDBACK, norton, FERGUSON, hopper Received at: 23=APR=74 13:54:45 5bg i have just observed 7 RADC users on and 2 Bell users with a 5 min ave, of over 6!!!!!! Seems that is not working as advertized . We (it would seem) must fix this!!! 5bg1 23=APR=74 1351=PDT MATTIUZ: bad files Distribution: FEEDBACK, mattiuz Received at: 23=APR=74 13:51:15 5bh jim, regardless of the file i load I cannot do anything in it, i always get the "fst entry nonexistant" comment ... why should this happen in all my files and want could i have done for this to happen? Inez Z 5bh1 23=APR=74 0703=PDT MATTIUZ: dex Distribution: FEEDBACK, mattiuz Received at: 23=APR=74 07:03:12 5b1 Jim, a couple of times when i am converting an exec file into nls via the dex process, the whole structure of the file has been rearranged, ... as if the system just slots the statements in at random. Have you come upon this before, if so am i doing something wrong?.....Inez 5b11 22=APR=74 2234=PDT BECK at SRI=ARC: Office=1 availability Distribution: FEEDBACK Received at: 23=APR=74 04:53:33 5b1 I have not been able to log into Office=1 on Sunday or Monday

evening (today) through either tip or telnet, Either "Host disconnected" or "Host not responding" every time,	18 5bj1
22=APR=74 2001=PDT MARKOWITZ: Message about a feedback mechan	nism
Distribution: FEEDBACK	
Received at: 22=APR=74 20:01:55	5bk
wouldnt it be nice if them who didnt want a lon	5bk1
message such as that of 22-apr didnt have to get it?	5bk2
How about a shorty that tells those interested to type the contents of a file	5bk3
26=APR=74 1725=PDT FEEDBACK: message forward	
Distribution: FEEDBACK, martinez	
Received at: 26=APR=74 17:25:36	5b1
Bob, Was this msg to you? It came to Feedback,	
16=APR=74 1249=PDT SU=DSL: tip and the 'e' sign	
Distribution: FEEDBACK Received at: 16=APR=74 12:49:15	
Bob!	
Note that a TIP user who types two @ signs will see three	
The first two are echoed by the TIP and the one that gets	
through	
is	
typically echoed by TENEX,	
Vint Cerf	5b11
26=APR=74 1720=PDT FEEDBACK: SNDMSG *s	
Distribution: FEEDBACK, feedback at SRI=ARC	
Received at: 26-APR-74 17:20:58	5bm
Control S does not work in inferior exec to retype the msg.	
This is a bug and should be fixed, Thank you,	5bm1
26=APR=74 1718=PDT FEEDBACK: MUX and DEX	
Distribution: FEEDBACK, norton, hardy at SRI-ARC	
Received at: 26=APR=74 17:18:22	5bn
Martin, We continue to get inquires from Bell about MUX and	
DEX as	
exemplified by the following, I do not understand this area	
and would greatly appreciate it if you or one of your people would dea	1
directly	
with Mike on this. You have met him and that makes it seem	

even more reasonable, please send copies of your dialogue to FEEDBACK for the record, Thanks, Jim Bair, 16-APR-74 1459-PDT BEDFORD: compatibility of CASSETTE, SAVE; 1 and our MUX

Distribution: FEEDBACK, mattiuz Received at: 16=APR=74 14:59:18

Do you fellows have ay reason to suspect that the Cassette routine

(for inputting cassette tapes) is somehow incompatible wth the GDC

1202 MUX that we ae using ?

We have no problem reading in tapes when coming in on DDD,

we use the MUX, we get all sorts of garbage which aborts the

(IE,, Control C*s, Control Z*s, etc.) It*s a real puzzle to us,

although we suspect that the difficulty lies in the CASSETTE software rather than in the MUX.
Any ideas ?

26-APR-74 1701-PDT FEEDBACK: Load ave and Superwatch Distribution: FEEDBACK, day, mattiuz, bedford Received at: 26-APR-74 17:01:24

Inez, As Jim may have told you, Superwatch isnt run during the day, that is it is not used to create the charts, etc., that require any computer power. However, it has to go around and collect statistics during the day, so that's what it's doing when you see it. That doesn't require much power and therefore should increase the load average.

Incidentally, having fond memories of Montreal about now.

Really did enjoy my visits ther and meeting with you people.

Must be spring ther now, huh? Jim

26-APR-74 1651-PDT FEEDBACK: Using the Journal Indexes Distribution; FEEDBACK, bedford, mattiuz Received at: 26-APR-74 16:51:24

Mike, Some additional info on searching for journal items:
after you have located the citation in the index or know the
number from some other source, and you find that's not online
(when you jump on link and it does not get you the file) use
the Exec's Interrogate command. The trick is to use the
generic name for the directory: <journal>xxxxx, rather than
some specific directory such as <ijournal>. I hope this helps,

5bn1

5bo

5b01

5bp

particularly to retrieve archived Journal items, Please let me know if i continues to be "inoperative". Jim

5bp1

25-APR-74 2327-PDT FEEDBACK: Markers Distribution: FEEDBACK, bedford Received at: 25-APR-74 23:27:55

5bg

Mike, hmmmmm.. no one but Doug and Jiim (a little) users markers. They can be very valuable when you repeatedly address a floating point in a file. You can rearrange it, but always return to the named location. Particularly good for some programs.... You should be able to use them in the address field by preceding the Marker name with a * (pound sign). Let me know if you have any luck. Jim (Sorry this one took a little long to answer...lots of reasons.....)

5bq1

25=APR=74 2321=PDT FEEDBACK: spelling Distribution: FEEDBACK, ucla=nmc Received at: 25=APR=74 23:21:42

5br

re 19 Apr msg, the programmer who cannot spell has left. Thanks for pointing that out to us.

5br1

25=APR=74 2317=PDT FEEDBACK: msgs, etc. Distribution: FEEDBACK, oper, MARTINEZ Received at: 25=APR=74 23:17:04

5bs

Bob, The for info and forwarded msgs....they are taken care of. The problem of disappearing files is not a newone, and is relatively serious. Hope that ferg can figure out. Incidentally, leaving the system up has been a great help to me tonite...thanks, JIm Bair

5bs1

25=APR=74 2313=PDT FEEDBACK: CM Distribution: FEEDBACK, bedford Received at: 25=APR=74 23:13:40

5bt

Mike. The intrastatement address for beginning of statement is _ not <. Could be a problem with the terminal character set.. does it have a _? Jim

5bt1

25-APR-74 2311-PDT FEEDBACK: Neted Distribution: FEEDBACK, illinois Received at: 25-APR-74 23:11:00

5bu

We cannot find any problem with Neted. It appears to have been there since we brought the system up in Feb. If the problem

persists, let us know again. Re: msg from Dave Grothe

5bu1

25-APR-74 2308-PDT FEEDBACK: ident passwords Distribution: FEEDBACK, mitre-tip 25=APR=74 23:08:21 Received at:

5by

Jon, sounds like a valid point, Will forward it to software development for action under needed development,

5bv1

25-APR-74 2302-PDT FEEDBACK: Questions about mail and msg files Distribution: FEEDBACK, docb 25=APR=74 23:02:45 Received at:

5bw

Virginia, I'll use your number to refer to the questions you asked:

1) Already answered in other sndmsg

2) Type "Rubout" or DEL depending on your terminal

3) Use READMAIL to see msgs by date, etc. as explained therein

4) Yes to all: in NLS use execute insert sequential...it will prompt your for the filename and an address of where to put the whole file in NLS. Then you can delete selectively, and delete

the message.txt at Exec level

5bw1

5) There is not limit other than the size of your directory. Yes, if you exceed that, you will not be able to receive msgs. Detailed explanations and instructions are in the TENEX user guide youshould have. If not contact the NIC (marsha keeney). If we can assist further let us know.

25-APR-74 2249-PDT FEEDBACK: First thing to do for bad files Distribution: FEEDBACK, mattiuz, stone, MCLINDON Received at: 25=APR=74 22:49:08

5bx

Inez, That problem has occurred more than once and has to do with the hardware (disc) getting lost, When You do get that, "fst entry nonexistant" or "bad file" immediately control C and reset by calling NLS again. This clear up the problem in many cases. Jim Duane and Connie, In case you had similar problems come up...good thing to help your users,

5bx1

25-APR-74 2244-PDT FEEDBACK: DEX mixup Distribution: FEEDBACK, mattiuz 25=APR=74 22:44:24 Received at:

5by

Inez, I can't think of anything you are doing wrong, but that certainly is a rare problem with DEX. We can have one of our programmers take a look at the problem, but in all fairness they have to see the error, It works fine here, So, if you

can give us the DEX file, mixed up resultant file in NLS, and the original tape we'll try our best to figure out what happened. Has it happened more than once? Jim

5bv1

25=APR=74 2239=PDT FEEDBACK: Office=1 availability Distribution: FEEDBACK, beck Received at: 25=APR=74 22:39:16

5bZ

Jeanie, Office=1 is not supposed to up those times. The contract reads 6 days per week, 16 hrs a day, shut down at 9PM, please let us know if it does not meet those hrs. (Jim)

5bz1

25-APR-74 2236-PDT FEEDBACK: L=10
Distribution: FEEDBACK, bedford, norton
Received at: 25-APR-74 22:36:36

500

Mike, Jim will be able help you on this during his next visit...in the very near future. Sorry there has been a delay, It doesn't look like the remate link training method worked too well for L=10. Regards, Jim Bair

5c01

25=APR=74 2233=PDT FEEDBACK: re: Link to operator about Journal Network Address

Distribution: FEEDBACK, ucla=nmc Received at: 25=APR=74 22:33:47

5ca

In order to check the Journal ident system in NLS, type Go to Ident subsytem CR, then with the subsystem prompt: >, type STatus and supply the ident or the person's name preceded by a period. The caps are what you should need to type. Quit the subsystem when done. Please let Feedback know if this gets to the right person.

5cal

25-APR=74 2213=PDT FERGUSON: Login Messages
Distribution: FEEDBACK, MARTINEZ, norton at ARC
Received at: 25-APR=74 22:13:46

5cb

Bob,

A large number of usrs have complained that we leave login messages around TOO LOONG!! So, Norton, Bair, and I have come up with the following ideas

 You should be the only person to put in and delete login messages, so that te users see a uniforn style.

2) No login message should be longer than 2 (two)!! lines, This mean that many messages will simply indicate the subject matter, with and indication of the TXT file in <SYSTEM>

to type out for more info.

3) Any message more than 10 days old should be removed.

If you want to talk with me about this, and we should, give me a call in the morning, ferg

p.s. Requests for login messages sould only be accepted from you, Jimb, Ed Pollack, Jim Norton, Jim Bair, or me.

25-APR-74 2213-PDT FEEDBACK: Login Messages, particularly for multiple user directories

Distribution: FEEDBACK, nbs=tip, ucla=nmc, cerf at ISI, su=dsl, mitre=tip, norton,, docb, illinois Received at: 25=APR=74 22:13:38

since a number of users commented about the same situation, I am sending this message to all at the same time. A decision has been made that messages will be less than two lines, pointing to a longer file if necessary, that only one person will send them, and that they will be deleted after 7 days. Thanks for your inquiries, let us know if you have any further input on this.

25=APR=74 2139=PDT FEEDBACK: Guest password Distribution: FEEDBACK, owen at USC=ISI Received at: 25=APR=74 21:39:52

Alan, The password was changed by someone using the directory, we have now changed it back. I'M terribly sorry about not responding sooner and could give you all kinds of reasons, but just please accept my apologies for any inconvenience. Let us know any ideas/comments you have. Thanks, Jim Bair (User Development)

22=APR=74 1901=PDT BAIR: lost files Distribution: FEEDBACK Received at: 22=APR=74 19:01:30

Jim Bair

Dear Dave,
Due the limited, finite computter resources available any file
that is not accessed within 21 days is archived == stored on
tape. It can be retrieved by using the interogate command at
the executive level. If you have any further problems, please
feel free to sndmsg to Feedback,
Sincerely,

19=APR=74 1421=PDT BEDFORD: "Fix marker named....."
Distribution: FEEDBACK
Received at: 19=APR=74 14:21:55

I'm not sure of the value of this capability...the Fix Marker

5ce1

5cb1

5cc

5cc1

5cd

5cd1

5ce

5cf

command. Is there any way of addressing (A:) the marker once you've put it in, other than the Execute Marker List command? what can you use these markers for ? Thanks?

5cf1

19=APR=74 1341=PDT UCLA=NMC: spelling in interrogate command Distribution: FEEDBACK Received at: 19=APR=74 13:41:03

Seq

Please correct the spelling of retreived to retrieved, Check the Interrogate Tenex Command. Thanks

5cg1

18-APR-74 1803-PDT FEEDBACK: File Restore, re msgs from Ed, Bob, and Users

Distribution: FEEDBACK, norton, MARTINEZ, jimb, pollack Received at: 18-APR-74 18:03:33

Sch

This is a suggested procedure for handling file restoration at Office=1.

There have been alot of problems lately associated with

retrieving
files from dumps in two cases: 1) from archive, particularly

the archive tape is at ARC due to the age of the file, and

2) when

there is a bad file. The history of some recent problems, particularly with Kennedyeand Stone at RADC do not be recounted,

the dialogue iis recorded in (feedback, feed, utility:m),

Dave

Hopper is working on the spurious messages that are printed with

the archive requests. Jeff Peters has restored the Journal

from ARC archives as per the RADC request and Kennedy has an older

version of his bad initials file restored and seems to be happy".

I suggest the following procedure for future caases, undoubtedly

there will be many.

1) The operator (at Tymshare) review the archive requests at

the end of each day (5pm EDT) and restore those file that

can from local tapes, At that time if a file is not available

at Tymshare, or if he has any problems, he can contact

Jeff Peters before he departsARC at 5 PDT. The goal , I think, should be i day return. However (and this is a good way to impress users), if the operator can get the files back the same day by occasionally looking at the listing, it would be a tremendous advantage. 2) Bad files are one of the most serious problem the daily user can face. The version that is bad is usually not recoverable except by the long and tedious process of editing out the good portions of the file in NLS and deleting the bad. However, it is not necessary to do any editing in NLS to help a user get back in business. The operator restores the most

5ch1

recent good version of the file, and informs the user that it is in his dir and the new name he's given it. The difficulty is in determining what is a good version. AS far as I can tell 12 must be loaded in NLS and an Execute File Verify done, If the verify works, it should solve the problem (of course the user still looses any editing done to subsequent versions, It's important in both cases for the user to be notified that something has been done for him (users tend to miss that). Incidentally, in the case where they cannot get into Office=1, they should be called to inform them know its up. This important == I can youch for it after being out in the NET World for 3 years. Bob had some question about the timing == whether or not all operators should be trained. My personal opinion is that entire period of 16 hrs a day should be covered by an opertor

who can restore files and respond to phone calls, particularly with regard to status, both of the Net access and Office=1.

Jeff Peters will be available to help or get files off AARC tapes between 8 = 5 PDT, Requests that come to Feedback will

be forwarded to the operator by sndmsg, Any response to the user

should be sent also to FEEDBACK so that we know what happened

and have a record .

These are my suggestions; comments welcome, I think it will

really help if we agrree on the the standard procedure for these non_NLS problems. Thanks, Jim BAir

P.S. Users may think there is some NLS solution and talk about plexes, etc, but I think this procedure will work if that is ignored in the case of bad files.

ignored in the case of bad files.

18=APR=74 1620=PDT CAVANO: archival Distribution: FEEDBACK

I am still having trouble in getting the archival system to cooperate with me, what can I be doing wrong (unless the files

cooperate with me, what can I be doing wrong (unless the files are being archived without being removed from my directory)???

18-APR-74 1219-PDT SDAC-TIP: quest

Distribution: FEEDBACK Received at: 18-APR-74 12:19:09

Received at:

What happen to the guest password?
Alan R, Hill <owen>@isi,<vsc>@isi,<tgs>@isi

18=APR=74 16:20:48

17-APR-74 1150-PDT Mailer: Distribution: FEEDBACK Received at: 17-APR-74 1150:31-PDT

mail for crocker@UCLA=NMC not deliverable because: Not deliverable after 5 days,

17-APR-74 1144-PDT BEDFORD: Journal index.....where, if at all?

5011

5ch2

5ch3

Sci

5011

Sed

5ck

5ck1

Distribution: FEEDBACK Received at: 17-APR-74 11:44:17

501

Is there an index available for the journal system we're using on Office=1 ?

5011

17-APR-74 1135-PDT BEDFORD: <USERGUIDES>arclocator.: I'm having trouble

5cm

Distribution: FEEDBACK Received at: 17=APR=74 11:35:53

5cm1

What happened to the arclocator since I last tried to use it?

16-APR-74 1526-PDT KENNEDY: System problems and file problems Distribution: FEEDBACK, oper, bair, norton Received at: 16-APR-74 15:26:31

Sen

You will be pleased to know that all of system related problems have gone away.

As of 1703 I logged in to Office 1.
As of about 1800 I managed to get version "x" of ejk,nls;25
up. It was a version that should not have existted, since I
had journaled and deleted some of it earlier. But...
I outputted it, got a good version of it in nls;25 did some
work, updated and then deleted the pc andthenls of version 24.
Everything seems fine now, So I am going home and do my
incometax.

incometax, (NOTE) Iam not delinquent, the returns from upstate NY go to Mass. In Mass they have Patriots Day whichis a legal holiday and we get extended til midnit onthe 16th.
Tomorrow at this time I may be delinquent.

5cn1

16=APR=74 1459=PDT BEDFORD: compatibility of CASSETTE, SAVE; 1 and our MUX

Distribution: FEEDBACK, mattiuz Received at: 16=APR=74 14:59:18

500

Do you fellows have ay reason to suspect that the Cassette routine (for inputting cassette tapes) is somehow incompatible with the GDC 1202 MUX that we are using? We have no problem reading in tapes when coming in on DDD, but when we use the MUX, we get all sorts of garbage which aborts the run (IE,, Control C's, Control Z's, etc.) It's a real puzzle to us, although we suspect that the difficulty lies in the CASSETTE software rather than in the MUX. Any ideas?

5001

16-APR-74 1249-PDT SU-DSL: tip and the '0' sign

Distribution: FEEDBACK Received at: 16-APR-74 12:49:15	5cp
Bob:	1
Note that a TIP user who types two @ signs will see three echoed.	
The first two are echoed by the TIP and the one that gets through is	
typically echoed by TENEX. Vint Cerf	5cp1
16-APR-74 1243-PDT CERF at USC-ISI: NETWORK PORT ALLOCATION	
Distribution: FEEDBACK Received at: 16=APR=74 12:43:49	5cq
JIM;	
THANKS FOR THE RESPONSE, I NOW UNDERSTAND WHAT'S GOING ON, CHEERS, VINT	5cq1
16-APR-74 1214-PDT PETERS at SRI-ARC: ARCHIVE REQUEST	
Distribution: FEEDBACK, FEEDBACK, MARTINEZ at OFFICE=1 Received at: 16=APR=74 12:13:51	5cr
<pre><ijournal>14724:NLS;1 IS NOW ON=LINE AT OFFICE=1:</ijournal></pre>	5cr1
16=APR=74 1154=PDT FEEDBACK: File restore Distribution: FEEDBACK, stone, kennedy	
Received at: 16=APR=74 11:54:20	5cs
Ed, Tymshare was unable to restore a good version of your initials file? Sorry for the delay. If still a problem let me	
know and we'll try an alternative route,	
Duane and Ed, I'm still trying to get Journal, 14724, restored, Problem with it being arcived on the ARC machine a long time	
ago. We have to work out proceedures for handling this. Jim	5cs1
16-APR-74 1137-PDT BEDFORD: WHEEEE! Thanks for the new allocation of disc.	
Distribution: FEEDBACK Received at: 16=APR=74 11:37:51	5ct
	000
No problem at all when you run short of space at the other end; I've already started to figure out ways of getting that 300 page allocation to do more work for me. Thanks again,	5ct1
16-APR-74 1127-PDT FEEDBACK: Disc allocation	
Distribution: FEEDBACK, bedford Received at: 16=APR=74 11:27:54	5cu
	-

Mike, Done, (Feels good to say that ...). You now have 400 pp. That's 100 over the max we set, but De'11 try it to see how it works out. We subdivided our finite resources to come up with 300 per user, so as people claim their own, we may have to set you back. I trust you'll be understanding at that time...it's hard to let go of a resource like that. Shouldn't be for a while yet. Jim

5cu1

16-APR-74 1117-PDT FEEDBACK: Allocation of Office-1 Distribution: FEEDBACK, cerf at USC-ISI Received at: 16-APR-74 11:17:46

5cv

vint, First to clear up some confusion, then answer to your question (no secrets here!) The number of ports is purely a mechanical factor and does not relate to who can log in. . . its analogous to the number of phone lines available.... The computer can handle (barely) 20 jobs as an ave, max, have sold 20 slots to whoever wanted to buy (with ARPAs concurrance of course). A slot currently is 16 hrs/day 6 days/week connect time and related support services such as trouble shooting.

at's it. (It will become more complex as it evolves,) The slots are currently purchased by ARPA (12, 4 of which are NIC), Rome Air Dev, Center (USAF) (5), Bell Canada (1), SRI (1), and one for sale. They are \$40,000 each/year. (May go down in a year ...) Hope that answers your question, thanks for the interest,

5cv1

16-APR-74 1105-PDT FEEDBACK: Restore = "impossible" Distribution: FEEDBACK, peters, peters at SRI-ARC Received at: 16=APR=74 11:05:53

Jim Bair (Coordinator User Development)

5cw

Jeff, Martinez could not restore Journla, 14724. Tried everything, Received later msg saying it might have been retrieved, but was unusable. Requested by <kennedy> ... Can you help? Help!!

5cw1

15-APR-74 1442-PDT BEDFORD: allocation of pages to BEDFORD up to 400 ?

Distribution: FEEDBACK Received at: 15-APR-74 14:42:56

5cx

Could you raise the allocation of pages for Bedford up to 400, at the expense of either Kollen, or Day (only temporarily in the case of Day). I've done about all th trimming I can. Thanks.

5CX1

15-APR-74 0744-PDT OPER: MAKING ARCHIVE HAPPEN

Distribution: FEEDBACK, NORTON, FERGUSON, POLLACK Received at: 15=APR=74 07:44:33

5cy

REFERENCES TO ARCHIVE COMPLAINTS MUST BE APPROACHED ON AN ITEM BY ITEM BASIS FOR THE MOST EFFECTIVE "FINE TUNING" TO OCCUR, WE WILL MAKE AN OVERALL GREATER EFFORT TO PROVIDE ACCEPABLE CUSTOMER SERVICE BUT NEED TO KNOW THE SPECIFICS OF COMPLAINTS TO ELIMINATE THOSE SYNPTOMS AT THEIR SOURSE; ARE REQUESTS THAT REFERENCE TAPES NOT LOCATED AT TYMSHARE INVOLVED? IS THERE A SPECIFIC USER WHO NEEDS EXTRA SERVICE TO OVERCOME HIS EXPRESSED DISSATISFACTION? DO THE ALLEGED BREAKDOWNS OCCUR DURRING A PARTICULAR TIME PERIOD (WHICH WOULD INDICATE TO ME WHICH PERSONELL REQUIRE FURTHER INSTRUCTION AND/OR CONTROL)?

5CV1

ON TANGIBLE SUGGESTION I CAN INPUT AT THIS TIME IS THAT SUPERFLUOUS
JOURNAL ERROR MESSAGES OF THE TYPE "<DIRNAME>IDENT, NLS;1 NO SUCH
DIRECTORY" MUST BE CLEARED UP; ARCHIVE REQUESTS TO THE A,R,T
ARE
OBSCURRED WHEN LINES OF THESE OUTPUT, I WILL SEND THE CURRENT STATUS OF THESE TO MARSHA KEENEY AND DAVE HOPPER.

5CY2

ON DIRECTORY «USERGUIDES» (AND OTHER SUCH CASES) IT IS A SIMPLE THING TO SET *DONT ARCHIVE* ON FILES THAT SHOULD REMAIN AND IT WOULD BE INCORRECT FOR ME TO ASSUME I CAN DETERMINE THE CRITERION FOR THIS MYSELF; THIS DECISION WOULD SEEM TO BE BEST MADE IF NOT IMPLEMENTED AT ARC.

5cy3

I LOOK FORWARD TO WHATEVER FURTHER INPUTS AARE AVAILABLE FOR THE COOPERATIVE EFFORT IT WILL TAKE TO ELIMINATE OR REDUCE THESE PROBLEMS.

5cy4

THANX
BOB MARTINEZ
TYM/OFFICE=1

5CY5

15=APR=74 0738=PDT MATTIUZ: load average

Distribution: FEEDBACK, norton, day, mattiuz, bedford Received at: 15=APR=74 07:38:38

5cz

Jim, is there any big reason why superwatch is run first thing in the Morning? It appears to be the job that makes the load average to high in the morning. Can this job not be run before the compute goes down during the night?.....Inez

Sez1

13=APR=74 2205=PDT BECK at SRI=ARC: Archived <userguides> at Office=1

Distribution: FEEDBACK, norton, vanNouhuys, kelley Received at: 15-APR=74 00:42:06

5de

Except for the following 3 files:

op=direxp,nls;16 op=dirlist.nls;8

this=charcodes.nis:15

there are no Office=1 <userguides> files on archive tapes.

Because of the procedure (see=JJOURNAL, 22363,1:w) for

maintaining Office=1's copy of <userguides>, there most likely
won't be any more files archived from that directory.

In particular, I will be reading every file there every 3 weeks (thus archive won't get to it) by means of transfering ARC's current copy of <userguides> to office=1.

I don't quite understand, from Feedback's sndmsg, what the problem with <userguides> is at Office=1, but it might be due to the fact that several parts of the TNLS Users Guide never got transferred, so users probably interrogated for it & found it missing.

The reason several files were missing (all NLS files should be there as of today) is that I've found file transfer of a whole directory that is not a username to inconsistently but constantly fail with all methods I've been advised of. I've spent many frustrated hours at this. Several weeks ago I was promised by Hopper & White that they were working on better tools for this. However, Today I did manage to get most of the files over there individually despite several bomb-outs for each

f them.

Print files are not available at Office=i*s <userguides>
so far, because ARC*S print files don*t work on Office=i*s
printer. Therefore, new print files will have to be generated.
However, users do have an alternative to running print files:
they may obtain such hardcopy directly from the NIC at SRI=ARC
by asking for the Users Guide they want.

5de1

12=APR=74 1541=PDT OPER: KENNEDY Distribution: FEEDBACK Received at: 12=APR=74 15:41:54

5da

5da1

5db

5db1

5db2

5dc

The second

I DON'T THINK BOBM CAN HELP MUCH EITHER SINCE I ALSO DON'T UNDERSTAND WHAT THE PROBLEM HERE IS, WE RESTORED THE FILE WITH NO TROUBLE BUT THEN KENNEDY LINKED BACK AND STARTED TALKING ABOUT BRANCHES AND PLEXES AND THAT'S REALLY OUT OF OUR DEPARTMENT, I SUGGEST YOU GET IN TOUCH WITH HIM AND LET US KNOW WHAT WE CAN DO TOHER RESTORING HIS FILES.

WITH REGARD TO THE MESSAGE FROM THE OPERATOR, WE ARE

WITH REGARD TO THE MESSAGE FROM THE OPERATOR, WE ARE
TRAINING A NEW OPERATOR ON TENEX AND HE HAS BEEN DOING
FINE UNTIL HE RAN INTO AN NLS PROBLEM.

LET US KNOW THE RESULT OF THIS. THANKS, EDWARD POLLACK

12=APR=74 1442=PDT OPER: RESTORING <KENNEDY>FILE Distribution: FEEDBACK Received at: 12=APR=74 14:42:37

TALKED WITH KENNEDY AND HE DECIDED TO WAIT UNTIL MONDAY TO FIX

UP THE PROBLEM , BOB M', IS NOT

HERE TODAY & I AM NEW AT THIS & NOT TO MUCH HELP. JOE REVILLE

12-APR-74 1211-PDT CERF at USC-ISI: ALLOCATION OF NETWORK PORTS AT OFFICE-1

Distribution: FEEDBACK Received at: 12=APR=74 12:09:31

JIM BAIR RECENTLY ADVISED ME THAT THERE ARE A TOTAL OF 30
NETWORK PORTS
ON OFFICE=1 OF WHICH 20 ARE ALLOCATED TO SUBSCRIPTION GROUPS.

HIS COMMENT WAS THAT ARPA HAS PAID FOR 4 NIC SLOTS, I AM ESSENTIALLY

CONFUSED BY THIS SINCE I ASSUMED THAT ARPA PAID FOR THE ENTIRE SYSTEM

AND THAT TYMSHARE IS FACILITY MANAGING THE THING, IN ANY CASE, I USE

ACCOUNT SU=DSL WHICH IS CERTAINLY PAID FOR BY ARPA, IN THE

OF UNDERSTANDING THE POLICY, CAN I BE APPRISED OF THE GROUPS WHICH HAVE

ACCESS TO OFFICE=1 AND THE NUMBER OF PORTS ALLOCATED TO EACH OF THESE

GROUPS? IF THIS IS DEEMED SENSITIVE INFORMATION, PERHAPS CARIG FIELDS

OR STEVE CROCKER AT ARPA WILL GIVE PERMISSION FOR THIS INFORMATION TO

BE GIVEN TO ME, BUT I DIDN'T WANT TO BOTHER THEM UNLESS IT IS

2

NECESSARY. THANKS IN ADVANCE FOR TAKING THE TROUBLE TO RESPOND VINT CERF [CERF@ISI].	5dc1
12=APR=74 1204=PDT FEEDBACK: restore = impossible Distribution: FEEDBACK, peter at OFFICE=1 Received at: 12=APR=74 12:04:37	5.00
Martinez could not restore Journial, 14724. Tried everything at Office=1, Can you help? JimBair	5dd1
12=APR=74 1153=PDT FEEDBACK: File restore Distribution: FEEDBACK, kennedy, oper Received at: 12=APR=74 11:53:30	5de
Oper: (Bob M?) Did you restore <kennedy>EJK to the latest good version yet? As per his sndmsg of 11 apr 1526. If you have just wanted to check, but you havent please send a copy of the restore notification to FEEDBACK, This will help us greatly help the users and keep track of things, (Excuse the typos)</kennedy>	of 5de1
12-APR-74 1146-PDT FEEDBACK: Your phone call Distribution: FEEDBACK, crocker at UCLA-NMC, crocker at ISI Received at: 12-APR-74 11:46:33	5df
Your call about not being able to make the final connection into Tenex from the Net is appreciated. We were aware of the problem and had fixed it earlier but it recurred Fixed it again, but taking a serious look at the Net server software. Any further problems, please feel free to sndmsg to Feedback@Office=1. (Jim Bair)	5df1
10=APR=74 0913=PDT STONE: Interogatemouse Distribution: FEEDBACK Received at: 10=APR=74 09:13:10	5 d q
We never did get back one document. Martinez said he tried everything he newIt was the AKW doc by doug watson and norton 14724 retyped portions of it, but it should be on-line, since it is used often.	5dg1
what everhappened t the 3rd (last) mouse we sent back to you guys. Did you get it? It was sent prior to your last visit JIMremember, I asked if you could bring it with you?? Appreciate a check, thhanks	, 5dg2
10-APR-74 0711-PDT BEDFORD: Slow response times leading to	

disaffection toward the system

Distribution: FEEDBACK, mattiuz, bedford Received at: 10=APR=74 07:11:12

5dh

Everytime I learn about something new in this system, like a special user program, or that RUNFILE routine, I get all excited and enthusiastic. Then I try to use one of them, and am quickly brought back to earth, Having to wait over a minute while the RUNFILE routine I built up tries to get into NLS takes all the fun out it. More importantly, it wastes a lot of time that I was trying to save with RUNFILE in the first place. Inserting MESSAGE.TXT files into NLS is no use at all if it's goin

to take over two minutes to get through the command, Execute ProgramsINMES.

More experienced users probably don't have to wait around to see if the command "took", but all of us around here tend to check things as we go, not out of any sense of insecurity about the system's ability to perform, but because we make lots of mistakes as we go. The lack of feedback (actually a very delayed form of feedback) is really cramping our learning and developing within the system.

This is not a bitch, by the way. I've bitched before, and I'm sure that you're more aware of the problem's this lack of memory is causing than we are. I just wated to point out that the slow response time may be more acutely felt by novice users such as ourselves, and may have more impact on their attitudes torwards this style of working than it would have on you seasoned professionals.

5dh1

12=APR=74 0817=PDT BAIR at SRI=ARC: gripe about allocation (11apr1547)

Distribution: FEEDBACK, cerf at PARC=MAXC, kudlick received at: 12=APR=74 08:15:55

5di

Sorry for the inconvenience. There are 30 Net ports. The problem you had was due to our Allocation system which controls the number of login jobs for each user group at Office=1. There are a total of 20 which are allocated to the subscription groups, for example, ARPA has paid for 4 NIC slots, we think this is an effective way of sharing limited resources, Any further questions or problems, sndmsg to FEEDBACK@office=1. Jim

5d11

11=APR=74 1526=PDT KENNEDY: initials file Distribution: FEEDBACK, oper Received at: 11=APR=74 15:26:19

541

My initials file is suddenly a bad file. I think the problem

5d11 back vesterday's version? Sorry about that! 11=APR=74 1136=PDT STONE: Mouse Distribution: FEEDBACK 5dk Received at: 11=APR=74 11:36:30 Disregard last mess on mouse. The 3rd and final mouse arrived here today, in fine shape after its stay in the hospital. first one received over 6 months ago is still performing flawlessly. Thanks a million for the job. It makes DNLS a delight again. The replacement for # 3 has been shipped out 5dk1 this morning. 9=APR=74 1702=PDT FEEDBACK: (jjournal, 30403,) Protection Issue Distribution: FEEDBACK, stone peceived at: 9=APR=74 17:02:37 5d1 puane, thanks for you votes, they are counted. It turns out that we do not have to change things for you becuase you are in a different category form commercial users. Note that even though your ha ha (4.) rings a little true, foriegn disclosure is not legal Anyway, nobody in your group minds open files? Even Deane? 5d11 Jim 9=APR=74 1437=PDT KENNEDY: archive restore (msg frm Jim) Distribution: FEEDBACK Received at: 9-APR-74 14:37:40 5dm jmb = all of mine came back. Acouple took hmore than one day, and did require a second request. I think this is growing pains and things seem to have picked up okay. There were at least three requests for one of Doug Engelbart's reports which they never found. There was considerable interaction between oper and dls, but no file. 5dm1 9=APR=74 1436=PDT FEEDBACK: Files Online Distribution: FEEDBACK, mattiuz, bedford Received at: 9-APR-74 14:36:34 5dn Mike, All the files that are supposed to be on line now are. You should now be able to use Journal indexes, etc. Please let us know if there is any further difficulty. Re: Journal, 30300,) and sndmsqs... 5dn1 9-APR-74 1405-PDT FEEDBACK: Archive restore Distribution: FEEDBACK, Kennedy, stone 9=APR=74 14:05:13 Received at: 500

is in the branch called (mess). Can you either fiex or bring

Ed: Did you get your files restored yet from archive? If it took more than one day, please tell me the date, and filename of the requests and any other pertinent info. Waiting for your reply, Jim Feedback

5do1

DVN 5=APR=74 16:24 22634 COMTEST of JOVIAL Chapter Location: (JJOURNAL, 22634,1:w) *****Note: (Secondary Distribution Copy from XXX)*****

5dp

DLS 4-APR=74 05:35 30404 Where have all the stats gone? Message: Susan, I get the Superwatch graphs each week....good deal because I like to keep track of how the ARC system is being used (now that the troublesome RADC guys are gone). Will we be getting the equivalent graphs and/or the BAH week in review report from Office=1, I have accumlated stats from BAH's report for the past year, and am interested in making comparisons between them and our current use.

549

DLS 4=APR=74 05:20 30403 Privacy, Protection, Whats the problem? Location: (JJOURNAL, 30403, 1:w)

5dr

NDM 3-APR-74 14:24 22623 Group File Protection: Response to (30396,) Location: (JJOURNAL, 22623, 1:w)

5ds

MIKE 26=MAR=74 14:29 30299
HELP HELP HELP ! We need a line processor.
Location: (JJOURNAL, 30299, 1; w)
*****Note: (Secondary Distribution Copy from XXX)*****

5dt

JHB 30=MAR=74 19:42 22536 User Development Trip to Bell Canada &Pre=application Analysis Location: (JJOURNAL, 22536, 1:w)

5du

Comments: Historical and Analytical; Follow=on Necessary in conjunction with Bell study of AKW.

5du1

JHB 30=MAR=74 19:38 22535 User Development Trip to RADC, 19 Nov 73 Location: (JJOURNAL, 22535, 1:w)

5dV

Comments: Historical

5dv1

MDK 27=MAR=74 08:09 22498

stuff

Location: (JJOURNAL, 22498, 1:w)

5dw

Comments: thought you might be interested in this msg from network feedback.

5dw1

MIKE 26=MAR=74 15:34 30301

Some questions on protectiona dn recognition of Bell users as a

group.

Message: 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 ?

5dx

In order to create distributions for sndmsg, you must first create a file. This file will contain nothing but the names of the people you wish to be in a particular distribution, 2) Then you insert one statement in the file and in it put the names of the receivers just as you would in sndms9 (lastname, lastname, etc.). 3) Check to see if the statement is longer than one line. If it is find the lastname before the end of the line and insert a literal carriage return after the comma. This way of noting each line with a CR is necessary when a string of names is more than one line long. the file and then position the pointer so it is at the beginning of statement 1. 5) With your marker at the beginning of the statement and statement numbers turned off (with viewspecs), do an Output Sequential (no forced upper) to Filename, sav CR, 6) To use the distribution list file, merely type a control B in sndmsg when is asks you for USERS: and enter the filename.sav <esc> CR. This may take more than one try, but should work in a way similar to using control b to submit a TXT file as the Message.

5dx1

MIKE 26=MAR=74 14:38 30300
Information on 'Files Not On=line'
Message: 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.

5dv

DLS 25=MAR=74 12:34 30284 Problems sorting plex Location: (JJOURNAL, 30284, 1:w)

5dz

8=APR=74 1723=PDT FEEDBACK: Append prob Distribution: FEEDBACK, bedford, mattiuz Received at: 8=APR=74 17:23:38

5e@

Mike, "fst nonexistant" usually means the system cant locate a valid address on disc because of technical failure. If you are specifying a correct address which must include a statement reference in it, then try it again. A repeat means you should do a Execute File verify to see if the file is in fact screwed up on disc. Please let me know what happens.

5001

8-APR-74 1716-PDT FEEDBACK: System down on fr1 nite (5apri917edt) Distribution: FEEDBACK, kennedy, stone, norton Received at: 8-APR-74 17:16:14

5ea

Ed, If the time is correct, I don't know why it goes down at 7pm your time. At about 3PM our time every Fri we bring a new Exec with all the improvements, etc., that have been tested during the week at ARC. If the time is correct (I'll wait for conformation from you) does it come back up? Is there any announcement that it's going down?

Jim Bair

Seat

6-APR-74 1126-PDT BEDFORD: difficulty in using the Append command between files
Distribution: FEEDBACK, bedford

5eb

I tried appending from my (useguse,) to my (round2,), and I got a message to the effect that <BEDFORD>ROUND2,NLS;2 = fst entry nonexistant, Is this just an isolated incident, or is the system trying to tell me something?

5eb1

5=APR=74 1917=EDT kennedy at RADC=TIP: Office=1 Distribution: FEEDBACK, stone at OFFICE=1 Received at: 5=APR=74 16:46:58

Received at: 6-APR-74 11:26:00

5ec

Why does the host go dead every Friday night at about this time???

It is somewhat disconcerting to be in the middle of something and suddenly have the whole thing go dead. It is crushing to have it happen every Friday night, Do we get a refund???? comment please!!!

5ec1

5=APR=74 1138=PDT FEEDBACK: Xseted File (5apr0858)
Distribution: FEEDBACK, mattiuz
Received at: 5=APR=74 11:38:52

5ed

Inez, there's no way to restore the file using the Xset command in reverse. If it's tto late to do an Execute Unlock, then use the xset command in xset mode lower which can make your whole file lower case, you'll still have to capitalize each sentence, etc. It's easy if you can do an Unlock, otherwise.... Jim

5ed1

5=APR=74 0858=PDT MATTIUZ: xset feature Distribution: FEEDBACK, mattiuz Received at: 5=APR=74 08:58:42

5ee

jim, in error, i accidently did that to one of my files...the complete thing...how can i fix it that only my top level statements and the first letter of each statement will be in caps?

5ee1

4=APR=74 1113=PDT KENNEDY: arch reqs Distribution: FEEDBACK, oper Received at: 4=APR=74 11:13:46

5ef

Thank you for the files and the notification. Don't mean to be picky just get frustrated, Ed K

5ef1

3-APR-74 1412-PDT BAIR at SRI-ARC: Archived Journal Indexes Distribution: FEEDBACK, HARDEMAN, norton, FERGUSON, oper at OFFICE-1 Received at: 3-APR-74 14:12:43

5ea

Beau, I'm not sure, but rumor has it that you are responsible or at least know something about the Journal catalogs at Office=1. Well, most of them are archive, but I dont know which ones to have restored. Could you send a note to the operator of Tymshare telling him which files to restore? Ferg, There must be some way to keep these catalogs, userguides, etc, from being Archived,,,can you do? Jim

5eg1

3-APR-74 1407-PDT BEDFORD: no available 110 baud ports - no sweat.

Distribution: FEEDBACK Received at: 3-APR-74 14:07:49

5eh

The idea came to me when I realized that on an upcoming trip, I wouldn't be near anything but the 110 baud machines. It won't continue to be a problem, if in fact it ever really was that serious, My question was more in the nature of curiousity and looking ahead, rather than a request. Thanks

5eh1

3=APR=74 1401=PDT BEDFORD: your "waiting for the *"
Distribution: FEEDBACK, mattiuZ
Received at: 3=APR=74 14:01:45

501

For a long time I thought that the "C was such a beast that it took two carriage returns after using it to get back to NLS, (Ha Ha on me !)
The 72 seconds I referred to was on first logging in; it hasn't been THAT bad for a while, now, I'll be sure and let you know if it gets really bad again.

5eii

3-APR-74 1141=PDT FEEDBACK: Waiting for the * Distribution: FEEDBACK, bedford, mattiuz Received at: 3-APR-74 11:41:49

5et

Mike, A couple of weeks ago, you mentioned something about waiting 72 secs for the TNLS herald, *. It occurs to me that if you do a continue from the Tenex level, you will NOT get one until some noise or a CR causes it. This is because a cinterupts NLS and returns you to the exact spot you were in before, AFTER the herald waiting for a command, Does this help?

5eji

3-APR-74 1137-PDT FEEDBACK: Mess command Distribution: FEEDBACK, mattiuz Received at: 3-APR-74 11:37:46

5ek

Inez, Must have been one of those glitches that occur randomly and are impossible to trace after the fact through the millions of circuits that are used, I can only Offer an alternative to "MESS", READMAIL.

Readmail<esc> CR gives you a subsystem designed to let you deal with messages at the Tenex level. Follow the instructions given when you ask for help, and you can read your msgs from any day to the present. Let me know if you have any trouble with it, Jim

5eki

3-APR-74 1005-PDT MATTIUZ: sndmsg Distribution: FEEDBACK, mattiuz, bedford Received at: 3-APR-74 10:05:03

5el

As i logged in this morning, i was told i had a new message however when i tried to read it, computer told me i had no new messages

Inez

5el1

3=APR=74 0929=PDT KENNEDY: reply on yourmsgs in response to my "deleted files" msg

Distribution: FEEDBACK, oper, bair Received at: 3=APR=74 09:29:23

5em

There is no way I can reproduce the entire session. Earlier in the day I looked at my dsk and expunged, Later after working entering a file on the TI and editing it on the IMLAC and journaling it, I was ready to log off. Ichecked dsk and found I had about 35 pages expunged I then checked a printout of my directory from that morning, I found that the one file was gone, so I undeleted it.
Ref the trim on extra file versions bi-weekly retaining only two, I had only one in my directory, it was the second version. Had it been expunged also would it have been recoverable = easily? I admit that the file was on a topic that has been hanging fire for a while and has probably onot been looked at for a month. Does this mean it gets trimmed out of my directory? By the way why is it tking so long to getjournaled material online? We asked for one of Engelbart's reports about three time a week or more ago and I don't think it made it yet. Talso asked for two last nite and have heard nothing. They may or may not be back right now.

In the first para, read 35 pages deleted, sorry about that.

5em1

3=APR=74 0709=PDT OPER: DELETED FILES Distribution: FEEDBACK, KENNEDY Received at: 3=APR=74 07:09:42

5en

TO REITTERATE THE MESSAGE FROM JIM BAIR, I CAN ADD THAT ON BI-WEEKLY INTERVALS WE PERFORM A TRIM ON EXTRA FILE VERSIONS KEEPING ONLY TWO VERSIONS, ALL FILES INVOLVED ARE KEPT ON TAPE STORAGE AND WE'D BE HAPPY TO RECOVER ANY AND ALL DESIRED FILES ON A PER REQUEST BASIS, THANX BOBM

5en1

2=APR=74 2058=PDT IRBY at SRI=ARC: lack of file name feedback Distribution: FEEDBACK, bedford at OFFICE=1, mattiuz at

OFFICE=1, hopper, wallace, white Received at: 2=APR=74 20:58:54

500

My humblest appologies but there in fact is no good reason for the lack of a file name feedback when the move command is used to move something into another file. The CM is move to the new file, but the user is not told of the change in file. This is a bug and should be fixed by Dave Hopper, It has been fixed in the new NLS. == Charles.

5eo1

2=APR=74 1838=PDT FEEDBACK: Prompt when new file location exists after move

Distribution: FEEDBACK, bedford, mattiuz, irby at SRI=ARC, hopper at SRI=ARC, wallace at SRI=ARC, white at SRI=ARC Received at: 2=APR=74 18:38:07

Sep

Mike, I agree with you, but I have been wrong before. There's probably some excellent logic behind why there is no filename echo after a move command from the file you're currently in to a new one. So, I'm sending this feedback msg to some of our system programmers fro their consideration. Thanks muchly for the good feedback, Jim

5ep1

2=APR=74 1831=PDT FEEDBACK: Link from half to ful duplex Distribution: FEEDBACK, stone Received at: 2=APR=74 18:31:17

5ea

Stoney, We have tried to duplicate your thing but have not be able to. Further, noone here can believe your description, Any more data?? Try it again? Jim

5eq1

2=APR=74 1807=PDT FEEDBACK: Inaccessible file Distribution: FEEDBACK, mattiuz Received at: 2=APR=74 18:07:31

5er

Inez, I cannot finf "LEGAL2" in your directory, Was that the correct file name? Jim (re: 2apri341)

5eri

2=APR=74 1805=PDT FEEDBACK: Unvoluntary delete (bair2apr1524)
Distribution: FEEDBACK, kennedy, oper
Received at: 2=APR=74 18:05:46

Ses

Ed, We have no way of finding out what happened unless you send us (feedback) a copy of the entire activity at the terminal that logon session. We have never had that problem before, and although that may sound like a cop out, its more relevant here because we must see the problem happen to understand wha it is., be able to duplicate it. We certainly do not want anyone's files deleted against their will. My only guess is

that you accidentally hit the del, or the file was not read for 21 day and was archived. If any files DO disappear, let us know and we can restore it from tape dump. Ciao, Jim

Ses1

2*APR=74 1756=PDT FEEDBACK: Error msg on EL (30mar1614)
Distribution: FEEDBACK, stone
Received at: 2*APR=74 17:56:44

5et

stoney, Thanks very much for the laboriously copied error msg. Our programmers know what happened from reading that (nothing that would ill affect you) but there's nothing they can do about it. It is a randow error, pdobably hardware, that is very infrequent, so much so that they cant duplicate it. Incidentally, they said all they needed were the first 2 lines of the error msg, above the "unassigned JFN". Thanks agin, keep that feedback coming. Regards, Jim

5et1

30=MAR=74 1614=PDT STONE(DLS) at OFFICE=1: Got the following mess when using Execute Logout

Distribution: FEED(FEEDBACK)
Received at: 30=MAR=74 16:14:14

5eu

ILLEGAL INSTRUCTION JSYS 56= 104000,,56

5eu1

AT LOGOUT+33= 262426

5eula

unassigned JFN

5eu2

R1/ R6,,R0= 6,,0

5eu2a

R2/ SETZ GSTACK+63= 400000,,553

5eu2b

R3/ FAD R0= 140000..0

5eu2c

S/ 772217, GSTACK+217= 772217, 707

5eu2d

M/ 772204, GSTACK+204= 772204, 674

5eu2e

30-MAR=74 1456=PDT FEEDBACK: Clayton Greer's request to run executables

Distribution: FEEDBACK

Received at: 30=MAR=74 14:56:10

5ev

I just set <USING> to a netwheel to enable him to run his automatic netnews distribution program. Seems it will save resources by doing automatically what must be done manua; lly, Bair

5ev1

2-APR-74 1731-PDT FEEDBACK: garbage in file Distribution: FEEDBACK, illinois Received at: 2=APR=74 17:31:19

5ew

Steve Bunch, Do you still have the larger than life file? If so, the best thing is to delete it and use null file to create a new one, Or it will automatically when you login the next time. Hope this works.

5ew1

2-APR-74 1722-PDT FEEDBACK: sys msg Distribution: FEEDBACK, ucla=nmc, jimb Received at: 2=APR=74 17:22:26

5ex

Dave, I dont follow your comment about the 15 min warning. it stuck or something? Jim Bair

5ex1

2-APR-74 1545-PDT FEEDBACK: "CASSETT" on private line(21mar1554) Distribution: FEEDBACK, bedford, mattiuz

2=APR=74 15:45:03

5ey

Mike, This is one of those problems its very difficult to find an answer to. It appears to our people to be the MUX, as you concluded. The program Cassett is particularly sensitive because of what these characters mean, and becuase there is

less I/O wait during that run (characters are more closely packed.

Received at!

you can look at one thing: the cable configuration on the plug might be in error such that the line discipline does not map through the signals correctly. Discipline should be EIA I believe.

secondly: Its most likely the MUX and can probably be pointed to as an error for the appropriate hardware people, OK? Jim

5ey1

2=APR=74 1533=PDT FEEDBACK: 110 Buad Port (re 26mar1543) Distribution: FEEDBACK, bedford, mattiuz 2=APR=74 15:33:13 Received at:

5ez

Mike, Currently there are no 110 baud ports at Office=1, they are all 300 as per Bells request. I'm not sure how a 110 would fit in with the multiplexer, but I'll look into if you are serious about that rate, i.e. can forsee a continueing need that warrents dedicating one line to that.

5ez1

2=APR=74 1341=PDT MATTIUZ: locked file pistribution: FEEDBACK, bair Received at: 2=APR=74 13:41:11

5 f @

to Bair (ARC)

Jim, why does the system not allow me to write on my own file? 5691 "Legal2" is the name....Inez 2=APR=74 0916=PDT FERGUSON: Russell's Probs Distribution: FEEDBACK, norton, norton at ARC, feedback at ARC 5fa Received at: 2=APR=74 09:16:39 I logged in today, and russel can get into NLS fine. I the problem is fixed. Also, he is not in the special group can always login. Is this crrect?? He is in SEISMIC. If this is all OK, i will assume he is now happy, 5fa1 2=APR=74 0830=PDT STONE: TENEX LINKS from Half to Full Duplex devices Distribution: FEEDBACK 5fb 2=APR=74 08:30:53 Received at: when the TENEX link command is used from a full duplex device to a half duplex device, the link is made, but no data is transmitted to the half duplex device. If the link is made in the other direction (from the half to the full duplex device) everything procedes as usual ... Any explaination for this? The TIP command echo none is in force when the half duplex device is being used, as is the TENEX command half. Is there any simple way to get around this ... at least to let the half duplex devi 5fb1 know a link has been made to it? 1=APR=74 1803=PDT BAIR at SRI=ARC: Dir "Carolstrom" Distribution: FEEDBACK, bair, mclinden at OFFICE=1 5fc Received at: 1-APR-74 18:03:56 Hi, Jim said something about this being misspelled, or perhaps it was that another dir for a similar name was needed?? Can you help? Hope things are fine back there in Sunny DC ... I 5fc1 really enjoyed my visit. Regards, Jim 29=MAR=74 0823=PDT BAIR at SRI=ARC: sndmsg fail Distribution: FEEDBACK, bair, FERGUSON, HOPPER 5fd Received at: 29=MAR=74 08:23:38 when sending a msg a couple of mins ago, it said "can"t == mail 5fd1 system failure." Not too nice..can we fix? Jim 28-MAR-74 2051-PDT BAIR at SRI-ARC: Rothenberg msg approx 2 Mar

...

Distribution: FEEDBACK Received at: 28=MAR=74 20:51:58

560

Jeff, Good grief, just realized that in all the hustle here with a trip back East fro 2 weeks, etc., thrown in for good measure forgot to answer your msg. At least itsnow happening. Journal Browse: In TNLS (TTY) you must jump on the link: (userguides, arclocator, 1:xw) which will , when printed as a plex, list a "menu". Use the statement number to select the item you are interested in and jump on the link contained in that statement. The jump to link command may be included in any address field(logical) and would look like this: A: .6 " or the " may be used alone. On your second question, if you're still interested, we can back up to Versions in most cases if we know th date you Let me know if this info is what you wanted. Hope to talk with you again in the not too distant future, PS: When you jump on the Journal index link, keep jumping until you have what you want

5fe1

28=MAR=74 1025=PDT FEEDBACK: Reverse DEX (27MAR1201) Distribution: FEEDBACK, mattiuz Received at: 28=MAR=74 10:26:10

544

Inez, There are a lot of variables, but you should be able to do th following way:
Tenex command: COPY FILENAME(sequential file) to TTY: CR CR.
Note the :, it is necessary. Set the Termiset to record before doing this and it should record everything as it is being typed out be the Exec. Note that it should be a sequential file. Try it a couple of time to see if it works. Jim

5ff1

27-MAR-74 1621-PDT FERGUSON at SRI-ARC: Bell dir group Distribution: FEEDBACK, bair, feedback, wallace Received at: 27-MAR-74 16:23:03

5fq

Jim,
I set up all the Bell users that way because that is what
we had agreed upon, (see <jjournal>22348) If you (or they)
want it
changed, we can do so. But that was my understanding of what
they
wanted, But as with everything in computers =
of course we can change it!!
Ferg

5fq1

27-MAR-74 1249-PDT FEEDBACK at OFFICE-1: URGENT security prob, Distribution: FEEDBACK, Wallace at SRI-ARC, ferguson at

SRI-ARC, norton at SRI-ARC 5fh Received at: 27=MAR=74 12:49:17 Got a somewhat urgent pron at Office=1 Tenex level, Copy to Wallace in hopes that he can act today without having to wait for Ferg who is out until tomorrow: Bell Canada has no prtection on their files or directories at all from each other, They can connect to anyone without the password and can simply load anyones file and write on it. Dont know how far the problem goes beyond that (its not true for me) but its kinda dangerous the way Bell operates. I tryed it as one of them (Bedford) an found it to be true, please let me know as soon as you come with anything, or if you dont have time smokes. Thanks, Jim 5fh1 27=MAR=74 1247=PDT OPER: MORE DISK Distribution: FEEDBACK, NORTON, MARTINEZ 5fi 27=MAR=74 12:47:16 Received at: AS PER YOUR REQUESTS USER DAY NOW HAS 500 PAGES ALLOCATED; USER LIUZZI NOW HAS 400 PAGES ALLOCATED. THANX BOBM 5fil TYM=OFFICE=1 27-MAR-74 1243-PDT FEEDBACK: Secuirty breach, your msg (26MAR1547&26MAR1600) Distribution: FEEDBACK, bedford 5fj Received at: 27=MAR=74 12143106 mike, Problem is real ... working on it with utmost urgency. 5£11 Thanks for telling us before it became a problem, JHB 27-MAR-74 1224-PDT FEEDBACK: 400pp of disc Distribution: FEEDBACK, Stone, liuzzi 5fk 27=MAR=74 12:24:21 Received at: 5fk1 Done 27-MAR-74 1222=PDT FEEDBACK: Stone request to increase Disc PP Distribution: FEEDBACK, oper, norton 5f1 27=MAR=74 12:22:43 Received at: BOBM: If you did not get go ahead frrom Jim, then go ahead and increase Liuzzi to 400 and let feedback know when done so I can notify them. Thanks for offering to do it, saves me the 5f11 trouble. Jim Bair. 27=MAR=74 1205=PDT FEEDBACK: Slow system == Bedford Bitch

Distribution: FEEDBACK, bedford, mattiuz, day, norton 5 fm Received at: 27=MAR=74 12:05:48 Mike: We realize that the system is somewhat slow. I don't think we were aware of the impact on users and thus really appreciate your msg (21MAR 0636). We are in the process of getting more memory, although we can not be absolutely sure that will solve the problem. The lead time on drum is incredible (6mos or more) so that is why we are trying the memory route. A rough quess would be within a month or two... Tymshare has to acquire the hardware and we have to acquire the money. In the m ntime, please be patient, it was extremely difficult to anticipate the responsivenes of the new hardware configuration, and we are now working on rectifying the situation, (Jim Bair) 5fm1 27=MAR=74 1201=PDT MATTIUZ: dex Distribution: FEEDBACK, bair, mattiuz Received at: 27-MAR-74 12:01:16 5fn Jim, is there a way to get something out of the system onto a tape? the reverse to the dex process? Inez 5fn1 27-MAR-74 1138-PDT ILLINOIS: 12 PAGE INITIAL FILE Distribution: FEEDBACK Received at: 27=MAR=74 11:38:59 5fo JIM, 5f01 JUST DID THE D P 1 AND UPDATE, HAD HELD OFF FOR FEAR OF DESTROYING USEFUL EVIDENCE, NEEDN'T HAVE WORRIED = THE INITIAL FILE IS STILL 12 PAGES LONG, I'M NOT REALLY CONCERNED ABOUT THIS PROBLEM, I JUST FOUND IT INTERESTING. IF THIS IS AN OLD PROBLEM THAT YOU'RE AWARE OF, I'LL JUST LET IT DROP. CHEERS, STEVE BUNCH 5fo2 27=MAR=74 1138=PDT FEEDBACK: Arcive solution (19MAR2010) Distribution: FEEDBACK, martinez, FERGUSON, jimb Received at: 27=MAR=74 11:38:52 5fp Bob: Thanks for checking into that, arciving becomes real important to clients when they are approaching the upper limit on disc space. Let know of any further feedback. Jim Bair 5fp1 27=MAR=74 1114=PDT FEEDBACK: Line noise Distribution: FEEDBACK, mattiuz, day, bedford Received at: 27-MAR-74 11:14:36 5fg

Is line noise still a problem, particularly since you have some sort of dedicated line? We have been working on some software solution to the problem, but have not found anything satisfactory yet.

5fa1

27-MAR-74 1111-PDT FEEDBACK: Line noise Distribution: FEEDBACK, Wallace at SRI-ARC, irby at SRI-ARC, ferguson Received at: 27-MAR-74 11:11:43

5fr

Line noise is a continuing problem particularly for the Bell Canada people. It is most frequently is interpreted as a CD, killing text insertion and other processes where one must start over, Question: What can be done here? could the system be changed to have a different bit configuration for CD or could we at least require 2 for execution? Thanks, Jim

5fr1

27=MAR=74 1105=PDT FEEDBACK: Follow=up Distribution: FEEDBACK, mattiuZ Received at: 27-MAR-74 11:05:37

5fs

Hi, Been away for awhile so this will be the first of a bunch of msgs that will hopefully answer the tons of feedback coming in from you all, 2 questions; Does Penny still get asked for her ident? Hane you gotten DEX under control and did you get the manuals?

The DEX stuff is pretty straightforward, so I don't imagine you are having much trouble. Penny should also be getting Journal

mail now.

Online linked training is still of questionable value, but if you want to do it I will be glad to. The problem here is that we do not have TNLs terminals in a room that has a headset ... the Bell conference mode was not too good for dialogue, Be talking to you, Jim (re: 1MAR0835)

5fs1

26-MAR-74 1600-PDT BEDFORD: HELP HELP ! Everything in our directories is wideopen to the group ! Distribution: FEEDBACK, mattiuz 26=MAR=74 16:00:57 Received at:

5ft

Since the last message, I've discovered that I can go into anyone's files in this group and insert or delete statements at will.

This is further than we're willing to go toward the idea of a community of knowledge workers, although the idea is intriguing. What was the problem ? When can you close us back up.

5ft1

26-MAR-74 1547-PDT BEDFORD: CONNECT command at the Exec level Security ? Distribution: FEEDBACK, mattiuz 5 fu Received at: 26=MAR=74 15:47:21 It seems that at one time it was necessary to give the user's password in order to CONNECT to his directory. This appears to no longer be necessary. Does this open the door to any security problems that you are aware of ? 5fu1 26-MAR-74 1543-PDT BEDFORD: possiblity of running TNLS from a 10 c.p.s. machine ? Distribution: FEEDBACK Received at: 26=MAR=74 15:43:18 5fv If the only thing we can get close to at times is a TWX machine operating at 110 baud, or whatever the speed is, Is there anyway we can get into the system with it, ie, another port Stvi with a low-speed capability ? 25-MAR-74 1016-PDT ILLINOIS: LARGER THAN LIFE NLS FILE Distribution: FEEDBACK 25-MAR-74 10:16:12 Received at: 5fw TRIED THE EXECUTE UNLOCK [GOT "THIS FILE IS NOT LOCKED"], THEN DID A COPY. THE RESULTING FILE IS THE SAME LENGTH, I.E., IT DIDN'T CHANGE ANYTHING. THE NEW COPY IS SRB.NLS: 7. THE ORIGINAL TRESPASSER IS :6. STEVE BUNCH 5fW1 21-MAR-74 1554-PDT BEDFORD: running the program CASSETT throughthe multiplexor Distribution: FEEDBACK Received at: 21=MAR=74 15:54:47 5fx Can anyone there figure out why we find it impossible to run CASSETT through on the private line, but not when we go over the DDD network ? The problem is in the system at that end finding too many extraneous control characters. It looks as if every 20-30 characters turns out to be a CNTRL Z or CNTRL C. we're not sure it's the MUX yet, but everything points to it. switching from the private line to DDD in the middle of a job solves the problem. 5fx1 27=MAR=74 0806=PDT BAIR at SRI=ARC: Message roll by Distribution: FEEDBACK, ferguson Received at: 27-MAR-74 08:07:55 5fy

One of the problems that came to my attention while back East was that login msgs for people user Imlacs at RADC roll by too fastdont stop and wait for a CR. They want to kno3w how to see them again or have a fix Can yoou fix this? Jim	5fy1
25=MAR=74 0914=PDT BAIR at SRI=ARC: Phone hangup re=send Distribution: FEEDBACK, mattiuz at OFFICE=1 Received at: 25=MAR=74 09:14:36	5fz
Re-send of message for the record (feedback) and just to make sure IMM got it, 18-MAR-74 1343-PDT NORTON: re not hanging up the Phone	
Distribution: BAIR, matiuz at Office=1, norton Received at: 18=MAR=74 13:43:18	
As I understand it, those incoming lines you have wired to	
multiplexer are your dedicated lines, I don't think it will matter	
if you don't hang uptry it and we'll se, Jim Norton	5fz1
Jim Bair	5fz2
25-MAR-74 0900-PDT BAIR at SRI-ARC: Partial Copy Prob Distribution: FEEDBACK, illinois at OFFICE-1, jimb at OFFICE-1 Received at: 25-MAR-74 08:59:58	5g0
To SRB: you can (should) do an Execute Unlock to eliminate PC flags, etc., then try, at Exec, COPy (file) to SAMENAME [newversion] CR [confirm] CR. If this doesnt give you a clean file, try delting plex 1 and Updating. Please let me know if this does or doesnt work. (feedbackgoffice=1).	5981
	2861
22=MAR=74 1125=PDT OPER: DSK ALLOCATION Distribution: FEEDBACK, NORTON Received at: 22=MAR=74 11:25:55	5ga
WHEN USERS REQUEST THAT THEIR DISK ALLOCATION BE ALTERED I WILL WAIT ON YOUR AUTHORIZATION BEFORE HONORING THE REQUEST, THIS IN PARTICULAR REFERENCES A REQ, FROM STON TO INCREASE ALLOC, FOR LIUZZI, THANX	
BOBM	5ga1
 22=MAR=74 1045=PDT STONE; Pages for Directory <liuzzi></liuzzi>	
Distribution: FEEDBACK, oper Received at: 22=MAR=74 10:45:28	5gb

5qf1

PROBLEM

BOBM TYM/O=1

Would you please increse the directory <LIUZZI> to 400 pages. Ray is working on a project (WWMCCS) that requires him to keep a number of large files resident in his working directory. 5gb1 Thanks, Stoney 21-MAR-74 0636-PDT BEDFORD: bitch bitch bitch bitch ! Load average too high and response time too slow Distribution: FEEDBACK, mattiuz 21=MAR=74 06:36:45 5gc Received at: I just waited over a minute (72 seconds) for the NLS herald. How is your progress going with respect to getting more disc or drum memory ? Load Avg. is now8.57, down from over 12, a few minutes ago. This is hard to take. 5gc1 20=MAR=74 1317=PDT MATTIUZ: new nls Distribution: FEEDBACK, bair, mattiuz Received at: 20=MAR=74 13:17:05 5gd Jim, any idea when the new version of nls will be avaible to us?..Inez 5gd1 20-MAR-74 0650-PDT BEDFORD: Bell Canada now into TNLS at 1200 baud. Distribution: FEEDBACK, pollack, norton Received at: 20=MAR=74 06:50:21 5 ge Everything appears to be working normally. Despite the fact that the load average is a little high right now (slowing response time), the improvement over 300 baud is staggering, (1 realize that for you folks used to 9600 we are still trudging along slowly, but we're quite content, nevertheless). 5ge1 19=MAR=74 2010=PDT MARTINEZ: ARCHIVE SOLUTION Distribution: FEEDBACK, BAIR, HOPPER, FERGUSON, JIMB Received at: 19=MAR=74 20:10:05 5qf IT IS CORRECT THAT ARCHIVING PROBLEMS IN THE PAST HAVE OCCURRED AS A RESULT OF IMPROPER ROTATION ON ARCHIVE TAPES: THE CODE WILL NOT ARCHIVE THE SAME FILE ON A SINGLE TAPE TWICE; OPERS WHO HAVE BEEN FILLING IN FOR ME WHILE I ATTEND CLASS WERE NOT AWARE OF THE PROPER ROTATIONAL ALGORITHM THEY ARE NOW AND THE

IF IT IS TYMSHARE'S SHOULD BE CORRECTED NOW.

30-JAN-74 1203-PST BAIR: Feedback on Userguides and user-progs cc: cavano, stone, bair Received 30-JAN-74 12:03:44	5gg
you should now be able to use all the user programs and the Journal indexes under Userguides (the userguides as well) Thanks for your request, con	5991
30=JAN=74 0701=PST STONE: Links to Journal catalogues cc: bair, bair at SRI=ARC Received 30=JAN=74 07:01:32	5gh
I need updated links to author and titleword indicies. It is also possible that these indicies are archived. If so, I think they should be put in a do not archive status. If you can get them to me, I will see that they are entered in everyones initials files here at RADCIndicies for ARC and RADC are both needed.	5gh1
29=JAN=74 0934=PST BAIR: Journal achives cc: cavano, bair, stone Received 29=JAN=74 09:34:51	5g1
Joe: The Journal archives are now online at Office=1 so that you may interrrogate them, (They were not as of Your msg 25Jan), JHB	5911
29-JAN-74 0608-PST CAVANO: userguides, user-progs Received 29-JAN-74 06:08:05	591
These directories are set up in Office=1 but with the exception of inmes both are empty, Are they going to be loaded so that they will be parallel with the ARC?	5911
29=JAN=74 0536=PST STONE: Sendprint Error Message Received 29=JAN=74 05:36:58	5gk
In trying to do a Sendprint to TIP 146 port 4 this morning, I received a new error message LOGIN: NO ROOM in System Can you interpret? The Sendprint subsystem then goes into its try again? and try another? routines, with no luck.	5gk1
28-JAN=74 1728-PST FERGUSON: msg file Received 28-JAN=74 17:28:01	591
got your mesage on missing msgs, but dont gite undersand, was this file on-line are ARC or OFFICE=1? Or even better, you can link to me, thanks will dea with it when I understand more fully, ferg	5g11

28=FEB=74 0946=PDT BAIR: DEX problems cc: norton, mattiuz Received 28=FEB=74 09:46:14

5gm

I note that you have a Primer, but still do not know if you have a manual. In order to deal with the backspaceing problem, we need to look at a file that has been loaded intoTenex from a DEX tape, ie, a sequential file, Please let me know where one is, Jim

5gm1

22=FEB=74 1156=PST BAIR: Getting reports again that the Journal is funny: No delivery within 4 days, reported on 21 Feb, We've got to make the thing more dependable...DAVE, would you please shake it up? Thanks.

cc: hopper, hopper at SRI=ARC Received 22=FEB=74 11:56:39

New York, 13441

5 gn

22=FEB=74 1145=PST BAIR: RADC Idents and Mouse cc: stone Received 22=FEB=74 11:45:11

500

1 Yes, we got the mouse and diagram, thanks, Hardware guys are working on it -- making mods as per diagram and our new specs. one you have now continues to work, it will all have been worth 2 I didnt have any problem using identisystem to print out RADC=TIP membership, but could be something funny about user definitions, Were you spelling out aTIP as well as RADC? At any rate, here is the currenttcontents of the master ident file for RADC=TIP: 3 (RADC=TIP) Expandorganization ACD ARB LML AAC RJC DRR2 DLD2 RHT2 FJT MAW EJK RAL JWJ DVA DFB WPB FSL WER RFI FPS TJB2 RED2 DAL RBP JLM JPC DLS MDP JRS RKW TFL ; Rome Air Development Center (IS) DLS Griffiss Air Force Base

5901

Delivery: Online; sub-Collection: RADC; Type: Tip; membershipPrevious: ARB LML AAC RJC DRR2 DLD2 RHT2 FJT MAW EJK RAL JWJ DVA DFB WPB FSL WER RFI FPS TJB2 RED2 DAL RBP JLM JPC DLS MDP

5gr1

5gs

5951

Sqt

5qt1

JRS RKW

TFL 1 5902 Groups: TIPG RADC NICLR; 21=FEB=74 1220=PST NSRDC: ARCHIVING FILES: BUG? 5gp Received 21=FEB=74 12:20:04 OVER A WEEK AGO I PUT A FILE ON THE ARCHIVE LIST VIA THE ARCHIVE COMMAND. IT STILL HAS NOT BEEN ARCHIVED ALTHOUGH A CHECK THROUGH THE STATUS SUBCOMMAND INDICATES IT IS STILL ON THE ARCHIVE PENDING LIST AND THE OPERATOR TELLS ME THAT ARCHIVAL HAS OCCURED SEVERAL TIMES AND THAT HE CHECKED THE PENDING FILES TO BE ARCHIVED AND THAT MY FILE WAS NOT LISTED ON HIS LIST, THE OPERATOR SAID TO TELL ALL TO FEEDBACK (IS THAT 5gp1 YOU BAIR?) ROBERT LIEBERMAN (NSRDC) 21=FEB=74 1004=pst stone: Journal delivery ec: bair 5gq Received 21=FEB=74 10:04:07 The Journal hasn't delivered anything for the past 4 days, this causes a lot of confusion, double sending etc, can you 5091 jog it loose? 20=FEB=74 1846=PST FERGUSON: <hoyle> cc: bair at NIC 5gr Received 20=FEB=74 18:46:17

16=FEB=74 1455=PDT BAIR at SRI=ARC: Idents cc: mattiuz at OFFICE=1, bair Received 16=FEB=74 14:56:51

The idents are KSH and DDAY respectively. De nada, Jim

Have created the directory, Password is KSH,

15-FEB-74 1549-PST FEEDBACK: Link stacks cc: Bedford Received 15-FEB-74 15:49:10

Link stacks are funny and will be changed in the new system.
But see if this helps: The file in the top of the link stack
is the one you're in. A Return (&) takes you to the one on the
bottom of ten stack. The stack is built as you load files (or
link to them) in one NLS session, not necessarily as move into
them once they have been loaded. Use Execute Status Link
stack. Comprende?

15=FEB=74 1515=PST BAIR: Sub

kennedy cc: Received 15=FEB=74 15:15:56

5qu

Sorry about that..it certainly wasnt a unnilateral decision and I agree with you about the new on ebeing better. Many people on the Network complained however. Too bad we cant offer both ...

5gu1

15=FEB=74 1513=PST BAIR: Idents cc: mattiuz, bair at SRI-ARC Received 15=FEB=74 15:13:41

5gv

Will do the Idents, but are you sure that's all you want? You dont't mean directories do you? Ciao, Jim

59V1

15-FEB-74 1118-PST FERGUSON: acct. no. beck cci Received 15=FEB=74 11:18:55

5aw

the EXEC gives you your acct. no. automatically. for programs require it, it (as is all of ARC is 30). If you ever forget, read the line that is printed when you log out, it contains vour acct, no. P.S. You should actually send all your questions to <feedback>, we are trying to handle all problems thru that. Take care ...

5gw1

14=FEB=74 1031=PDT BAIR: Mice cc: hardy at OFFICE=1 Received 14=FEB=74 10:31:23

5gx

The following msg was received from Stone: 14=FEB=74 05:36:00,745

Date: 14=FEB=74 0535=PDT From: STONE

Ret mouse

ferg

I am using the mouse you sent ... have ben for about 3 days now. It seems to be holding up. John Hayden had to make guite a few mods to the one you sent us, to make it compatable with the IMLAC's we have. The plug you sent was a male ... o is the one on the IMLAC. Also made some internal changes and ran two

extra wires from mouse to plug. I have sent one of ours back, along with circuit diagrams that John drew up. If there any questions, it would probably be best if Martin and John talked di ctly. I can't give you his phone number, so it would probably

be best if you called me, or we called you on the Enterprise line. Thanks again for your help Stony

It seems self explanatory. Please keep me posted. Jim

14-FEB-74 0934-PDT BAIR at SRI-ARC: Index program cct stone at OFFICE=1 Received 14=FEB=74 11:09:48

It should be fixed now. Thanks for your msg.

13=FEB=74 1324=PST MATTIUZ: noise on the line Received 13=FEB=74 13:24:58

Three times while working one day, there was noise on the line and the system program hit the control x command and everything I was doing was lost. Is it possible for the program to read 2control x's instead of one. It isn't likely to hit twice.

12=FEB=74 1654=PST FERGUSON: misc. CC: MEYER, WALTERS Received 12=FEB=74 16:54:17

Dean, The ident for <WALTERS> is set=up. It's grunt!! is that really true? If not really grunt, please sndmsg. Also, you have been moved to the ENERGY group for login group allocation stuff.

Hope you're enjoyinv Wasington,

12=FEB=74 1624=PDT FERGUSON at SRI=ARC: Trouble Logging Out cc: norsar tip at OFFICE = 1 Received 12=FEB=74 16:26:34

This is to DAG (Rieber=Mohn): When you get the message "NOT LEGAL IN INFERIOR EXEC" after trying to logout, this means that you are really in an inferior exec. probably logged in (at the superior exec), ran NLS, and then said

87

5gx1 5gx2

5gy 5gy1

5qz

5921

5h8

5he1

5ha

. ..

"Goto Exec", This new exec you see (called an inferior) has a subset of the superior exec commands available. Specifically, you cannot logout from this place, as there is still an NLS and EXEC above you. You simply GUIT your way back up to the SUPERIOR exec, and then logout.

If this message does not really answer your questions, either sndmsg

again or link to me,

12=FEB=74 1619=PDT FERGUSON at SRI=ARC: <rel=nls>xnls cc: nsa at OFFICE=1 Received 12=FEB=74 16:21:22

To Jess Hill, we have not yet finished our work on XNLS. At the moment we are only having ARC programmers and users working with that program, as there are many known bugs and problems. We have avoided releasing it to all users, as they may inadvertently do bad things to their files in the course of finding a bug, so until we successfully finish and release XNLS, we would like you to continue using standard NLS.

12-FEB-74 1616-PDT FERGUSON at SRI-ARC; <jernigan>liz2.sav cc; JERNIGAN, nsa at OFFICE-1, norsar-tip at OFFICE-1 Received 12-FEB-74 16:18:03

This message is to:

1) Mil Jernigan

2) Jess Hill of NSA

3) Yngvar Lundh of NORSAR-TIP

5he1

As you have found, no NETUSER can access a program by typing e<DIR=NAME>FILE=NAME<CR>
You only have access to programs in dir <NETSYS>. We have done this in an attempt to keep the Office=1 machine dedicated to NLS, and provide the best possible system load for good NLS response. So we have made an effort to prevent other programs from peing

5ha1

5hb1

5hc

run.
However, there are some other programs which are very useful to
the
average user. We have therefore included <jernigan>liz2 in the
<netsys> repetoire. You can now use it. If there are any
other
programs you are accustomed to, and wish to have included in
<netsys>
please sndmsg to <feedback> or <bair>.
Ferg

5hc2

12=FEB=74 1543=PST FERGUSON: c.c. of sndmsg to usc Received 12=FEB=74 15:43:53

5hd

This is directed to jim Pepin:

5hd1

Jim = I have no explanation for why you can't get to Office=1 from the USC=TIP, but you can from others. Once a Tip is running, the NETWRK should automatically know of its existence. I suggest you speak to the Netowrk Control Center at BBN (phone (617)661=0100). They should be able to handle your problem.

If you need any more help, don't hesitate to SNDMSG, Ferg

5hd2

11=FEB=74 1339=PST STONE; User Program "INDEX" cc: bair, ferguson Received 11=FEB=74 13:39:41

5he

The user program, INDEX, loads OK, but when trying to execute, it gives the message, File not on line... If Archived, use EXEC's INTERROGATE.... Whats up? It generates the heading at the taile of Plex 1 Index for Plex at 1.... but doesn't seem to be able to actually generate the index.

5he1

1=MAR=74 0835=PDT MATTIUZ: dex cc: MATTIUZ Received 1=MAR=74 08:35:44

5hf

Jim, I do not have a manual on Dex....the file where you can see my problem is TEST1.NLS; i. When Penny logs in the system, it still askes for her ident, should It? It did say however that she had no journal mail and Is it fixed? I can't tell. I won't be able to setup anything for the online training till late next week as I'm working onanother project and should be

finished by then, O.K.? Till then.... Inez 5hf1 1-FEB-74 0950-PDT BAIR at SRI-ARC: ESCAPE CHARACTER FOR TELNET cc: STONE at OFFICE=1 Received 1=FEB=74 09:48:37 5hg YES, IT HAS TO BE A CONTROL CHARACTER. (WOULD YOU PLEASE SEND THESE AND ALL OTHER REQUESTS TO FEEDBACK SO THAT WE CAN NOT DUPLICATE EFFORT HERE AND HAVE A RECORD OF THE KIND OF PROBLEMS/QUESTIONS YOU ARE HAVING ... IT WOULD HELP, THANKS). 5hq1 19-MAR-74 1947-pDT FEEDBACK: Sendorint cc: mattiuz Received at 19=MAR=74 19:47:41 5hh Inez, Not sure what you're trying to do but I assume that its see the product before actually doing a whole file, ie, one or twopp up to the halt you mentioned. In orde to see parts of a document more easily use Output Device Teletype, and watch it scrol by on yourr screen. Othewise, do you have anymore specific questions? its a bearr to use but will become easie someday with a new system. See the Tenex userquide for details if you aren't sure how to use it (I figured that you already ar or you wouldn't have asked about the halt.) Jim 5hh1 19-MAR-74 1940-PDT FEEDBACK: Arcive problem cc: oper, FERGUSON, HOPPER, jimb, MARTINEZ Received at 19-MAR-74 19:40:33 5hi Not sure who should lookinto this but getting reports that files are not being archive within days of the command usage. Guess this should be handled by Tymshare? Jim Bair 5hi1 19=MAR=74 1938=PDT FEEDBACK: Archive cci cavano Received at 19=MAR=74 19:38:17 5hj Joe, it was nice to see you although so briefly ... good to see that youre almost well again. Thanks for your note on archive problems, will look into it with programming staff. Jim 5h11 19-MAR-74 1936-PDT FEEDBACK: Dex tape mattiuz cci Received at 19=MAR=74 19:36:02 5hk

Inez, hi again. The only thing I can suggest is that you try it again, maybe evem twice,,,computer things have a way of ironning out that way. If it still doesn't work, send us the

tape so that we can try to figure out what's wrong, Good luck on this one, Jim

5hk1

19-MAR-74 1931-PDT FEEDBACK: Superwatch cc: norton, mattiuz Received at 19-MAR-74 19:31:37

5h1

Inez, Hi frrom Wash,DC. Neat that the system enables me to keep up with the communications from afar.... Anyway, your name has to be entered into a file that permits the software to run for you. Jim is working on it with Ferg (our Tenex programmer) and they'll let you know when it's OK to use, Jim B

5h11

19=MAR=74 1415=PDT MATTIUZ: dex cc: bair, mattiuz Received at 19=MAR=74 14:15:33

5hm

HELP! I am having problems today, after giving all the necessary commands to convert the tape to an nls file, the tape start to read the data and then it is as if the system is reading all kinds of Ctrl z's because only junk starts appearing on the screen. I have looked at the tapes locally and there are no terminators on at the beginning og the tape. Do you have any suggestions as to what he problem might be. This is happening on more than one tape. the other toes i have been converting ye all been alright....Thanks Inez

5hm1

19=MAR=74 0853=PDT MATTIUZ: superwatch cc: bair Received at 19=MAR=74 08:53:09

5hn

Jim, Norton mentioned when he was visiting us the other day, that it would be ok for me to usee the superwatch program to get some info on ourselves, however, I still cannot access it as it is still defined for ARPA users only,,,Could you check this out for me? ..., Thanks Inez

5hn1

19-MAR=74 0852=PDT CAVANO: archive cc: bair Received at 19-MAR=74 08:52:03

5ho

I archived some file yesterday that weren't archived. This problem has occurred before as well, Just thought you would like to know...Joe

5ho1

19-MAR-74 0851-PDT VU: Stupid Question...Stupid Mistake

cc: bair Received at 19-MAR-74 08:51:25

Thanks again mary vu

5hp

JIM,
Sorry my first question had to be such a dumb one, You were
right
about that minus sign, It should have been = instead, I just
didn't
see it when I was checking my directives.

5hp1

19=MAR=74 0744=PDT FEEDBACK: Copy of "Postel's Journal Problem"
cc: mitre=tip, bair at SRI=ARC
Received at 19=MAR=74 07:44:30

5hq

Jo, The problem you had was notwith teh Journal per se but with Tenex's handling of the partial copy you had to create (automatically) to send a Journal item. If you note your dir you will see a JWORKYOURIDENT file that is set up temporarily to hold the Journal submission for future processing. This is the file that most likely was in trouble. Delete it and its partial copy if it is still there, and retry the Journal. Retry even if it is not there. This is one of those randon erorr things hope you have had your quota...good luck, Jim Bair

5hq1

(second tv9

5hq2

18-MAR-74 1456-PDT BAIR: Output processor page problem cc: vu, mattiuz, hoyle Received at 18-MAR-74 14:56:22

5hr

Mary: There apppears to be a directive : "RM=69; which will try to set the margin to a = minus) 65. Let me know if that solves the problem,yer welcome, Jim

5hr1

18-MAR-74 1320-PDT HOYLE: Output Processor Problems cc: bair, mattiuz, vu Received at 18-MAR-74 13:20:30

5hs

Jim, weird things are happening when I use the output processor to print out one particular item. The whole thing is printed vertically on the page! None of us here can figure it out. Inez referred me to you. I was hoping you could take a look at it when you have a minute. USER IDENT: Hoyle FILE NAME: Notes
ADDRESS: .2a

5hs1

The output processor works great with the rest of the file.
Is there anything wrong with the directives I used? Can't see anything else wrong with the file. Would appreciate your help.

Thanks Jim. Mary Vu

Thanks for your help, Jim

5hs3

5hs2

15=MAR=74 1351=PDT BAIR: sequence generator cc: bedford Received at 15=MAR=74 13:51:48

5ht

mike: See the 1 *10 Programming User Guide branches 4a2 and 4a5 for starters (online jump on link to ** userguides, 110 **guide, 4a2:m), Also, would you please use FEEDBACK for questions? I'm trying to not have to log in too many places to receive msgs. Jim

5ht1

15-MAR=74 1154=PDT OPER: NEW MONITOR VERSION AT 0=1
marran, martinez, jimb
Received at 15-MAR=74 11:54:01

5hu

15=MAR=74 1145=PDT BAIR: ident problem cc: laforge, stone, kennedy, keeney at SRI=ARC Received at 15=MAR=74 11:45:27

5hv

Zd Laforge at RADC is not receiving journal mail addressed to his group. A check of RADC-TIP shows he's not there...this is probably the problem; don't have any idea have his ident(ELF) got dropped.

Question: what is the difference between RADC and RADC-TIP?

5hv1

14=MAR=74 1521=PDT OPER: NEW MONITOR VERSION marrah, martinez, jimb
Received at 14=MAR=74 15:21:42

5hw

13-MAR=74 1118-PDT BEDFORD: problems with ports at that end ? Received at 13-MAR=74 11:18:43

5hx

what does it mean if we don't get an answer from the ports at your end, even when we come in over the DDD network. I think that a bsy signal means that there are no ports avaailable, but what about no answer at all (current load avg. is abt 5.6....19 users)

5hx1

11=MAR=74 1109=PDT LAFORGE; radc list of users Received at 11=MAR=74 11:09:29

5hy

i sent a message to oper a couple of weeks ago that iseemed to

Sic

mattiuz

Received at 7-MAR-74 15:48:43

have dropped out of the radc directory as iwasn't getting the general type messages, i got no feedback from oper, feedback, 5hy1 maybe ican get some operation from you!. 11-MAR-74 0657-PDT BEDFORD: resend of HELP cry; how can I unlock my initial file ? cc: mattiuz 5hz Received at 11=MAR=74 06:57:10 I cant make any changes in my initial file (bedford, mike,) because it says the file is locked by MIKE. Execute Unlock and Update don't work; messages indicate it isnt locked ad that no chages have been made, respectively. The dir dshows a partial copy. 5hz1 9=MAR=74 1059=PDT BEDFORD: Cannot get into PC of my initial file Received at 9=MAR=74 11:00:00 510 I'm Unable to make any changes to the file <bedford>mike,nls;8 There appears to be a partial copy, but I can't work in it. When I try to make changes in (bedford, mike,), I get a mesage that the file is locked by (MIKE). If I try to update it, it says there have been no changes; If I try Execute Unlock, it says that the file isn't locked. Help. I've tried logging ot and logging back in wth no better luck. 5101 7-MAR-74 1632-PDT UCLA-NMC: running executables bair Received at 7=MAR=74 16:32:25 51a I mean regular of executable files (.SAV). We have some that to process and transmit files to CCN's document printer. The programs are in our directory (currently only CCNJOB.SAV). Dave. 5ia1 7-MAR-74 1552-PDT FEEDBACK: Additional Disc pp. cc: stone, carrier, ferguson, oper Received at 7=MAR=74 15:52:36 51b <stone> and <carrier> now have 500pp each. please address all requests for additional resources to 5ib1 <feedback> or Journal FEED. 7-MAR-74 1548-PDT FEEDBACK: New Dir and group protect

New dir. established for <vu> password MHV, ident pending (probably will be able to log on by Mon.) 250pp. We are still working on file protection by group...system programmers have been very busy, so hope it will happen this week, Sorry for the delay.. Journal protection is a separate thing and we currently dont know when that will be done, Instructions will be sent out when it is. 5ic1 7=MAR=74 0955=PDT MATTIUZ: group ident cc: bair, mattiuz Received at 7=MAR=74 09:55:10 51d Could you let me know when are files will be recognized, or I should say , when will we be recognized as a group in order for us to access certain certain files? 51d1 7=MAR=74 0953=PDT MATTIUZ: new directory bair, mattiuz Received at 7=MAR=74 09:53:03 5ie Jim, we need a new directory for Mr. Hovlw's\\\e's secretary. Info required is as follows: Mrs. Mary H. Vu Bell Canada 620 Belmont, Room 1105 Montreal, Quebec H3C 3G4 Tel. 514-870-3540 5ie1 6-MAR-74 1033-PDT BAIR at SRI-ARC: Control o in Telnet cc: JERNIGAN, bair, using at OFFICE=1 5if Received at 6=MAR=74 10:32:53 Response to "o not working: Telnet intercepts "o as a special command character. To "0 you have to set to "clear, output .character" to something else, like "y. Telnet command is: c(lear, output, character="y CR, OK? 51f1 6=MAR=74 1013=PDT BAIR: readmail cc: mattiuz Received at 6=MAR=74 10:13:00 5ig Inez, Readmail works fine here, maybe it was in a bad mood, Are you hitting two CRs after th date? eg.: *d[ate] 6=mar=74 cr cr. You have to type out th complete date exactly as I did...belongs to the Network (not really part of NLS) Jim 5191

6-MAR-74 0741-PDT MATTIUZ: readmail

	cc: bair Received at 6=MAR=74 07:41:11	511
	readmail feature does not seem to be working. It seems to read all messages rather than only the specified date given.	5ihi
	4-MAR-74 1616-PDT HOPPER: Regarding your question of 2-MAR-74	
1	644-PDT	
	cc: FERGUSON, norton, bair at SRI-ARC Received at 4-MAR=74 16:16:18	511
	You left off the question mark. The answer is "no",	5111
	2-MAR-74 1700-PDT BAIR: File BOOK	
	cc: day, mattiuz	
	Received at 2=MAR=74 17:00:17	511
	BOOK1 is presumed to be the same as BOOK referred to in problem	
	msg. Seems you fixed it yourself, great, (This is in response to msg from Inez on 1 MAR.	5111
	2=MAR=74 1644=PDT FEEDBACK: Printer Probs at Office=1	
	cc: norton, hopper, FERGUSON, bair at SRI=ARC Received at 2=MAR=74 16:44:31	51k
	Dave Hopper: Would you please fix this problem and let me know	
	when its solved, Thanksproblem: 1A REG. PRINTER, ON ALL OUTPUTS THAT ARE NOT TXT FILES AND	
	IN PARTICULAR ON ALL OUTPUT QUICKPRINT LISTINGS A FILE THAT WOULD NORMALLY BE 20 PAGES IS STRETCHED OUT TO 160 PAGES	
	WITH	
	ONE LINE OF OUTPUT ON MOST PAGES, I HAVE HAD SUCESS WITH LOADING THE FILE IN NLS AND DOING AN OUTPUT SEQUENTIAL, BUT	
	THE GENERAL EXPERIENCE WE'VE HAD IS THAT NO OTHER OUTPUT	
	COMMAND	
	WILL PRODUCE SATISFACTORY LISTINGS,	
	TYM/OFFICE=1	
	P.S. I'D LIKE TO AVOID SHIFTING OUR LISTING LOAD ON TO	
	JEFF'S SHOULDERS IF POSSIBLE. I'D RATHER FIND OUT HOW WE CAN FIX	
	THE PROBLEM HERE.	
	BOBM	51k1
	NOTE: We should all think/meet some policy for the use of the	
	printer at Tymshare, I cant see how they can provide this kind	5182
	OI SETVICE LU SUDSCTIDETS! (JIM DAIT	73.3.6.7

1=MAR=74 0657=PDT OPER: PRINTER OUTPUT Received 1=MAR=74 06:57:11

511

REG, PRINTER, ON ALL OUTPUTS THAT ARE NOT TXT FILES AND IN PARTICULAR ON ALL OUTPUT QUICKPRINT LISTINGS A FILE THAT WOULD NORMALLY BE 20 PAGES IS STRETCHED OUT TO 160 PAGES WITH ONE LINE OF OUTPUT ON MOST PAGES, I HAVE HAD SUCESS WITH LOADING THE FILE IN NLS AND DOING AN OUTPUT SEQUENTIAL, BUT THE GENERAL EXPERIENCE WE'VE HAD IS THAT NO OTHER OUTPUT COMMAND

WILL PRODUCE SATISFACTORY LISTINGS.

TYM/OFFICE=1
P.S. I'D LIKE TO AVOID SHIFTING OUR LISTING LOAD ON TO JEFF'S SHOULDERS IF POSSIBLE, I'D RATHER FIND OUT HOW WE CAN FIX THE PROBLEM HERE,

5111

1-MAR=74 0932=pDT MATTIUZ: bad file cc: mattiuz Received 1-MAR=74 09:32:54

5 i m

we are having another problem with one of larry day's file. This one is his "book,nls;i" file, the protection on it is the normal one,unlocked, yet the status file verify shows it as being locked, aloaso, he cannot write in this file, why not? it is his directory....Please look into...It really is weird.....Inez

51m1

DLS 28=FEB=74 11:22 30158
Comparison of RADC User Statistics for two 6 months periods
Location; (HJOURNAL, 30158, 1:w)
*****Note: if you have any use for this...help yourself*****

5in

Comments: For those of you interested in how yyyou compare with others at RADC in use of NLS. % SYS column really has little meaning. To find out your weekly averages for any number, divide the number by 25 (or multiply by 4 and shift the decimal point 2 places to the left).

5ini

DLS 19=FEB=74 14:39 30130 Potential use of cOM Output by RADC Location: (HJOURNAL, 30130, 1:w)

510

5101

Comments: Would appreciate any guidance, help etc. that can be given. Thanks.

MIKE 22=FEB=74 09:44 30127 problem in addressin a particular statement by its statement name. Message: There is a statement named "protect" in my initial file, located in the plex under statement named "links". I cannot address this first statement ("protect") by its statement name, only by its statement no. (11a, as i write this) Any idea what the problem is?

5ip

ANSWER:

51p1

Mike: The problem you experienced (re == ,30127,) with a statement name not working within one particular statement was due to an inadvertant change of the name delimiters to NULL from (and). (Command = Execute Name delimiter followed by those you want effective in that statement). I have reset them so the name address should work now. Thanks for your inquiry.

5ipia

MIKE 22=FEB=74 09:37 30126

NAPKE log=in problems

Message: Penny Napke is not getting on=line journal mail; she is receiving hard copy through the mail.

Also, wenever she signs on as NAPKE, whe is asked for her IDENT.

Can you help?

5iq

MIKE 22=FEB=74 09:30 30125

How do we get that IBM file into NLS?

Message: further to previous journal message, we are still
interested in getting some IBM files into NLS, and we dont know
what you need in the form of machine readable code to do the job.
I understand that you don't have the conversion facilities
available there, but I also understand (through BobM) that a the
arpanet has such conversion capabilities for IBM users on arpa.
Would this help us out ...is we ran it through somebody elses
file on arpa before coming to you? (assuming we could figure ot
some way of doing that, of course)

5ir

22=FEB=74 1159=PST BAIR: Resend of Journal msg problem cc: hopper, hopper at SRI=ARC Received 22=FEB=74 11:59:58

518

(sndmsg flaky..4th try:)
Getting reports again that the Journal is funny: No delivery
within 4 days, reported on 21 Feb. We've got to make the thing
more dependable...DAVE, would you please shake it up? Thanks,

51s1

WILL

e	=FEB=74 1337=PST OPER: MONITOR POLICY cc: bair at SRI=ARC, norton at SRI=ARC, kudlick at SRI=ARC, rguson at SRI=ARC, wallace at SRI=ARC, hopper at SRI=ARC, rrah, martinez, jimb	
	Received 22=FEB=74 13:37:45 : <martinez>MONPOLICY.TXT:3 22=FEB=74 12:03:26 EDIT BY</martinez>	511
	OPER	5it
	NEW MONITOR VERSIONS AT OFFICE=1	5it2
	THE FOLLOWING SCENARIO IS INTENDED TO DESCRIBE THE MECHANISMS AND POLICIES INVOLVED IN NEW MONITOR VERSION BRING UP AT OFFICE=1:	51t3
	1) WHEN CHANGES ARE DESIRED THE CHANGES SHALL BE QUEUED IN SUCH	
	WAY THAT A NEW RELEASE WILL INCORPORATE AS MANY CHANGES AS CAN BE MANAGED AND CONTROLED IN A SINGLE VERSION,	51t4
	2) THESE CHANGES WILL BE TESTED AND DEBUGGED AT THE BEGINNING OF THE WEEK DURRING OFF HOURS BY THE PROJECT SYSTEM PROGRAMMER.	5it5
	3) A TRANSMITTAL FORM SHALL BE ENTERED INTO A FILE IN DIR. <documentation> AND SHALL BE NAMED IN THE FORM TENEX.CHANGES; VERSION.</documentation>	
	THIS TEXT FILE SHALL DESCRIBE THE CHANGES PENDING AND SHALL BE AVAILABLE BY AT LEAST WEDNSDAY OF THE WEEK WHEN INSTALLATION	
	IS ANTICIPATED, COPIES WILL BE DELIVERED TO BOB MARTINEZ, ED POLLACK AND MIKE MARRAH OF TYMSHARE AND BILL FERGUSON OF ARC.	51t6
	4) IN NO CASE (EXCEPT WHERE A BUG EXISTS THAT JEOPARDIZES SYSTEM	
	OPERATION) WILL A NEW MONITOR BE INSTALLED BEFORE A FRIDAY	
	ON THE NIGHT SHIFT FRIDAY MORNING BEFORE A SCHEDULED MONITOR INITIATION A PACKCOPY (DSKDUP) WILL BE TAKEN TO BACKUP THE	
	FILE SYSTEM, ALSO PRIOR TO SYSTEM TAKEDOWN FRIDAY AFTERNOON AN INCREMENTAL DUMP WILL BE TAKEN TO BACKUP FILES CHANGED SINCE	
	PACKCOPY,	51t7
	5) ON THE THURSDAY PRECEDING MONITOR INITIATION NOTIFICATION	

BE SENT (SNDMSG) TO BOB MARTINEZ, JIM BLUM AND MIKE MARRAH

TYMSHARE AND BAIR, NORTON, KUDLICK, FERGUSON, WALLACE, HOPPER AND

FEEDBACK OF ARC, THIS WILL ANNOUNCE THE INITIATION AND

A THOROUGH WORK OUT OF THE NEW MONITOR UNDER A REAL TIME ENVIRONMENT.

6) IN GENERAL, THE NEW MONITOR WILL BE BROUGHT UP FRIDAY AFTERNOON AND RESULTING DOWNTIME ANNOUNCED IN THE SCHEDULED DOWNTIME

FILE, DURRING THE WORKOUT, SHOULD THE SYSTEM CRASH ONCE (NOT HARDWARE

CAUSED) IT WILL BE THE POLICY TO REVERT BACK TO THE PREVIOUS MONITOR VERSION. IN SUCH CASES FIELD TEST MAY RESUME THE FOLLOWING

SATURDAY AT THE DISCRESSION OF BOB MARTINEZ, ED POLLACK, JIM BLUM, AND MIKE MARRAH AS IT IS DECIDED BY THE MAJORITY OF THEM.

7) IF AND ONLY IF THE NEW MONITOR VERSION RUNS SATISFACTORILY ON

BOTH FRIDAY AND SATURDAY WILL IT BE PROVISIONALLY ACCEPTED AND INSTALLED AS THE RUNNING SYSTEM FOR THE FOLLOWING WEEK, IF NOT THEN DEBUGGING WILL RESUME AND THE SCENARIO DESCRIBED ABOVE WILL REOCCUR THE FOLLOWING WEEK.

23=FEB=74 2014=PDT DAY: Continuing Saga of Foul=ups cc: mattiuz, norton, bair, day Received 23=FEB=74 20:14:10

My main file (lhd,nls,4) continues to get worse, Execute Status File tells me that it is a bad file as we knew, However, the new file that was created for me...SAVELHD..5 has the same rating! whatever the bugs in the old one were, they have continued to live on in the new file. One of the verify messages indicated that there is an illegal user no in my file header...is this a clue? I tried tocreate a new file out of pieces of the nls;4 one, the system crashed and i ended up with a 266 page par

al copy which i have since deleted. (Not bad for a partial version of a 31 page file!!!!). I need some advice that can clean this up as 1 keep having to control c to get out of the file when it goes "dead". Right now i just sign in and go right through the nls 4 file to other ones to do anything as i don't trust that file, Would someone at OFFICE-1 please examine that file and help clean it up. If there are any questions please call me at 514-870 3223 (office) or 514-648 7207 (home). I

51t8

-1975

51t9

51u

51t10

would li this done quickly (not ASAPII) since i have been having the problem for a week, ThanksLarry	5iu:
23=FEB=74 2023=PDT DAY: P.S. on Foul ups cc: norton, bair, day, mattiuz Received 23=FEB=74 20:23:05	511
Execute status file on some of my other files(messages,letters,phlinks) also indicates that there is an illegal user no in my header,,whatever that means, It appears that the problem is more widespread inmy directory than i suspected, More reason for concern from my viewpoint,	5ivi
25=FEB=74 1025=PDT FEEDBACK: Archive Received 25=FEB=74 10:25:31	51
iRobert Lieberman: There were some bugs in the archive system software that have now been fixed (as far as we know). A new monitor has been brought up and all should be well now. Thanks for your feedback, (the Bair alias feedback).	51w1
Copy of msg to Lieberman at NSRDC,	51w2
25=FEB=74 1037=PDT FEEDBACK: Net command availability cc: ferguson, ferguson at SRI=ARC, norton, bair at SRI=ARC Received 25=FEB=74 10:37:51	5ix
Ferg: Perhaps I've found a glitch in the new monitor or perhaps this is a conscious decision; RUNFile is not available to NET users?? Please change thisas far as I can remember it has been an advertized feature recently and should continue to be available. The copy command is also not available to the Net by decision, and I think it should be reversed. There must be some way of protecting important files such that the Copy won't jeaprodize system security or whatever. I have advertized the Archive system fix, and am assuming that indeed itt is functioning now. The Journal is slow at best I haven't heard from Hops on that, is there anything you can do to ensure next day delivery? There is a majot file problem at Bell, something about "illegal user number in header" causing a bad file. Let's get together on this one.	5ix1
25=FEB=74 1057=PDT FEEDBACK: IBM Card to NLS transfer cc: mattiuz, bedford	
Received 25=FEB=74 10:57:27	5 i y

problem In Journal message (,30109,). The problem was dealt with on Jim's recent visit there.	5iyi
25=FEB=74 1114=PDT FEEDBACK: Link stack question followup cc: mattiuz, bedford Received 25=FEB=74 11:14:22	5iz
Mike: Was the question answered OK? (re == Journal,30080,) If so, we would appreciate a short description of your reaction to this link stack function. Send to FEED as with the IBM card transfer problem,(use your architect).	5121
25=FEB=74 1327=PDT NSRDC: message.txt file bad entry message Received 25=FEB=74 13:27:17	510
We have a bad entry or format message from the readmail subsystem; also the 'bad' entry apparently is printed. It looks like the last file we placed into the archive, no sweat to us, just thought you would like to know, robert Lieberman	5301
25=FEB=74 1833=PDT BAIR: LHD files cc: jimb Received 25=FEB=74 18:33:18	5ja
All are bad. Try an earlier date. And del those in my dir when you put in another try	5jai
25=FEB=74 1845=PDT FEEDBACK: Bad file cc: day, norton, hopper Received 25=FEB=74 18:45:01	510
Larry: It was good linking to you. The file restore from 18 Feb did't work either, so I have made the reconstructed LHD6 your initials file, and it looks OK (with the content i showed you). Will still attempt to go back to a version that is good so that you can check to see what is missing. You may delete LHD6, it has served its purpose. I'm really sorry for the delay in this most frustrating problem and hope it doesnt happen again. I have a feeling that there still may be problems with e other files, but that should be solvable by our programmers, esp. the one in DC.	
Let Feedback know about any further problems. Have a good trip to Rome and environs (bleak now). Jim	5jb1

Inez: Please enter a description of the disposition of MIKE'S

request for advice on how to enter a large text file from an

MIKE 19=FEB=74 13:34 30109

IBM-based system into an NLS file

Message: I have just completed storing 700 = 800 text entries on an IBM computer running APL for us. The entries are actually comments of the respondents to a questionnaire we recently sent out. I would like to transfer the whole lot of comments into an NLS file, but I expect some difficulty due to incompatibility of the systems. If m at a bit of a loss concerning what goes on behind the scenes here, but the fellow from the APL group recommended the following:

-dump the entire lot of comments onto 80-column cards;
-ship the cards out to you people on the West Coast;
-let you put the cards into an NLS file for us, taking advantage of watever conversion routines you have available.

How does that sound? What could we do at this end to simplify the conversion into a useful NLS file. I thought that if we did something like insert an exclamation point after each of the comments, it would help you fellows out, since it will be easier to do it before the comments come out on cards. What other suggestions would you have?

I expect the punched cards to be available by the beginning of next week.

510

MIKE 13=FEB=74 16:09 30080

Problems working through the link stack,

Message; When working backword in the loop of files that I've
developed (by using the A; g routine, the first file that
pops up is the file that I start in, rather than the file I was in
just previously. Is this normal ? Have I overlooked something ?

It didn't work like this at ARC, did it ?

51d

DLS 6=FEB=74 03:54 30052
On=line only Delivery of Journal Documents
Message: Mike and Jim are right in suggesting that the RADC
delivery of Journal items be changed to on=line. The are enough
terminals and experienced users here now, so that most items can
be read at the terminal or printed on the line printer, We do
appreciate your efforts in the past in sending us hardcopy. It
has allowed us to maintain a local hardcopy library, which has
proved to be very valuable on a number of occasions. Dena Meyer
has written a user program, which helps in getting Journal
documents printed for us. I hope to get one of the secretaris to
run this on a regular basis, daily, so that we can continue to
maintain the hardcopy library. Your action will force me to get
this procedure going. I needed a little pushing.

5je

MIKE 15=FEB=74 06:59 30092

Is BELL=CANADA recognized as a group by OFFICE=1?
Message: I wonder if the users at BELL=CANADA are recognized as a group by the system's protection mechanism. We've defined the protection codes for several of our files as 777752, ad find that only the creator of the file can write in it. Have I over looked something, or is the system overlooking something?

5jf

11=FEB=74 1339=PST STONE; User Program "INDEX" cc: bair, ferguson Received 11=FEB=74 13:39:41

519

The user program, INDEX, loads OK, but when trying to execute, it gives the message, File not on line... If Archived, use EXEC's INTERROGATE... whats up? It generates the heading at the taile of Plex i Index for Plex at 1... but doesn't seem to be able to actually generate the index.

5191

12=FEB=74 1543=PST FERGUSON: c.c. of sndmsg to usc Received 12=FEB=74 15:43:53

5jh

This is directed to Jim Pepin:

51h1

Jim = I have no explanation for why you can't get to Office=1 from the USC=TIP, but you can from others. Once a Tip is running, the NETWRK should automatically know of its existence, I suggest you speak to the Netowrk Control Center at BBN (phone (617)661=0100). They should be able to handle your problem.

If you need any more help, don't hesitate to SNDMSG.

5jh2

ferg

12=FEB=74 1616=PDT FERGUSON at SRI=ARC: <jernigan>liz2.sav
cc: JERNIGAN, nsa at OFFICE=1, norsar=tip at OFFICE=1

511

This message is to:

Received 12=FEB=74 16:18:03

3) Yngvar Lundh of NORSAR TIP

1) Mil Jernigan

2) Jess Hill of NSA

5111

As you have found, no NETUSER can access a program by typing a<DIR=NAME>FILE=NAME<CR>

you only have access to programs in dir <NETSYS>. We have done this in an attempt to keep the Office=1 machine dedicated to

NLS, and provide the best possible system load for good NLS response. So we have made an effort to prevent other programs from being run, However, there are some other programs which are very useful to the average user. We have therefore included <jernigan>liz2 in the <netsys> repetoire. You can now use it. If there are any other programs you are accustomed to, and wish to have included in <netsys> please sndmsg to <feedback> or <bair>. Ferg

12=FEB=74 1619=PDT FERGUSON at SRI=ARC: <rel=nls>xnls cc: nsa at OFFICE=1 Received 12=FEB=74 16:21:22

511

5112

To Jess Hill, we have not yet finished our work on XNLs. At the moment we are only having ARC programmers and users working with that program, as there are many known bugs and problems. We have avoided releasing it to all users, as they may inadvertently do bad things to their files in the course of finding a bug. So until we successfully finish and release XNLS, we would like you to continue using standard NLS. Ferg

5111

12-FEB-74 1624-PDT FERGUSON at SRI-ARC: Trouble Logging Out cc: norsar-tip at OFFICE-1 Received 12-FEB-74 16:26:34

51k

This is to DAG (Rieber=Monn):
When you get the message "NOT LEGAL IN INFERIOR EXEC" after
trying
to logout, this means that you are really in an inferior exec,
you
probably logged in (at the superior exec), ran NLS, and then
seid
"Goto Exec". This new exec you see (called an inferior) has a
subset
of the superior exec commands available. Specifically, you
cannot
logout from this place, as there is still an NLS and EXEC above

you.
You simply GUIT your way back up to the SUPERIOR exec, and then logout.
If this message does not really answer your questions, either sndmsg again or link to me.
Fero

12=FEB=74 1654=PST FERGUSON: misc. cc: MEYER, WALTERS

Received 12=FEB=74 16:54:17

Dean,
The ident for <WALTERS> is set=up. It's grunt!! is that
really
true? If not really grunt, please sndmsg.
Also, you have been moved to the ENERGY group for login group
allocation stuff.
Hope you're enjoyinv Wasington.
Ferg

13=FEB=74 1324=PST MATTIUZ: noise on the line Received 13=FEB=74 13:24:58

Three times while working one day, there was noise on the line and the system program hit the control x command and everything I was doing was lost. Is it possible for the program to read 2control x's instead of one. It isn't likely to hit twice.

13=FEB=74 1432=PST MARTINEZ: XNLS IS MISSING CC: BAIR, BAIR at NIC Received 13=FEB=74 14:32:14

A USER FROM MIT-MULTICS COMPLAINED TO ME THAT HIS ATTEMPT TO USE
THE XNLS CONVERSION YIELDED THE RETURN "503 SPECIAL PROCESSING DISPATCH FAILED; NO SUCH PROCESSOR," THE CONVERSION IN HIS WORDS
WAS "SORELY NEEDED" AND HE REQUESTED IT BE INSTALLED ASAP, ALSO JIM, I AM GETTING THE IMPRESSION THAT MANY OF OUR NEWLY TRANSFERRED USERS ARE NOT AWARE OF THE FEEDBACK DIR AND THE FUNCTION IT IS SUPPOSED TO PERFORM, IF YOU LIKE I CAN SEND

A SYSTEM MESSAGE CONCERNING THIS DIRECTORY IF YOU LIKE, THIS IS NOT SUGGESTED WITH THE IDEA OF MY SHIRKING WHAT I CAN HANDLE VIZ USER PROBLEMS BUT RATHER IN THE INTREST OF FACILITATING

THEIR EFFECTIVE COMMUNICATION AND CORRECTION, PLS LET ME KNOW WHAT I CAN DO TO HELP, THANX

5jkl

511

5 jm

5jm1

5jn

BOBMARTINEZ TYM/OFFICE=1

5jn1

13=FEB=74 1522=PST FEEDBACK: XNLS Received 13=FEB=74 15:22:04

510

Bob; XNLS or any version of it is not available to Users, Unfortunately it was before we set up the subscription servie at Office=1, so many people were playing with what is a n experimental system for in-house testing and shakedown only. It will be available to subscribers after April 1 sometime (current prediction), In the meantime people will have to be hapy with good of NLS unless there are exceptional circumstances, in which case have them contact me for a sarter. Thanks for yoyyr offer to send the msg about feedback, I'll take your clue and work something myself, thanks anyway. Jim

5101

<BAIR>FEEDBACK, NLS;1, 1=FEB=74 12:06 JHB;

51p

DLS 23=JAN=74 07:28 21572 Feedback on Feedback, or Loop=the=Loop Location: (GJOURNAL, 21572, 1:w)

5jp1

SRL 23=JAN=74 10:02 2:1574 journal problem at RADC Message: 21=JAN=74 12:12:14,483

Date: 21-JAN-74 1212-PDT From: STONE

Re: Journal submission problems

while using the IMLAC and trying to send a journal message, I have problems when I get to the Distribution part. The first character of an ident gives me an error message which says "UASQD Failed in LITTTY", we recently received a new IMLAC program from you guys...could this be the problem?? When its fixed I have some feedback information for you, Too lazy to retype it now, -----

21=JAN=74

*****Note: fy1****

51p2

SRL 23=JAN=74 10:06 21575
mouse problem at radc Message: 07:57:50,433Date: 22=JAN=74
0757=PDT
From: STONE

Re: Mouse Button Problems

cc: hopper when in the insert character/text/etc mode, I get

the message "undefined input" if I hit the left button to backspace character or the left 2 buttons to backspace visible. If I use control H or control W from the keyboard, it works OK, I have not loaded the most recent release of the IMLAC program, Would this fix it?22=JAN=74
****Note: fyi****

5 dp3

6=JUN=74 0741=PDT MATTIUZ: new ident and new directory Distribution: FEEDBACK, mattiuz Received at: 6=JUN=74 07:41:18

6

Jim, we require two things here: Only an ident for

6a

Phil R. Marquette Bell Canada 620 Belmont St. Room 1105 Montreal, Guebec H3C 3G4 TEL: 514-870-5733

6b

enew Directory with the 300 page llocation for:

60

Mike Katsoulis Bell Canada 620 Belmont St, Room 1105 Montreal, Quebec, H3C, 3G4 TEL: 514=870=2713

6d

(wat initial password will you set up for him?) also what directory can Phil work from with only an ident? would it be ny one f ours?)

60

thanks INEZ

6£

(ANALYSIS) Items for Analysis

7

(ack)nowledged): Initial acknowledgement done by Utility, further action = long term

7a

10=APR=74 0711=PDT BEDFORD: Slow response times leading to disaffection toward the system Distribution: FEEDBACK, mattiuz, bedford Received at: 10=APR=74 07:11:12

7a1

Everytime I learn about something new in this system, like a

special user program, or that RUNFILE routine, I get all excited and enthusiastic. Then I try to use one of them, and am quickly brought back to earth. Having to wait over a minute while the RUNFILE routine I built up tries to get into NLS takes all the fun out it. More importantly, it wastes a lot of time that I was trying to save with RUNFILE in the first place. Inserting MESSAGE.TXT files into NLS is no use at all if it's goin to take over two minutes to get through the command, Execute Programs ..., INMES. More experienced users probably don't have to wait around to see if the command "took", but all of us around here tend to check things as we go, not out of any sense of insecurity about the system's ability to perform, but because we make lots of mistakes as we go. The lack of feedback (actually a very delayed form of feedback) is really cramping our learning and developing within the system. This is not a bitch, by the way. I've bitched before, and I'm sure that you're more aware of the problem's this lack of memory is causing than we are. I just wated to point out that the slow response time may be more acutely felt by novice users such as ourselves, and may have more impact on their attitudes torwards this style of working than it would have on you seasoned professionals.

7a1a

PAN 6=MAR=74 11:24 30183
Sign=on problem
Message: Every time I sign on the system, it asks me for my ident, Is there anyway that this could be done automatically = if so, it would be greatly appreciated.

7a2

2-APR-74 2058-PDT IRBY at SRI-ARC: lack of file name feedback
Distribution: FEEDBACK, bedford at OFFICE-1, mattiuz at OFFICE-1, hopper, wallace, white Received at: 2-APR-74 20:58:54

7a3

My humblest appologies but there in fact is no good reason for the lack of a file name feedback when the move command is used to move something into another file. The CM is move to the new file, but the user is not told of the change in file. This is a bug and should be fixed by Dave Hopper. It has been fixed in the new NLS. -- Charles.

7a3a

2=APR=74 1316=PDT BEDFORD: missing prompt when using the MOVE command in NLS
Distribution: FEEDBACK, mattiuz
Received at: 2=APR=74 13:16:39

7a4

In moving a structure from one file to another, I understand that the address of the bug or whatever you call it is in the file that you moved TO, not FROM. In this case, shouldn't the system echo your new location?	7a4a
21=MAR=74 0636=PDT BEDFORD: bitch bitch bitch bitch ! Load	
average too high and response time too slow Distribution: FEEDBACK, mattiuz	
Received at: 21-MAR-74 06:36:45	7a5
I just waited over a minute (72 seconds) for the NLS herald, How is your progress going with respect to getting more disc or drum memory ?	
Load Avg. is now8.57, down from over 12, a few minutes ago. This is hard to take.	7a5a
26=FEB=74 0951=PDT BAIR: Sndmsg to Bair about login incongruity	
cc: sdac=tip	7-6
Received 26=FEB=74 09:51:26	786
Buz Owen: Thanks for your comment althoughit doesn't sound too serious. It will be added to our Feedback data base,	7a6a
(action): no feedback yet, Analysis responsble for initial acknowledgement	7b
(done)	7c
(NIC) Items directly concerning the NIC function.	8
ADO 30=APR=74 18:18 30593	
Message: There's no news online.	
	8a
6=MAY=74 2107=EDT Vint Cerf at AMES=TIP: Net mail from site BBN=TENEX	
Distribution: FEEDBACK	
Received at: 6=MAY=74 19:06:23	86
Jim:	
haven't tried guest because office=1 was not responding on	
Monday May 6 at 1800 hours, Will try again later this week and will gripe if I have trouble, Thanks for checking again, vint	8b1
	THE STATE

15-MAY-74 1610-PDT FEEDBACK: Library services at the NIC Distribution: FEEDBACK, hughes at MIT-MULTICS, norton,

hhughes mac at MIT=MULTICS
Received at: 15=MAY=74 16:10:02

80

Herb. There have been major changes in the NIC recently by ARPA. These changes will virtually eliminate service as it is now known. This will be formally announced this week through the System, with copies sent through the mail to key people at each site. Thus, the answers to your questions are very different than they would have been a few weeks ago. Yes, we would like to have any documents for our hardcopy collection that you would like to share with us. They would of course be indexed in our Journal indexes, but that will be available only to people that are on line. since there will be no service via the NIC after 1 July, it would not be useful to establish any kind of abstract library (there is none now) . However, if you wish to purchase part of the Utility service from us, we would be glad to discuss any possibiliites. The service currently sells for a minimum of \$10 to 40 thousand per year which includes user support as well as computer service/time. If you are interested or have any further questions, please feel free to contact Jim Norton or myself at SRI (415) 326-6200 ext, 3614. Thanks for your inquiry, Jim Bair (Head, User Development)

801

05/15/74 0949=edt HHughes, MAC at MIT=Multics; Net mail from site MIT=MultICS

Distribution: FEEDBACK Received at: 15=MAY=74 06:48:07

8 d

i have several questions. we have here at project mac several documents that we think of interest. Do you have a hardcopy library and if so could we send you copies to be numbered and placed in the library. We noticed for example that the tenex documentation has nic numbers

841

842

9a

9a1

9b

second related question we have prepared abstracts of MAC technical memos for journal entry into the NIC is there already a library of abstracts, If so what kind of stuff is in it and would it be appropriate for us to put ours into it? or would it be better to simply create a mit-multics file of documents and abstracts available to everyone

8 d 3 thanks Herb Hughes

(Tym)share: User already acknowledged, but have direct bearing on Tym Ops.

5=APR=74 1917=EDT kennedy at RADC=TIP: Office=1 Distribution: FEEDBACK, stone at OFFICE=1 5=APR=74 16:46:58 Received at!

Why does the host go dead every Friday night at about this time??? It is somewhat disconcerting to be in the middle of something and suddenly have the whole thing go dead. It is crushing to have it happen every Friday night, Do we get a refund???? comment please!!!

3-APR-74 0929-PDT KENNEDY: reply on yourmsgs in response to my *deleted files* msg Distribution: FEEDBACK, oper, bair Received at: 3=APR=74 09:29:23

There is no way I can reproduce the entire session. Earlier in the day I looked at my dsk and expunded. Later after working entering a file on the TI and editing it on the IMLAC and journaling it, I was ready to log off, Ichecked dsk and found I had about 35 pages expunded I then checked a printout of my directory from that morning, I found that the one file was gone, so I undeleted it. Ref the trim on extra file versions bi-weekly retaining only two, I had only one in my directory, it was the second version. Had it been expunded also would it have been recoverable = easily? I admit that the file was on a topic that has been hanging fire for a while and has probably onot been looked at for a month, Does this mean it gets trimmed out of my directory? By the way why is it tking so long to getjournaled material online? We asked for one of Engelbart's reports about three time a week or more ago and I don't think it made it yet. Ialso asked for two last nite and have heard nothing. They may

or may not be back right now. 9b1 In the first para, read 35 pages deleted, sorry about that, 10 (system) System messages, retained for historica purposes, 28=MAR=74 1125=PDT OPER: NEW MONITOR VERSION Distribution: FEEDBACK, BAIR at SRI-ARC, NORTON at SRI-ARC, KUDLICK at SRI=ARC. FERGUSON at SRI-ARC, WALLACE at SRI-ARC, HOPPER at SRI-ARC, POLLACK, MARTINEZ, JIMB Received at: 28=MAR=74 11:25:18 10a ON FRIDAY 3/29/74 1500 (3:00 PM) MONITOR VERSION 13139 WILL BE BROUGHT UP. THIS INSTALLATION WILL INCORPORATE FEATURES AND MODIFICATIONS WHICH WE ANTICIPATE WILL ENHANCE THE EFFICIENCY

YOU ARE INVITED TO LOG ON AT THAT TIME AND GIVE 13139 A WORKOUT, FEEL FREE TO POUND, STRETCH, WIGGLE AND OTHERWIZE SHAKE LOOSE ANY WEAKNESSES, BUGS OR GLITCHES THAT MAY POSSIBLY REMAIN IN THE

FLEXIBILITY OF TENEX AT OFFICE=1 (AND SO ON).

CODE SO THEY CAN BE CORRECTED.

PARTICULAR DETAILS CAN BE VIEWED IN <DOCUMENTATION>TENEX.CHANGES: 13139.

BOBM

TYM/OFFICE=1 10a1

21=FEB=74 1541=PST OPER: MONITOR INITIATION

cc: bair at SRI=ARC, norton at SRI=ARC, kudlick at SRI=ARC,
ferguson at SRI=ARC, wallace at SRI=ARC, hopper at SRI=ARC,
marrah, martinez, jimb

Received 21=FEB=74 15:41:21

10b

ON FRIDAY 2/22/74 1500 (3:00 PM) MONITOR VERSION 13136
WILL BE BROUGHT UP, THIS INSTALLATION WILL INCORPORATE FEATURES
AND
MODIFICATIONS WHICH WE ANTICIPATE WILL ENHANCE THE EFFICIENCY
AND
FLEXIBILITY OF TENEX AT OFFICE=1 (AND SO ON).
PARTICULAR DETAILS CAN BE VIEWED IN
<DOCUMENTATION>TENEX, CHANGES; 13136.
YOU ARE INVITED TO LOG ON AT THAT TIME AND GIVE 13136 A
WORKOUT.
FEEL FREE TO POUND, STRETCH, WIGGLE AND OTHERWIZE SHAKE LOOSE
ANY WEAKNESSES, BUGS OR GLITCHES THAT MAY POSSIBLY REMAIN IN
THE
CODE SO THEY CAN BE CORRECTED.

BOBM TYM/OFFICE=1

10b1

20=FEB=74 1859=PST FERGUSON: Request for new monitors at Office=1

cc: bair at SRI=ARC, norton at SRI=ARC, kudlick at SRI=ARC, ferguson at SRI=ARC, wallace at SRI=ARC, hopper at SRI=ARC, marrah, martinez, jimb
Received 20=FEB=74 18:59:34

100

Gentlemen,
When jimb brings up a new monitor, we would like to do that at
5:00 pm
on a Friday. You will all receive a notification of the new
monitor,
and we would like you to BEAT upon that monitor as much as
possible. If their are no bugs, that monitor will stay up,
Otherwise,
we will have an opportunity to back up to a more reliable
monitor.

If you encounter problems, you should sndmsg to

If you encounter problems, you should sndmsg to feedback@office=1
AND jimb@office=1.

This is also a test to make sure the message gets to everyone, ferg

10c1

28=FEB=74 1110=PDT OPER: MONITOR VERS, 13137
cc: bair at SRI=ARC, norton at SRI=ARC, kudlick at SRI=ARC, ferguson at SRI=ARC, wallace at SRI=ARC, hopper at SRI=ARC, marrah, martinez, jimb
Received 28=FEB=74 11:10:18

10d

ON FRIDAY 3/01/74 1500 (3:00 PM) MONITOR VERSION 13137
WILL BE BROUGHT UP. THIS INSTALLATION WILL INCORPORATE FEATURES
AND
MODIFICATIONS WHICH WE ANTICIPATE WILL ENHANCE THE EFFICIENCY
AND
FLEXIBILITY OF TENEX AT OFFICE=1 (AND SO ON).
PARTICULAR DETAILS CAN BE VIEWED IN
<DOCUMENTATION>TENEX.CHANGES;13137.
YOU ARE INVITED TO LOG ON AT THAT TIME AND GIVE 13137 A
WORKOUT.
FEEL FREE TO POUND, STRETCH, WIGGLE AND OTHERWIZE SHAKE LOOSE
ANY WEAKNESSES, BUGS OR GLITCHES THAT MAY POSSIBLY REMAIN IN
THE
CODE SO THEY CAN BE CORRECTED.
BOBM
TYM/OFFICE=1

10d1

TPO 12 - ISC - Good Copy for System Use

(J31026) 26=AUG=74 05:27; Title: Author(s): Daniel R. Loreto/DRL2; Distribution: /DRL2 RJC; Sub=Collections: NIC; Clerk: DRL2;

TPO 12 - ISC - Good Copy for System Use

This is a good version for system use only = if use this one, must substitute "1" or "i"

TPO 12 - ISC - Good Copy for System Use

<LORETO>TP074.NLS;1, 20=AUG=74 16:13 DRL2 ;

3.12 TPO No. 12 - COMPUTER SYSTEMS TECHNOLOGY

3.12.1 GENERAL OBJECTIVES:

(U) The objective of this TPD is to develop the various computer related technologies which are required to allow computer systems to be used for the efficient and economical solution of numerous Air Force operational problems.

The efforts directed toward meeting this objective are in two major areas = Computer Architecture and Interactive Processing. Computer Architecture deals with the organization of computer components and sub-systems. Interactive Processing addresses the problems of automatic signal classification, man-machine interface, and the automation of operational functions.

The objectives of the efforts in the Computer Architecture area are to: (1) demonstrate the application of Associative processor (AP) techniques to the solution of Air Force high data rate real-time data processing problems; (2) develop technology which will allow sharing of DDD computing resources such as computers, computer peripherals, data bases and software facilities; (3) develop technology which will make possible the orderly design, test and evaluation of special computer architecture required by the Air Force before the architecture design is given to a contractor to build.

Efforts in the Interactive Processing area are directed toward: (1) developing the facilities and the expertise required to solve the complex data processing problems of automatic signal classification technique development, and assisting a wide variety of users in actually developing automatic classification and identification equipment for use in various Air Force surveillance systems; (2) developing cost effective interactive graphics techniques and systems which will lower Air Force operational costs and increase effectiveness.

3.12.2 SPECIFIC GOALS AND TECHNICAL APPROACHES:

(U) The plan for attaining the TPO objective is shown in the overview chart (Page 3,12=2). The technical efforts covered

by this TPO are oriented toward providing the four major products shown.

3.12.2.1 (U) ASSOCIATIVE PROCESSOR COMPUTING SYSTEM = The goal of this product is to provide techniques capable of meeting the ever increasing data processing requirements of the Air Force as typified by the high data rate real-time processing demands imposed by systems such as the Airborne Warning and Control System (AWACS).

As indicated by the Milestone Chart (Page 3.12=), this goal is being achieved by RADC's Associative Processor Testbed facility. The testbed facility consists of an Associative Processor tied to RADC's HIS 645 sequential computer, a situation display capability for purposes of providing operator interaction with the executing programs, and equipment for monitoring the performance of the testbed equipment while executing operational type programs, completion of the testbed system is planned during FY=76, when a data manipulation capability for effecting high utilization of processing elements will be installed to complement the interim capabilities available at the present time.

The major on-going effort for assessing the capability of an associative processor to meet real-time requirements is directed toward the AWACS requirements. Associative Processor Application Software, to accomplish the functions required by AWACS, is being developed for analysis and demonstration on the AP testbed, This activity, which is being accomplished both in-house and contractually, will concentrate on the data processing aspects of active and passive tracking, radar data correlation, display processing, and signal processing, Completion is expected in mid FY=76. Major improvements in capability are envisioned for AWACS-like systems using an AP approach rather than a sequential computer. AP active tracking tests to date indicate a capability of handling five times as many radar tracks. Efforts to develop software for other Air Force system functions requiring real time processing capability will be started upon completion of the AWACS work, In addition, Syracuse University is developing software to perform functions such as matrix manipulations, fast fourier transforms, partial differential equation solutions, and traffic control/collision predictions, and MITRE Corporation is developing software in functional areas directly applicable to ESD project requirements.

During FY=75, the Associative Processor testbed will become a remotely accessible Associative Processing Research Facility. Under this mode of operation, DOD agencies and contractors will be able to enter batch jobs from remote stations on a twenty hour per day basis.

Two AP design studies are being conducted in support of RADC TPO=9 "Telecommunications". This TPO supports improvements to the Defense Communications System (DCS). The first is the Communications Processing System study which will examine various architectures, including the Associative Processor, in the design of a processor to handle all types of communications traffic both digital and analog. Completion is planned for mid Fy=75. The second design study is for an associative communications multiplexer which will compress and multiplex digital signals using an Associative Processor. Completion is planned for the end of Fy=75.

The Prime end goal of the Associative Processor Project is the development of hardware and software specifications for a cost-effective, highly reliable Associative Processor Computing System (APCS) suitable for airborne and tactical environments. These specifications and the rationale developed by the project during the 1973-1976 time period are expected to lead to a 6.4 program to actually fabricate the evolved APCS design. This program, estimated at 14 million dollars, will result in a militarized Associative Processor and its supporting software directed toward applications such as AWACS and the Advanced Airborne Command Post. The computer system will serve as the basis for continued software development and application programming at RADC and can be used as a prototype design for operational Air Force systems. Target date for completion is FY=79.

3.12.2.2 (U) DISTRIBUTED COMPUTATION SYSTEMS = The objective of this product is to provide the Air Force with mechanisms for maximizing the utilization of its computing resources. Distributed Computation Systems are of two types: (1) computer systems which are physically distributed but tied together by means of a network such as the ARPANET, and (2) computer systems which have, on a single mainframe, a variety of functionally distributed capabilities which can strategically be brought together in an optimum fashion to provide highly efficient/low cost solutions to the

Air Force real time/special requirements. Milestone Chart (Page 3.12-) covers both types of Distributed Computation Systems.

To achieve the first objective of providing the capability to efficiently and effectively utilize the dispersed computational resources inherently present in a distributed heterogeneous computer network, the Distributed Computation Techniques and Applications effort will identify problems inherent in present netted computer systems which deter resource sharing among computers. It will explore existing software and hardware systems to determine what fixes can be made to overcome the problem with these systems. It will then propose possible system architectures which should lead to a system which allows efficient resource sharing in a manner which makes the mechanics of network use completely transparent to the network resource user. It will implement the software fixes proposed by the study and test them in actual operational systems, Any additional techniques which appear promising will also be explored.

The System Architecture effort will involve simulation and, if possible, implementation of the architecture proposed by the Distributed Computation Techniques and Applications study. These will be thoroughly tested to determine their applicability to actual operational systems such as the World Wide Military Command and Control System (WWMCCS).

The AFSC Network effort will develop the interfaces to connect 16 AFSC computers to the ARPANET in two phases. In the first phase, three CDC=6600 machines at ASD, ADTC and AFWL will be connected to the net. In the second phase, the remaining 13 sites will be connected.

The second objective of the Distributed Computation systems product area is to develop an effective low cost approach for producing cost effective computing capability required to solve special processing functions which are peculiar to the Air Force and which cannot be satisfied by computers existing in government and industries inventories. For this purpose, a program called Configurable Processor has been initiated. A Configurable Processor is a functionally distributed computation system which can be structured by means of firmware to assume the optimal, cost effective architecture form required by the problem and the software which

provides solution to the problem. The design which is a by=product of the configured system will be given to a contractor to build only after it has been tested and evaluated using significant benchmark software. After the design has been released to the contractor, the "configured architecture" will then serve as an interim computer so that software development can be continued while the special computer is being built.

The configurable processor concept is an outgrowth of the associative processor program, the microprocessor technology developments which now provide complete computer functions on a single integrated circuit chip, and the advances which have been made in the microprogramming technology.

The configurable processor program will begin with the purchase of off-the-shelf Micro Function Components including microfunction chips, a microprogrammable control unit and a multi-dimensional access memory. These components will be assembled into an extremely inexpensive system which through firmware can be made to act as any architectural form (sequential processor, parallel processor, multi-processor, etc.) having any desired word/logic length. The Configurable Processor Design, Test and Evaluation will be accomplished on these assembled components and as such will represent a Configurable Processor Testbed Facility.

Configurable Processor Application Software will be developed to demonstrate the process of structuring the configurable processor based on: (1) the structure of the problem, and (2) the structure of the software for implementing the problem solution.

The end product will be: (i) an inexpensive, Air Force Configurable Processor Testbed Facility, (2) utility software for facilitating the configuration process, and (3) validation data which will demonstrate the process and the benefits that a Configurable Processor Facility brings to the Air Force.

3.12.2.3 (U) SIGNAL CLASSIFICATION - The automatic classification of signals is required to support many Air Force objectives including space defense, remote surveillance, base defense, and tactical interdiction. Devices (signal classifiers) which analyze the output electronic signals from the transducers of various sensor systems, including radar, photometric, seismic,

acoustic, etc., and automatically recognize these signals as occurring in a specific target class, must be developed. These classifiers will increase the effectiveness of the sensor system since false alarms will be eliminated/reduced and will allow more accurate and rapid assessment of the threat by commanders, Classifiers may be implemented as part of a data processing system, be part of other ground or airborne installations, or be contained in sensors impact implanted into enemy territory.

The technical approach to the design of these classifiers is to use advanced pattern recognition techniques (software) residing on a general purpose computer interactively coupled to a high performance graphics console to provide general purpose design tools. These tools allow the design engineer to analyze a data set, extract features characteristic of each target class, evaluate these features and design the target classifier. Since several solutions can be developed rapidly, the most cost effective in terms of accuracy versus complexity (i.e., the number and type of features or method of classification required) can be implemented.

Up to this point, development work has centered around the tools and techniques to allow problem solution. With the validity of our interactive pattern recognition approach having been verified on specific previous applications, our attention for FY=76 and beyond is on the implementation of a fully operational pattern recognition pesign Facility, a unique capability within DOD and industry. This facility is needed in order to support the future signal classification workload as a production oriented capability, addressed to specific user requirements, In order to arrive at this posture in a timely fashion, the Milestone Chart (Page 3,12=) line items associated with waveform processing and preprocessing and with the updating of the On-Line pattern Analysis and Recognition System (OLPARS) must be completed.

Waveform Preprocessing Techniques encompass those ancillary projects necessary for a viable system. In FY=74, such items as hybrid feature extraction software, hybrid preprocessing routines, and the configuring of a peripheral image dissector, permitted the handling of digital, analog, and photographic waveform data input. In FY=75, the item will be expanded to include a data

link from the RADC HIS 6180 to the PDP 11/45 computer, so that each computer may be used to the greatest advantage.

The Waveform Processing System (WPS) addresses the problem of quickly and efficiently extracting discriminatory feature information from the waveform data, When completed in early FY=77, it will allow the analyst to dynamically interact with the data in defining and testing candidate feature sets. The result will be a more effective design in a minimum of time.

Improvements in the prototype version of OLPARS are of two categories: (1) the implementation of the logic design capability on the PDP 11/45 computer resident with the WPS, and (2) the implementation of the logic design under the MULTICS Operating system on the RADC HIS 6180 computer. In the first OLPARS version, full advantage will be taken of the high performance graphics terminals associated with the PDP 11/45 system, and of the interplay between the feature extraction and logic design software. The MULTICS/OLPARS version will take advantage of the inherent flexibility of the MULTICS operating system and provide, for the first time, a multi-user capability for pattern recognition applications. If RADC becomes a host on the ARPA network, the multiple users could be from any agency with access to the network. By this method, we not only produce results in the terms of specific classifier designs for certain users, we also will be able to export our software capability to those users who would like to do their own analysis.

Using the capability of the interim Pattern Recognition Design Facility which currently exists, RADC is pursuing a vigorous program in selected applications areas to support user signal classification requirements. The Aerospace Shape Identification (Radar) line item includes a study of the feasibility of recognizing characteristic shapes of aircraft and space Objects by analyzing the narrow pulse radar returns, with sufficiently descriptive features which are independent of orientation, one would dramatically decrease the storage and speed requirements for any classification system.

In a related area of Photometric Signature Analysis, RADC is studying actual space object signatures derived from telescopically collected reflected sunlight in order to determine certain characteristic information. In the first part of this

effort, in direct support of SAMSO's Satellite Observables Program (per TN=SAMSO=RADC=1708=73=01), the analysis is performed on selected satellite signatures as determined by SAMSO. In the second portion, the photometric data collected on various selected space objects will be analyzed to determine features and classification logic for automatic discrimination purposes. This second portion is in support of the Air Force Avionics Laboratory and is directed initially toward tumbling rocket bodies. Results of both the photometric and aerospace shape work are directly applicable to the needs of ADC as expressed in ADC=ROC 16=71.

Another major applications area, represented by the Acoustic/Seismic/Magnetic Data Analysis area, includes projects which deal with the processing of ground based analog sensor data. In each case, the project involves aspects of signal processing, to determine sensor and event characteristics, and the application of classical pattern recognition to design discrimination logic.

The first of these projects involves the processing of aircraft acoustic signatures for the purposes of remotely monitoring air base activity. This project, in support of RADC TPO=7 "Tactical Surveillance and Control", involves the collection and analysis of a large aircraft signature data base of take=offs, landings, and fly=overs. Logic will be designed to discriminate between the aircraft events of interest and thereby monitor the base activity. The discrimination logic in this application, as in all of the others, initially is in the form of software programs and equations, but can be implemented in microcircuits and integrated with the sensor electronics as required.

Another project, in support of ESD Advanced Development Program 681E and RADC TPD=7 "Tactical Surveillance and Control", involves the modernization of line sensors to be used in the Base Installation Security System. The sensor outputs consist of magnetic and seismic waveforms which are generated by valid intrusions and by false alarm events. The modernization task involves the analysis of the sensor waveforms and the design of discrimination logic to sort out valid intrusions from the false alarms, such as wind and lightning. Once a desirably low false alarm rate has been achieved, these improved sensors based on RADC's new design classification logic will be acquired by ESD for installation at air bases throughout the world.

The last of the projects being pursued in the ground-based sensor area is the Nuclear Data Analysis project in support of the Arms Control and Disarmament Agency (ACDA). In this project, short period seismograms of teleseismic Eurasian events will be analyzed with the objective of automatically classifying earthquakes from underground nuclear explosions. Using the extensive event data base collected by ACDA, RADC will analyze the signals, extract the discriminatory information and design classification logic for the task,

The last of the applications areas to be discussed is one represented by the Milestone Chart line item entitled Speaker Identification. In support of RADC TPO-2 "Intelligence Analysis and Exploitation", a data set of human speech is being analyzed. The analysis is focused on determining, and if possible, quantifying inter-speaker similarities and intra-speaker differences for application in security related speaker recognition devices.

New pattern recognition techniques for feature extraction and target classification are continually being evaluated and the potentially useful ones added to those tools so that they evolve to solve an ever increasing spectrum of problems. Development in this area is expected to continue through at least FY=77.

3.12.2.4 (U) COMPUTER GRAPHICS SYSTEMS = The goal of the computer graphics technology area is to provide cost effective solutions to the problems encountered in developing low cost multi-terminal computer graphics systems which will present computer generated data to an operator and allow him to interact with it. The data presented can be in the form of alphanumeric symbology or line drawn graphics. The system must allow the operator to interact with the data base and modify or control the overall processing function by means of his input devices while observing the results with some type of display. This technology and the technology being developed under RADC TPO-4 "Intelligence Data Handling", fully complement each other since TPO-4 efforts are directed toward image analysis which is not a goal of this TPO.

one of the most effective types of display presentation is the interactive graphics display. In this mode, the operator has access to and control over the computing process with the results presented to him in the form of graphical figures. There are

numerous levels of performance and cost associated with each system, as well as a variety of possible implementation schemes. The selected system must represent a balance between performance, cost and flexibility.

The RADC computer graphics program is a combination of both contractual and in-house efforts. All of these efforts depend heavily on the interactive processing facility recently installed at RADC. This facility includes a flexible computing system as well as high performance graphics and allows the operator to both perform development functions as well as to simulate several applications functions for specific operational users. The Milestone Chart (Page 3.12) outlines the computer graphics program.

The Air Force Global Weather Central (GWC) Interactive Graphics System effort is directed toward providing their analysts and forecasters with the ability to generate, edit, analyze and update various weather charts and forecasts in the interactive mode, This will increase the flexibility as well as decrease the cost of the various operations involved. The final system configuration will include numerous terminals and several forecast locations as well as a direct hook-up to the main GWC computer facility. This is a multi-phase, multi-year effort which will result in the automation of a significant portion of the GWC operation. This will be accomplished through the implementation of several mini-computer based graphics systems, as well as the development of specialized software and techniques to handle the particular characteristics of the environmental data. The effort is being pursued in support of MAC-DAR-L72-7 with full implementation scheduled for FY-78.

One of the prime considerations in applying computer graphics is that of economy. The specific approach that will reduce the persterminal cost of multiple terminal graphics systems is the use of raster (or digital TV) techniques. Such a system not only has the potential for high performance at relatively low cost, but also offers the unique feature of being able to mix computer generated graphical data with pictorial information. The Raster Graphic Techniques effort is aimed at investigating the feasibility of performing the graphics functions using interactive TV displays. The goal is to provide performance equivalent to present selective address systems with a significant reduction in cost. The culmination of the program in FY=78 will be a Multi=Terminal Raster

Graphics System which demonstrates equivalent performance at much lower cost than previously available systems.

The Graphics Software Techniques area represents a group of related and continuing efforts aimed at decreasing the complexity and increasing the efficiency of graphics software and the means to generate it. To provide a testbed within which to work, a complete graphics software system has been configured to operate on our graphics facility. Among the areas which will be pursued in future development efforts are the investigation of graphic data base structures and their effect on processing efficiency, as well as the practicality and desirability of including a graphic extension within a higher order language, particularly the block structured declarative type.

The Graphics modeling effort is aimed at the development of a modeling system to investigate the various parameters utilized in the design of interactive graphic systems. These include the use of satellite processors, distributed as opposed to concentrated data bases, the effect of response time on various interactive devices, and operator performance within such a system. The result will be more effective and efficient system designs while minimizing the overall cost.

3.12.3 RELATED EFFORTS:

(U) Numerous efforts which are related to this TPO are being pursued by other Air Force Laboratories and other agencies, both within DOD and in industry. Close technical liaison is being maintained on these efforts and any technical advances made will be applied to this TPO. Conversely, the results of efforts under this TPO are made available to other agencies for application to their programs. Following is a summary of the major efforts related to the products of this TPO.

3.12.3.1 (U) ASSOCIATIVE PROCESSOR COMPUTING SYSTEM = The Federal Aviation Agency is studying the use of an associative processor for air traffic control processing. A prototype STARAN was used for conflict prediction studies at the Knoxville, Tennessee test site. Further studies are being conducted with three contractors, each applying benchmark problems to their machine. The Defense

Mapping Agency (DMA) is leasing an associative processor to study its applicability to the post processing functions of cartography.

- 3,12,3,2 (U) DISTRIBUTED COMPUTATIONAL SYSTEM = The ARPANET designed and implemented by the Defense Advanced Research Projects Agency (ARPA) embodies many of the prerequisite features which will provide the basis for this advanced study. Specifically, it includes all the protocols which allow transfer of data and programs between computers and between peripherals and computers. The National Software works program, sponsored by ARPA in conjunction with RADC TPD=11 "Software Sciences Technology", having the objective of giving a programmer access to many software development tools, will coordinate closely with and use many of the results of this program.
- 3.12.3.3 (U) CONFIGURABLE PROCESSOR FACILITY = Univac has a program under IR and D which will be used to design their next generation computer systems. They intend to build a microprogrammed multi-processor with an extremely flexible internal communications scheme to support the program. IBM, under internal corporate research, is designing a direct execution machine (a machine which directly executes higher order language code).
- 3,12,3,4 (U) TARGET RECOGNITION = The Army is applying pattern recognition techniques to speaker identification photograph analysis, shock trauma analysis and mine fusing applications. The Navy is using pattern recognition for speech recognition and for sonar target identification. NASA is doing work in identification of various earth resources using multi-spectral scanners. The Arms control and pisarmament agency is utilizing pattern recognition techniques to identify nuclear blast detonations.

It should be noted that the preceding work has been done in close cooperation with RADC. Some of the work was actually completed on the RADC system by other services after training and familiarization by RADC personnel. These agencies have either begun development or are considering development of a research tool patterned after the RADC On-Line Pattern Analysis and Recognition System (OLPARS); or are planning to continue using the RADC system.

3.12.3.5 (U) COMPUTER GRAPHICS SYSTEMS - There are numerous efforts in Computer graphics being pursued both within DOD and in other government agencies. The Army is developing Cartographic

analysis techniques using interactive graphics while the Navy is synthesizing radar backgrounds and clutter to test radar signal processing systems. NASA has used computer graphics extensively for both computer aided design and flight simulation. More recently within the National Oceanographic and Atmospheric Administration computer graphics has been applied to the analysis of meteorological data particularly relative to severe weather conditions. ARPA has been one of the prime movers in the development of Graphic techniques primarily through its university contracts.

3.12.4 REQUIREMENTS:

(U) There are numerous Air Force requirements for the technologies being developed under this TPO. High speed data processing techniques, software first techniques, automatic target identification techniques, and interactive graphics systems are being developed to satisfy the following requirements:

2nd JOVIAL COM Testrun

(J31027) 27=AUG=74 10:17; Title: Author(s): Duane L, Stone/DLS; Distribution: /RN2 RJC DVN; Sub=Collections: RADC; Clerk: DLS; Origin: <STONE>COMTEST, NLS:3, 17=AUG=74 09:49 DLS;

Journalling this for backup and historical reference, , also need the file space,

DLS 27=AUG=74 10:17 31027

=19=

27 AUG 74

JOVIAL J73

Chapter 2

ELEMENTS

2.1 Introduction

A program: declaration written in JOVIAL consists, basically, of statements and declarations. The statements specify the computations to be performed with arbitrarily named data, Simple:statements can be grouped together into compound: statements in order to help in specifying the order of computations. Among the declarations are data; declarations and processing:declarations. The data:declarations name and describe the data on which the program is to operate, including inputs, intermediate results, and final results. The processing: declarations generally contain statements and other declarations. They specify computations, but they differ from statements in that the computations must be performed only when the particular processing: declaration is specifically invoked by name. In addition to statements and declarations, there are directives which serve various purposes. They designate externally defined names the compiler is expected to recognize, they control selective compilation of various statements and declarations, and they provide information the compiler needs in order to optimize the object code. The statements, declarations, and directives are composed of symbols, which are the words of the JOVIAL language. These symbols are, in turn, composed of the signs that constitute the JOVIAL alphabet.

- represents the general order in which the elements of a program; declaration are introduced in the preceding paragraph represents the general order in which one looks up definitions when trying to clear up a question. The definitions in this manual are introduced, however, in the opposite order. Such arrangements lead to complaints that one must "read the book backwards," This comment arises from the process of looking up a form in the table of contents, turning then to the late chapter where it is defined in terms of earlier defined forms. These, more elementary, forms are then found, via the table of contents, in an earlier chapter. And so forth. Nevertheless, the document is arranged for the use of a reader rather than for reference. Difficult as this may be for reference use, the opposite arrangement is much more difficult for a reader.
- .2 An index=glossary is included which facilitates reference. The index=glossary answers many questions directly. In other cases, it references syntax equations and sections by number.

27 AUG 74

It is important to distinguish between a space, an element of JOVIAL, and a space, an element of our descriptive language. JOVIAL is written using symbols, the words of the language. The symbols are composed of signs, the elements of the JOVIAL alphabet. In general, symbols do not contain spaces. The exceptions are pointed out in section 2.5.2, with respect to comment, and in Section 2.8.2, with respect to character:constants. In general, symbols are separated by spaces. Again the exceptions are noted in Section 2.10; however, these exceptions are permissive; i.e., it is always correct to put spaces between symbols.

,1 The following example is wrong:

PLXMPY (1. 375, =, 75, 5 ., 7.3 ; REAL, IMAG) ;

.2 The following examples are right:

a, BEGIN 1, 3, +5, = 7 END

b. SL:PLXMPY(1.375, ... 75, 5., 7.3: REAL, IMAG);

c. SL : PLXMPY (1,375 , = .75 , 5, , 7,3 ; REAL , IMAG) ;

.3 In defining and explaining signs and symbols, any spaces included in the metalanguage formulas are not meant to be included in the definition. The phrase "string of" implies that there are to be no spaces between the elements strung together, Similarly, phrases such as "followed by", "enclosed in", and "separated by", imply that there are to be no spaces between the elements concerned. This is the situation (except where explicitly stated to be different) in this chapter, Chapter 2. In Chapter 3 and beyond, the opposite view is maintained with respect to these phrases.

2.3 Signs, Elements of the JOVIAL Alphabet

letter
sign ::= numeral
mark

-21-

27 AUG 74

BCDEFGHI letter ::= M ZOPG RSTUVWXXX

0 2 numeral ::= 5 6 7 8 9

JOVIAL J73

27 AUG 74

JOVIAL J73

```
plustsian
         minusteian
         asterisk
         slash
         backislash
         ampersand
         greater: than: sign
         less:than:sign
         equals: sign
         atision
                         decimalipoint
mark ::=
 .
         colon
         comma
         semicolon
         space
         left:parenthesis, parenthesis
         right:parenthesis, parenthesis
         left:bracket, bracket
         right:bracket, bracket
         prime
```

quotation:mark dollar;sign exclamation:point

,1 Sign means a letter, a numeral or a Mark, Letter means one of the 26 letters of the English alphabet, written in the form of a roman capital. Numeral means one of the ten arabic numerals: 0,1,2,3,4,5,6,7,8 or 9. (The slash through the zero is only for the purpose of distinguishing it from the letter 0 in definitions and examples of JOVIAL.) Sign, letter, and numeral are defined more formally by means of the syntax equations in the boxes at the head of this section, Mark is most easily defined by the formal means of the syntax equation in the box above. The box above also contains a metalinguistic term associated with each mark; this serves to define these terms.

JOVIAL J73

=23=

27 AUG 74

2.4 Symbols, The Words of JOVIAL

primitive
ideogram
name
letter:control:variable
symbol ::= abbreviation
number
constant
comment
directive:key
status

.1 The symbols or words of the JOVIAL language are composed of strings of signs, in some cases a single sign. Most symbols do not contain spaces. In fact, spaces serve to seperate symbols from one another.

2.5 Primitive, Ideogram, Directive: Key, Comment

27 AUG 74

ABS ALT. ALT NENT AND NOT NULL BEGIN FIT NWDSEN OR BLOCK OVERLAY BY BYTE PROC PROGRAM DEF DEFINE REF REMQUO DIRECT DSIZE RESERVE ELSE RETURN END SHIFT SIG primitive ::= ENTER EQV SIGNED EXIT SIGNUM FOR SIZE FORM STATUS FORMAT STOP FRAC SWITCH GOTO TABLE TF TEST IN THEN INT TYPE ISIZE UNTIL ITEM WHILE JOVIAL XOR LOC XRAD NAME ZAP

JOVIAL J73

27 AUG 74

+ * * / ** / ** / ** / ** / * * / * * / *

66

-26-

JOVIAL J73

27 AUG

(COMPOSE ISKIP IREGIN LEND ITRACE ICOPY LABNORMAT. 1SETS directive:key ::= IUSES IPOINTER IORDER IRECURSIVE ITIME ISPACE !LINKAGE IINTERFERENCE I FREQUENCY

comment ::= " character

sign
character ::=
system:dependent:character

- .1 Primitives may be considered the key words of the JOVIAL language. They are generally used to give the primary meaning of a statement or declaration, although some are used for secondary purposes. Ideograms are generally used as arithmetic; operators, as relational; operators, and for purposes such as grouping, separating, and terminating. Directive: keys are used to state the primary meanings of directives. Comments can be used to annotate a program; declaration = explaining to readers (and often the original programmer) what is going on.
- .2 Notice that a comment is delimited by quotation:marks. Therefore, spaces are permitted within a comment, but a quotation:mark is not permitted within a comment. Also, a semicolon is not permitted within a comment. The reason for this is to permit some recovery in case a delimiting

27 AUG 74

JOVIAL J73

quotation; mark is left off a comment. If the comment were not then terminated by the next semicolon, the entire remainder of the program; declaration would be turned inside out==the comments being interchanged with the statements and declarations. Even with this rule, failure to terminate a comment can lead to disaster. If an END is swallowed up, the entire program structure can be disarrayed.

- .3 The system; dependent; characters that can be included in comments (and other structures) are simply those characters, other than JOVIAL signs, that the particular system and compiler can read and write.
- .4 Notice that primitives, ideograms, and directive:keys do not contain spaces. Spaces are significant in a program; declaration; usually in that they separate symbols. Comments, on the other hand, may contain spaces. This permits easier reading and writing of the commentary. The quotation; marks delimiting the comment provide the necessary grouping so that the spaces do not cause trouble.

-28-

JOVIAL J73

27 AUG 74

2.6 Abbreviation, Letter:Control:Variable, Name

abbreviation := letter

letter:control:variable ::= letter

letter numeral name ::= s s

- .1 Abbreviations are specific letters having specific meanings in specific contexts, usually data; declarations. The specific uses are documented later on, usually without calling the letter an abbreviation.
- ,2 The letter:control:variable is a special variable having meaning only within a loop:statement and passing out of existence when the loop:statement is not being executed. It is explained more fully in connection with the explanation of the loop:statement.
- ,3 Regardless of the syntax in the box above, a name must not be the same as any primitive. Notice that a name must include at least two signs. The use of the dollarisign is system dependent. That is, it provides a means whereby a name can be designated to have some special meaning in relation to the system in which the compiler is embedded. Such special meanings are outside the scope of this manual, however, and names containing dollarisigns are considered the same as other names herein. Names do not contain spaces. An embedded space would change a name into two names or other symbols.
- 2.7 Number, Constant, Status

number ::= numeral

numeric:constant
constant !:= pattern:constant
character:constant

character:constant ::= count f character

count ::= number

integer:constant
fixed:constant
numeric:constant ::= floating:constant
status:constant
qualified:status:constant

status:constant ::= V(status)

status:list:name
item:name
qualified:status:constant ::= V(table:name
status)
procedure:name
alternate:entrance:name

-30-

JOVIAL J73

primitive status ::= name letter

- ,1 The above definitions are obviously not complete, in that several kinds of constants mentioned in the box are not yet defined. This discussion is mainly concerned with the use of spaces together with numbers, constants, and statuses as symbols.
- .2 A number is a string of numerals, without spaces, In some places, a number can stand alone as a constant. In other places, particularly data:declarations, it stands alone as a symbol but is not considered a constant. In other places, a number is part of another symbol. A case in point is the character:constant, defined above. The optional count in a character:constant is a number. (In several places, numbers or other constructs are given new names reminiscent of their uses in those places.)
- "3 A character:constant is a symbol. If it begins with a count, there must be no spaces between the count and the first prime. Between the primes, the string of Characters may include spaces, but these spaces are significant. They represent part of the value represented by the character:constant. (There are restrictions on the characters permitted in a character:constant, discussed in Section 2,8,2). In a status:constant and a qualified:status:constant, the left:parenthesis, the name, the colon, the status, and the right:parenthesis are all symbols. Spaces are permitted between these elements, but not within the name or the status. Space is not pemitted between V and the left:parenthesis. All other constants are symbols, not containing spaces.

JOVIAL J73

2.8 Constants and Values

numeric:constant
constant i:= pattern:constant
character:constant

character:constant ::= count 'character '

count :1= number

.1 Character:constants are the means of representing character values to be manipulated by a program, (Characterivariables and character: formulas are indirect means.) The characters acceptable as character values are whatever the system will accept from among those given in the body of Figure 2-1. At least the 59 JOVIAL signs must be accepted, Comparison of Figure 2-1 with section 2 of USAS X3,4=1968, "USA Standard Code for Information Interchange", shows the graphic characters in identical positions in the two tables, Figure 2=1 includes eight additional columns presently under consideration by standardization bodies. The positions of the characters in the table are the only correspondence. This manual does not require that internal representation be in accordance with USAS X3,4=1968, If, however, JOVIAL program; declarations generate messages for transmission to other systems or process messages received from other systems, these messages are required by other directives to conform to USAS X3.4=1968 in their external representation.

2 All of the character values indicated in the body of Figure 2=1 can be represented in character:constants (except for system=dependent limitations). Artifices are required, however, to represent some of the values. Any spaces within the delimiting primes, except within a three=character code, represent characters of value "space". Primes, semicolons, and dollar:signs have special meanings. Therefore, in order to represent a single occurrence of one of these signs, two of them are used in succession. If a succession of these signs is desired as part of the value represented by a

character; constant, the entire string is doubled. In summary:

2n primes are used to represent n primes,

2n semicolons are used to represent n semicolons.

2n dollar:signs are used to represent n dollar:signs,

Part of	Column		8	9		2	3 11	4	5
6	7		8	9	10		11	12	13
14	15								
	Column	Code	0	1		2	3	4	5
6	7 F		8	9	A		3 B	4 C	5 D
6 E Row	F								
Row									
Ö				space	0		0	p	
p				apace			4		
1				1	1		A	G	a
g 2									
2				"	2		В	R	p
3					3		C	S	c
5					3				
4				8	4		D	T	d
t 5									
5				8	5		E	U	е
u 6				6	6		F	٧	f
V									
7				,	7		G	W	g
W									
x 8				(8		Н	X	h
9)	9		I	Y	1
y 10 2				#	1		J	Z	1
2					100		~		
12				*	1		T.	,	1
11 12 13					=		K L M N	1	k 1 m
14					>		N		n
15				1	3		0		0

Notes: row O, column 3: zero
row 1, column 3: one
row 7, column 2: prime, often rendered as a vertical mark
in JOVIAL

#33#

27 AUG 74

JOVIAL J73

row 12, column 6; a lowercase letter row 15, column 4; an uppercase letter

Figure 2=1. Characters

.3 The reason for doubling the primes inside a character; constant is that single prime terminates the constant. The reason for doubling semicolons inside a character; constant is the same. Although it is illegal, a single semicolon terminates a character; constant; and for the same reason it terminates a comment, to avoid turning the whole program; declaration inside out if the correct terminator is omitted, The reason for doubling dollar; signs is that a single dollar; sign introduces the codes described in the next two paragraphs,

.4 Any character represented in the body of Figure 2=1, if it is acceptable at all by the system as a character value, may be represented by a three character code beginning with a dollar:sign. The second character is a column code from the figure; i.e., any numeral or one of the letters from A through F. The third character is any character from the body of the figure that can be recognized by the compiler. The character specified by such a code is the one at the intersection of the column designated by the column code and the row in which the third character is found. For example, the percent mark can be represented by any of several three character codes, including these two:

\$25

\$20

.5 Within a character; constant, there is a recognition mode for letters. Initially, the mode is "general", in which all characters, including uppercase and lowercase letters, and the three-character codes are recognized as described above. The mode can be changed to "lowercase", however, by including the two-character mode code consisting of dollar:sign followed by uppercase or lowercase L. All letters following such a mode code in a character: constant, regardless of the case used, are considered to be in lowercase. The two-character mode consisting of dollar:sign followed by uppercase or lowercase U sets the "uppercase" mode, in which all letters are considered uppercase. The three-character codes pevail, without changing the mode, regardless of the mode. Hence, the appropriate case can be specified for one letter in a stream of letters. For example, here are four character: constants with the value "De Gaulle":

De Gaulle

DSSE GSSAS7HSSLSSLSSE

DSLE S4GAULLE

'sudslesu gslaulle' (none of these are ones)

.6 If the count is present in a character:constant, there must be no spaces between the count and the first prime, and the count gives the number of concatenated repetitions of the character values represented within the primes. Examples:

2'TOM' is equivalent to 'TOMTOM'

0'*' is equivalent to "********

3' ' is equivalent to ' '

- .7 Notice that it is indeed the values that are repeated, not the characters making up the constant before evaluation. Thus, 2°TsLOM° is equivalent to 'TomTom'; it is not equivalent to 'Tomtom'.
- ,8 The system may impose a limit on the number of characters in strings representable by character:constants, character:variables, or character:formulas. The size of a character:constant is the number of characters represented in the value; not the number of characters between the primes.
- .9 Pattern: constants directly represent values consisting of strings of bits, (Various variables and formulas also represent bit values.) The numeral to the left of the B in the patterniconstant is the "order" of the constant and controls the possible patternidigits and affects their meanings. These relationships are displayed in the box above wherein pattern; digit is defined. The right column contains the possible orders. The patternidigits are displayed in the center in braces. The permissible patternidigits are only those on the line with or above the selected order. For example, if the pattern is of order 4, only F and the 15 pattern: digits above F are permitted as part of this particular pattern: constant. The meaning of each patternidigit is given in the column on the left, but these are also affected by the Order, If the Order is n, then the n rightmost bits of each pattern represent the meanings of the corresponding patternidigits, The optional count gives the number of concatenated repetitions of the pattern:digits enclosed in primes. No spaces are permitted anywhere within this structure.

DLS 27=AUG=74 10:17 31027

-35=

27 AUG 74

JOVIAL J73

1 2 pattern:constant	11=	3	В	count	patternidigit
4 5					

pattern	pattern:digit order		
0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0	1	
0 0 0 1 0	2		
00011	2 3	2	
00100	4		
00101	5		
0 0 1 1 0	6		
0 0 1 1 1	7	3	
0 1 0 0 0	8		
0 1 0 0 1	9		
0 1 0 1 0	9 A		
0 1 0 1 1	В		
0 1 1 0 0	C		
0 1 1 0 1	D		
0 1 1 1 0	pattern:digit ::=		E
0 1 1 1 1	F	4	
10000	G		
1 0 0 0 1	H		
10010	I		
10011	j		
1 0 1 0 0	K		
	L M		
	N		
1 0 1 1 1 1 1 1 1 0 0 0	Ö		
1 1 0 0 1	P		
1 1 0 1 0	Q.		
1 1 0 1 1	R		
1 1 1 0 0	S		
11101	T		
1 1 1 1 0	Ü		
1 1 1 1 1	V	5	
THE RESERVE OF THE PARTY OF THE			

^{.10} The meaning of a patterniconstant is the string of bits resulting from the concatenation of the strings of bits (as

DLS 27=AUG=74 10:17 31027

-36-

JOVIAL J73

modified by the order) represented by each pattern:digit.
The size of the pattern:constant is the number of bits in the sring and may be obtained by multiplying the order times the count (assumed to be 1 if not specified) times the number of characters inside the primes. In the following examples, a pattern:constant on the left is shown with the bit string it

4B*7CF03* 01111100111100000011
3B*3120* 011001010000
1B6*10* 101010101010
5B2*R* 1101111011

integer:constant
fixed:constant
numeric:constant ::= floating:constant
status:constant
qualified:status:constant

integer:constant ::= number

represents on the right:

floating:constant ::=

number E scale

number scale

E scale

number number

scale ::= number

#37

27 AUG 74

JOVIAL J73

status:constant ::= V(status)

primitive status ::= name letter

status:list:name
item:name
qualified:status:constant ::= V(table:name :
status)
procedure:name
alternate:entrance:name

also numeric:constants represent numeric values. (There are also numeric:variables and numeric:formulas.)

Numeric:constants, as well as numeric:variables and numeric:formulas, are described in terms of their three possible modes of representation; as integer values, fixed values, and floating values. The compiler may represent constants in modes other than those indicated by the program;declaration; as long as the overall effect of the program;declaration is not compromised. (This principle applies in general; i.e., the compiler can do things differently as long as the result is the same.) Suppose, for example, an integer:constant is used in a context that requires it to be converted to a floating value. It is far more efficient for that conversion to be done once, at compile time, instead of each time the code is executed.

27 AUG 74

.12 An integer value is a numeric value represented as a whole number without a fractional part, but treated as if it had a fractional part with value zero to infinite precision. In this manual, precision means the number of bits to the right of the point in binary representations of numeric values. A number used as an integer:constant represents an unsigned integer value. The size of an integer:constant is the number of bits needed to represent the value; from the leading one bit to the units position, inclusive (value zero has size i). No spaces are permitted in an integer:constant. The system may impose a limit on sizes of integer values.

"13 Floating values (v) are represented within the computer by three parts, the significand (s), the radix (r), and the exrad (e), having the following relationships (with regard to the absolute value):

V = S X T

s = 0 or m < s < m x r

.14 The radix (r) and the minimum value (m) are fixed in any system. Therefore, only the significand and the exrad are saved as representations of a floating value. For a negative value (not a constant, a minus sign is also saved with the significand. Regardless of the system values of r and m, we assume that r = 2 and m is one-half. The language permits inquiry into the values of significands and exrads based on the radix and minimum of these values. Therefore, with respect to value, internal representation of floating values exhibits (so far as the programmer can see from results) the relationships:

V = 5 X 2

s = 0 or 1/2 < s < 1

.15 Floating:constants are written with the assumption that, externally, r = 10, and there is no m, Thus, the value of a floating:constant is given as:

V = S X 10

,16 A floating:constant must not contain any spaces. In the syntactic equation for a floating:constant, the number (or numbers) and the decimal:point (if present) give the value of the external significand. The scale (with or without its plus:sign or minus:sign) following E gives an exrad (exponent of the radix) to be used as a power of ten multiplier. If the exrad is zero, it and the E can be omitted. To be a floating:constant, the symbol must contain a decimal:point,

JOVIAL J73

or a scale as exrad, or both. It must not contain an A; that would make it a fixed; constant.

.17 A floating:constant can contain information relating to the precision of its internal representation. The scale following M gives the minimum number of magnitude bits in the significand of the internal representation. In most systems, there are one or two modes of representation of floating values. If the scale following M is greater than the maximum number of magnitude bits in any of the system-dependent modes of representing floating values, the floating; constant is in error. Otherwise, the compiler chooses the mode with the smallest number of magnitude bits in the significand at least as large as the scale following M. If there is a choice of exrad size also, the compiler chooses one that can encompass the Value of the floating:constant. These sizes are based on the numbers of bits in the actual representations, not on what may be a fictional assumption that the radix is 2. If the M and its following scale are omitted, the compiler chooses its normal mode of floating representation or one that can contain the value.

.18 A fixed value is an approximate numeric value. Within the computer, it is represented as a string of bits with an assummed binary point within or to the left or right of the string. The number of bits in the string, not counting a sign bit if there is one, is the size of the fixed value. The number of bits after the point (positive or negative, larger or smaller than the size) is the precision of the fixed value.

.19 A fixed:constant is seen, in the syntactic equation above, to be an integer:constant or a floating:constant (without an M and its scale) followed by the letter A and a scale. The A and its scale are essential to make the form a fixed:constant. Spaces are not allowed anywhere within a fixed:constant. All that precedes the A determines the value of the fixed:constant (which may then be truncated on the right). The scale after the A tells how many bits there are after the point. (If the scale is negative, the bits don't even come as far to the right as the point). The size of the constant is the number of bits from the leftmost one-bit to the number after the point as specified by the scale after A, inclusive. Here are some fixed:constants, their values, their sizes, and their precisions:

-40-

JOVIAL J73

27 AUG 74

fixedic	onstant	value	size		precis	ion
19A0	19		5		0	
19A3	19		8		3	
19A=2	16		3		=2	
2.3A0	2		2		0	
2.3A=1	2		1		=1	
2.3A2	2,25		4		2	
2.345	2,28125			7		5
2.3A6	2.96875			R		6

- .20 No spaces are permitted within a fixed; constant. The system may impose a size limitation on fixed values.
- .21 Integer:constants, floating:constants, and fixed:constants cannot have embedded spaces and cannot have negative values. Both of these characteristics are changed for status:constants and qualified:status:constants. In status:constants and qualified:status:constants, there must be no spaces within the status, within the qualifying name, or between the V and the left:parenthesis. There may be spaces elsewhere within such constants.
- ,22 Status; constants and qualified; status: constants represent constant integer values. How they become associated with these values and how they may be used are explained elsewhere. In distinction to integer: constants, which can only stand for zero and positive integer values, status: constants and qualified; status: constants can also stand for unvarying negative integer values.
- 2.9 Computer Representation of Constants and Variables

JOVIAL is designed to be compatible with binary computers, machines in which numeric and other values are represented as strings of binary digits, ones and Zeros. The bits (binary digits) of a computer are organized in a hierarchical structure, a compiler may impose a different structure on the computer, but for reasons of efficiency it usually adopts a structure identical to or at least compatible with the structure of the machine. The structure discussed in this section is the system structure; i.e., the structure presented to the programmer by the combination of a particular computer and a particular JOVIAL compiler that produces object code for that computer,

,1 JnVIAL program:declarations are not completely independent of the system. The extent of dependence, however, is related to the use of certain language features.

JOVIAL J73

Dependence is increased by the use of features, such as pattern; constants and BIT, that relate to bit representation or those, such as LOC, that relate to system structure. The value of a pattern; constant is completely independent of the system, but its use implies knowledge of the representation of other data. It is that knowledge, built into te program; declaration, that is system dependent.

- .2 Even if such deliberate system dependence is avoided, the programmer must still have knowledge of structure and representation in his system so that he may know the limitations on precision, how his tables must be structured, and how to avoid gross inefficiencies. For example, in processing long strings of character data, it is often much faster to examine and manipulate them in word-size, instead of byte-size, hunks.
- .3 A "byte" is a group of bits often used to represent one character of data. The number of bits in a byte is system dependent. Although JOVIAL permits some leeway in positioning bytes, there are usually preferred positions, when referring to these preferred positions, we often use the term "byte boundary".
- .4 A "word" is a system=dependent grouping of bits convenient for describing data allocation. Entries and tables are allocated in terms of words. Data are overlaid in terms of words. The maximum sizes of numeric values may, but need not, be related to words. Word boundaries usually correspond to some of the byte boundaries.
- ,5 The "basic addressable unit" is the group of bits corresponding to each machine location. In many machines, the basic addressable unit is the word. In others, it is the byte. If it is the word, each value of the location counter refers to a unique word. If the basic addressable unit is the byte, each location value refers to a unique byte. In these latter circumstances, it often happens that addresses are somewhat restricted. For instance, it may be permitted to refer to a string of characters starting in any byte, or to double-precision floating values starting only in bytes with locations divisible by 8.
- .6 Integer and fixed values are represented in binary as strings of bits. The number of bits used to represent the magnitude of a value is known as its size and is (in most cases) under the control of the programmer. The position of the binary point is understood and takes up no space. For signed values, the sign bit is an additional bit not counted in the size of the value. For purposes of the use of BIT, the sign bit is considered to lie just to be left of the most significant bit accounted for by the size of the value. The

maximum permissible size of an integer or fixed value is system dependent. The maximum size of a signed integer or fixed value is one less than this system-dependent size and the places where unsigned values of maximum size may be used are restricted; i.e., they must not be used in conjunction with any arithmetic:operators, nor with the four nonsymmetric relational:operators <, >, <=, >=, and when used with the symmetric relational:operators (= and <>) the other operand must not be signed.

- .7 The compiler determines the sizes of constants. The programmer usually supplies the sizes of variables. The size does not include the sign bit for signed data. For unpacked or medium packed data, there may be more bits in the space allocated for an item than are specified by the programmer, whether or how these extra bits are used is system dependent, but in any case they are known as "filler bits". The sign bit, if there is one, and any filler bits are to the left of the magnitude bits. It depends on the system whether the sign bit is to the left or right of the filler bits.
- ,8 The meanings of bit values 0 and 1 are not stipulated, but in most implementations 0 stands for 0 and 1 for 1 in positive values. For negative values, there is considerable variation. All the following are known and acceptable representations of =12 in an unpacked, signed, integer item declared to be four bits long:

100000000000000000000000000000001100

10100

- "9 Floating values are represented by two numbers, both signed. The significand contains the significant digits of the value and the exrad is the exponent of the understood radix. Each system has a standard mode of representing floating values, known as "single precision", with a specified number of bits in the significand and a specified number in the exrad. Many systems have one or a few additional modes in which there are more bits in the significand, the exrad, or both. If there is more than one mode, the programmer can usually choose the mode for each floating value. In the absence of an indication of such choice, the compiler will usually choose single precision. The radix is an implicit constant having a system-dependent value.
- .10 Character values are represented by strings of bytes, each byte consisting of a string of bits. The number of bits in a byte is system dependent. The number of bytes used to

represent a character value is under control of the programmer, but there is a system-dependent maximum.

- il A character item that fits in one word is always stored in one word, by the compiler. By use of a specified:table; declaration, the programmer may override this rule. If it is not densely packed, a character item always starts at a byte boundary. If it crosses a word boundary, a character item always starts at a byte boundary. The programmer must not attempt to override this rule.
- .12 An entry variable whose relevent table: declaration does not describe it as being of some other type is a bit variable. It is merely the string of bits, of a size corresponding to the number of words in an entry, representing the entry.

2.10 Spaces, Comments

The syntactic structures of all symbols have now been explained, as well as the places where spaces are permitted or prohibited within them. All further structures that go to make up a program declaration are composed of strings of symbols. It is always permitted to place one or more spaces between symbols. It is sometimes required to put at least one space between symbols. The criterion is to avoid ambiguity. Comments can often replace required spaces.

.1 Spaces are required in many situations to enable the compiler to detect the end of one symbol and the beginning of the next. Generally, at least one space is required between two symbols of any class except ideograms, but including the quotation:mark. The rule is exhibited in detail in the following table. The rows are labelled with the ending signs of the left symbol of a pair of symbols. The columns are labelled with the beginning signs of the right symbol of a pair. "SR" at the intersection of row and column indicates that at least one space is required between the pair of symbols:

	Left symbol		Right s	ymbol	starts	with:	
	ends in	numeral	letter	\$			11
SR	numera1		SR		SR	SR	SR
5.	letter	SR SR SR	SR	SR SR SR	SR SR SR	SR SR SR	SR

-44-

JOVIAL J73

27 AUG 74

SR

- ,2 A comment may occur between symbols, However, it must not occur within a definition nor within any constant, such as a status:constant or a character:constant, A comment may be used instead of the required space between symbols unless use of the comment would cause the occurrence of two quotation:marks in succession. In fact, only the use of a comment can bring about the situation indicated by the lower right corner of the table above. Introduction of a comment between symbols where a space is permitted but not required may then require a space to prevent the comment from interfering with another symbol.
- .3 A comment must not be used where the next structure required or permitted by the syntax is a definition. That is, a comment must not follow the define; name or a right; parenthesis in a define; declaration. And a comment must not follow a left; parenthesis or a comma in a definition; invocation. A comment, as defined above, must not occur in a definition delimited by quotation; marks.

DLS 27=AUG=74 10:17 31027

27 AUG 74

JOVIAL J73

Appendix A

SYNTAX EQUATIONS

The following pages contain the complete syntactic description of JNVIAL (J73). The metalinguistic equations are in alphabetical order of the metalinguistic terms being defined. In general, each defining equation is individually boxed. The boxes are nubered sequentially in the upper left hand corner by a number in italics followed by a colon. Following the colon is a list of the box numbers in which the current term is used as a part of the definitions of other terms. The metalinguistic symbology is explained in section 1.4.

Equations 94 and 95 are in one box. These are both valid and necessary definitions for format:list. Equation 144 is the definition for mark. In the same box, opposite each mark is a metalinguistic term (or two). These marks constitute the definitions of these terms. Equation 172 defines pattern:digit. In the same box is information giving the bit patter corresponding to each pattern:digit, depending on the order of the pattern:constant. In the box with equation 190, the definition of relational:operator, is a list of the meanings of the relational:operators. Box 234 contains a definition for system:dependent:character, but the definition is a prose description; a metalinguisitic equation is not feasible. Equations 247 and 248 are in one box. They are both valid and necessary definitions for variable.

1: 233

abbreviation := letter

21 63

abnormal:directive ::= IABNORMAL data:name

3: 130

absolute:function:call ::= ABS (numeric:formula)

4: 58, 170

definition
actual:define:parameter ::=
 " definition "

5: 101, 170, 180, 191

STOP

alternate:entrance:name

RETURN

procedure:name
TEST control:variable
EXIT statement:name
actual:input:parameter ::=
statement:name
procedure:name
formula
table:name
data:block:name
variable
pointer:formula

6: 170, 180, 191

actual:output:parameter ::= variable

7: 166,217
allocation:increment ::= number

```
8: 9, 49, 166, 182, 205, 217
   allocation: specifier ::= @ pointer: formula
    75, 184
9:
   alternate; entrance; declaration ::=
     ENTER alternate:entrance:name
           ( formal; input:parameter
            formal:output:parameter
           environmentalispecifier
               itemidescription
           allocation: specifier
           packing:specifier [ bit:number ]
               + constant ;
10: 130
  alternate:entrance:function:call ::= ALT (
  procedureiname
11: 5, 9, 53, 101, 122, 138, 180, 187, 193
  alternate:entrance:name ::= name
```

assignment:operator ::= :

assignment:statement ::=
formula
variable
indexed:variable:range =
format:function:call

format:variable = ;
indexed:variable:range

15: 159
attribute:association ::= 00 [description:attibute]

16: 63
begin:directive ::= IBEGIN reference

17: 18

bit:form ::= form

18: 18, 29, 97, 159, 196

pattern:constant
entry:variable
comparison
chain:comparison
bit:string:function:call
shift:function:call
bit:formula ::= bit:form
bit:formula logical:operator bit:formula
NOT bit:formula
bit:formula & bit:formula
(bit:formula)
numeric:formula
character:formula

19: 9, 182, 205, 217, 218

bit; number ::= number

20: 18, 130

bit:string:function:call ::=
BIT (formula , numeric:formula numeric:formula)

21: 247

bit:variable ::=
 entry:variable
 BIT (named:variable , numeric:formula
 numeric:formula)

22: 217

bits:per:entry ::= number

23: 130

byte:string:function:call ::=
 BYTE (character:formula , numeric:formula ,
numeric:formula)

241 18

chain; comparison :== comparison relation; operator formula

25: 26, 32, 46, 62, 100, 112, 120, 137, 213, 234, 240

sign character ::= system:dependent:character

26: 29, 39

character; constant ::= count ' character '

271 29

character:form ::= form

28: 29

character:format ::= count C

29: 18, 23, 93, 94, 97

character:constant
 character:variable
 character:form
character:formula ::= character:function:call
 character:formula & character:formula
 (character:formula)
 bit:formula

30: 29

character:function; call := function; call

31: 29, 96, 247

named:character;variable character;variable ;:= BYTE (named:character;variable , numeric:formula

, numeric:formula)

321 233

comment ::= " character "

331 18, 24

comparison ::= formula relational:operator formula

341 63

compool:directive ::=
name
compool:name
:COMPOOL (name) ;

(compool:name)

35: 34

compool:name ::= name

27 AUG 74

36: 219

declaration
compound:statement ::= BEGIN END ;
statement

37: 38, 97, 238, 241

conditional:formula ::= formula

381 207

conditional:statement ::=
 IF conditional:formula ; controlled:statement
 statement:name : ELSE controlled:statement

39: 9, 42, 182, 205, 233

numeric:constant constant := pattern:constant character:constant

40: 97

constant:formula ::= (formula)

41: 166, 167, 217, 218

constant: ist ::=

[index] constant:list:element

[index]
 constant:list:element

421 41, 42

constant: list:element ::=
count (constant: list:element)
constant: list:element

431 136, 148

44: 5, 239

named:variable
control:variable ::=
letter:control:variable

45: 38, 141

controlled:statement ::= statement

461 63

copy:directive ::= COPY character ;

47: 26, 28, 42, 72, 78, 95, 98, 103, 120, 124, 126, 171, 173, 199

count ::= number

48: 182

data; allocator; specifier ::= @

49: 49, 51, 75

data:block:declaration ::=

environmental:specifier
BLOCK data:block:name
allocation:specifier

simple:item:declaration table:declaration END ; data:block:declaration independent:overlay:declaration

50: 5, 49, 52, 90, 109, 138, 209

data:block:name ::= name

51: 54

item:declaration
 table:declaration
data:declaration ::=
 data:block:declaration
 overlay:declaration

52: 2, 129, 174, 195, 244

item:name
data:name ::= table:name
 data:block:name

53: 130

procedure:name
data:size:function:call ::= DSIZE (
alternate:entrance:name

54: 36, 54, 112, 179

status:list:declaration
form:declaration
data:declaration
null:declaration
declaration
declaration
processing:declaration
external:declaration
BEGIN declaration END;

551 54

define:declaration ::=
DEFINE define:Dame (formal:define:parameter) "
definition ";

561 55, 58

define:name ::= name

57: 4, 55

definition ::= sign

581

definition:invocation ::= define:name (
actual:define:parameter)

59: 185

dependent:program:declaration ::= procedure:declaration

601 15, 69

item:name
description:attribute ::=
item:description

(equ61)

61: 166, 217

dimension: list ::= [lower: bound : upper: bound

62: 207

direct:statement ::= DIRECT character JOVIAL ;

631

compool:directive skipidirective begin: directive end:directive trace: directive copyidirective abnormalidirective setsidirective directive ::= usesidirective pointer:directive order:directive recursive directive time:directive space: directive linkage:directive interference: directive frequency:directive

641 233

1COMPOOL ISKIP IBEGIN 1END ITRACE ICOPY LABNORMAL ISETS directive:key ::= IUSES 1POINTER LORDER IRECURSIVE ITIME ISPACE LINKAGE LINTERFERENCE !FREQUENCY

65: 63

end:directive ::= !END ;

66: 217

entries:per:word ::= number

671 18, 21, 117, 252

entry:variable ::= table:name [index]
pointer:formula

68: 9, 49, 166, 182, 205, 217

program:name IN procedure:name environmental:specifier ::=

RESERVE

RESERVE

691 159

evaluation:control ::= 0 [description:attribute]

701 207

exchange:statement ::= variable == variable ;

71: 207

exit:statement ::= EXIT statement;name ;

72: 82

count D count Z

exrad ::= count Z count D

count Z *

73: 130

exrad:function:call ::= XRAD (numeric:formula)

74: 132

exrad; specifier ::= number

751 54

externalideclaration ::=

simple:item:declaration table: declaration data:block:declaration name: declaration

DEF procedure: declaration alternate:entrance:declaration REF simple:item:declaration

table: declaration

data:block:declaration END ;

name: declaration procedure: declaration

alternate:entrance:declaration

761 87

field:width ::= number

771 157

fixed:constant ::= number

scale scale

number . number

78: 158

integer:part fraction:part

fixed:format ::= integer:part
count * R

count * fraction:part

79: 160
fixed:function:call ::= function:call

80: 162
fixed:variable ::= named:variable

floating:constant ::=

number E scale

number ,
scale

E scale

number , number

82: 158

floating;format ::= significand E exrad R

831 162

floating:function:call ::= function:call

841 162

floating:variable ::= named:variable

85: 141

for:clause ::= FOR loop:control ;

86: 17, 27

form ::= form:name (formula)

87: 54

form:declaration ::= FORM form:name field:width ;

88: 86, 87

forminame ::= name

89: 55, 170 formal:define:parameter ::= letter

90: 9, 170, 182

statement:name
simple:item:name
formal:input:parameter ::= procedure:name
table:name
data:block:name

91: 9, 170, 182

formal:output:parameter ::= simple:item:name

921 95

null:format
insert:format
format ::= skip:format
character:format
pattern:format
numeric:format

931 14, 130

format:function:call ::=

FORMAT (character:formula , format:list , procedure:name)

94: 93, 95, 96

format: list ::= character: formula

95: 93, 95, 96

format
format:list ::=
count (format:list)

96: 14, 102, 247

format:variable ::=

FORMAT (character:variable , format:list , procedure:name)

97: 5, 14, 20, 24, 33, 37, 40, 86, 119, 159, 192, 203, 209, 242, 245

pointer:formula
numeric:formula
bit:formula
formula ::= conditional:formula
character:formula
value:formula
numeric:formula
constant:formula

98: 78

count D count Z fraction:part ::=

count D

99: 130

fraction:part:function:call ::= FRAC (numeric:formula

.Grab=n;

100: 65

frequency:directive ::= !FREQUENCY character ;

101: 30, 79, 83, 125

intrinsic:function:call

(actual:input parameter)

103: 248

format:variable
BYTE (named:character:variable ,
numeric:formula

functional:variable :== , numeric:formula
)

BIT (named:variable , numeric:formula , numeric:formula)

103: 158

generalized:numeric:formula ::= count N R

104: 207

go;to:statement ::= GOTO statement:name [
index] ;

105: 115

high:point ::= numeric:formula

107: 43

numeric:formula increment:phrase ::= BY numeric:value:formula

108: 49, 168

109: 111

110: 108, 109

independent;overlay;expression ::=
 independent;overlay;string :
 independent;overlay;string

111: 110

independent; overlay; string ::= independent; overlay; element

112: 185

independent:program:declaration ;:=
 statement
PROGRAM program:name (character) ;
 declaration

113: 41, 67, 104, 237

index ::= index:component

114: 113, 116

index:component ::= numeric:formula

index:component:range ::= low:point : high:point

116: 118, 155

index:component:range
index:range ::=
 index:component

117: 150

table:variable indexed:variable ::= entry:variable

118: 14

indexed: variable: range ::=

iteminame

[index] @ pointer:formula

table:name

item:name

ALL (@ pointer:formuja

tableiname

1191 43

initial:phrase ::= formula

120: 92

count S

numeral

insert:format ::= count

letter

count " character

121: 182

instruction:allocation:specifier ::= Pointer:formula

1221 130

procedure:name
instruction:size:function:call ::= ISIZE ()
alternate:entrance:name

123: 157, 175

integer:constant ::= number

1241 158

count Z count D

integer:format ::= R

count D count Z

125: 160

integer:function:call ::= function:call

1261 78

count Z count D

integeripart ::=

count D

127: 130

integer:part:function:call ::= INT (numeric:formula)

128: 162

named; variable integer; variable ; = letter; control; variable

1291 63

interference:directive ::= !INTERFERENCE data:name : data:name ;

130: 101

format: function: call byte:string:function:call bit:string:function:call alternate:entrance:function:call number: of: entries: function: call location:function:call shift:function:call absolute:function:call words:per:entry:function:call intrinsic:function:call ::= exrad:function:call significand:function:call signed:function:call signum: function: call size:function:call type:function:call fraction:part:function:call integer:part:function:call instruction: size: function: call data: size: function: call

132: 9, 60, 166, 167, 182, 205, 217, 218

item:description ::=

U

C size:specifier

F , R significand:specifier exrad:specifier

status:list S status:list:name , R size:specifier

, precision:specifier

133: 52, 60, 118, 167, 187, 205, 218, 229, 237, iteminame ::= name

134: 1, 89, 120, 135, 136, 145, 197, 221

A
B
C
D
E
F
G
H
I
J
K
L
letter := M
O
P
Q
R
S

UVXXX

135: 44, 128, 233, 248

1etter:control:variable ::= 1etter

136: 140

letter:loop:control ::= letter (control:clause)

137: 63

linkage:directive ::= !LINKAGE character ;

1381 130

statement:name
named:variable
location:function:call ::= LOC (table:name)
data:block:name
procedure:name
alternate:entrance:name

139: 130

AND
OR
logicalioperator ::=
EQV
XOR

140: 85

named:loop:control loop:control ::= letter:loop:control

141: 207
loop:statement ::= for:clause contolled:statement

1421 115

lowspoint ::= numeric:formula

143: 61

number lower:bound ::= simple:item:name

1441 197

plus:sign minusisign asterisk slash backislash ampersand > greater:than:sign < less:than:sign equals: sign at:sign mark ::= decimalipoint colon comma semicolon space left:parenthesis, parenthesis right:parenthesis, parenthesis left:bracket, bracket right:bracket, bracket prime quotation: mark dollarisign exclamation:point

145: 11, 34, 35, 50, 56, 88, 133, 183, 186, 206, 220, 221, 225, 233, 236, 241

letter numeral name ::=

1461 54, 75

statement:name
name:declaration ::= NAME
procedure:name

147: 31, 102

named; character; variable i:= named; variable

148: 140

named:loop:control ::= named:variable (control:clause

149: 219

namedistatement ::= statement:name : statement

150: 21, 44, 80, 84, 102, 128, 138, 147, 148

simple; variable named; variable ::= indexed; variable

151: 54, 164, 215

NULL 1

null:declaration ::=

BEGIN END ;

1521 92

null:format ::=

153: 219

NULL ;

null:declaration ::=

BEGIN END 1

1541 7, 19, 22, 47, 66, 74, 76, 77, 81, 108, 123, 143, 169, 177, 189, 194, 201, 210, 214, 223, 232, 233, 243, 249, 250

number ::= numeral

155: 130

number:of:entries:function:call ::= NENT (table:name
[index:range])

156: 120, 145, 154, 197

157: 39, 159

integer:constant
 fixed:constant
numeric:constant ::= floating:constant
 status:constant
 qualified:status:constant

158: 92

generalized:numeric:format
integer:format
numeric:format ::=
 fixed:format
 floating:format

159: 3, 18, 20, 21, 23, 31, 73, 97, 99, 102, 105, 107, 114, 127, 142, 159, 161, 175, 196, 198, 200, 202, 232

numeric:constant numeric:variable numeric:function:call

numeric:formula

evaluation:control numeric:formula evaluation:control

numeric:formula ::= numeric:formula arithmetic:operator

formula

attribute:association (numeric:formula) bit:formula

1601 159

integer:function:call
numeric:function:call ::= fixed:function:call
floating:function:call

161: 97, 107

numeric:value:formula ::= [numeric:formula]

162: 159, 176, 247
integer:variable
numeric:variable ::= fixed:variable
floating:variable

1631 63

orderidirective ::= !ORDER ;

164: 165

null:declaration ordinary:table:item:declaration

1651 235

ordinary:table:declaration ::= ordinary:table:heading ordinary:table:body

1661 165

ordinary:table:heading ::= environmental:specifier TABLE table:name allocation:specifier

item:description = constant:list

167: 131, 164

ordinary:table:item:declaration ::=

ITEM item:name item:description packing:specifier

= constant:list

168: 51

independent:overlay:declaration
overlay:declaration ::=
 subordinate:overlay:declaration

1691 9, 166, 167, 182, 205, 217, 218

N:

packing:specifier ::= M number

-

1701

actual:define:parameter
formal:define:parameter
parameter := actual:input:parameter
formal:input:parameter
actual:output:parameter
formal:output:parameter

171: 18, 39, 108

pattern:constant ::= 3 B count * pattern:digit

172: 171

	pa	ti	te	n	patternidigit	order		
00	0	00	00	0	0		1	
0	0	0	1	0	2			
0	0	0	1	1	3		2	
0	0	1	0	0	4			
0	0	1	0	1	5			
0	0	1	1	0	6			
0	0	1	1	1	7		3	
0	1	0	0	0	8			
0	1	0	0	1	9			
0	1	0	1	0	A			
0	1	0	1	1	В			
0	1	1	0	0	C			
00	1	1	0	1	D	0000		
0				0	patternidigit	11=		E
0	1	1	1	1	F		4	
1	0	0	0	0	G			
1 1 1	0	0	0	1	H			
	0	0	1	0				
1	0	0	1	1	J			
1 1 1 1	0		0	0	K			
1	0	1	0	-	L M			
1	0	1	1	0	N			
1	1	0	0	0	0			
1	1	0	0	1	P			
1	1	0	1	0	Q Q			
1	1	0	1	1	R			
1 1 1 1 1 1	1	1	0	0	5			
1	1	1	0	1	T			
		1	1	0	Ü			
1	1	1	1	1	V		5	
*	19		*					

173: 92

pattern:format i:= 3 B count P

174: 63

pointer:directive ::= !POINTER pointer:formula : data:name ;

175: 5, 8, 67, 97, 101, 118, 121, 174, 180, 208, 237

1761 247

pointer:variable ::= numeric:variable

177: 132

precision:specifier ::= number

178: 221, 233

ABS ALL ALT NENT AND NOT BEGIN NULL FIT NWDSEN DR BLOCK BY OVERLAY BYTE PROC DEF PROGRAM DEFINE REF DIRECT REMQUO DSIZE RESERVE ELSE RETURN END SHIFT primitive ::= ENTER SIG EQV SIGNED EXIT SIGNUM FOR SIZE FORM STATUS FORMAT STOP FRAC SWITCH GOTO TABLE TEST IF IN THEN INT TYPE ISIZE UNTIL ITEM WHILE JOVIAL XOR LOC XRAD NAME ZAP

179: 181

declaration procedure:body ::= statement

```
180: 207
   procedure: call: statement ::=
      remquo:procedure:call:statement
         procedure:name
                @ pointer:formula
         alternate:entrance:name
            ( actual:input:parameter
            ( actual:input:parameter
           actualioutputiparameter
181: 59, 75, 184
  procedure; declaration ::= procedure; heading
  procedure:body
182: 181
  procedure: heading ::=
                        environmental:specifier
  PROC procedure:name
                        data; allocation; specifier
     : instruction; allocation; specifier
          formal:input:parameter
     formal:output:parameter
        environmental:specifier
```

item:description

packing:specifier [bit:number

allocation: specifier

constant

183: 5, 10, 53, 68, 90, 96, 101, 122, 138, 146, 180, 182, 167, 193

procedure:name ::= name

1841 54

program:declaration
processing:declaration ;:= procedure:declaration
 alternate:entrance:declaration

185: 184

independent:program:declaration
program;declaration
program;declaration

186: 68, 112

programiname ::= name

187: 157

status:list:name
 item:name
qualified:status:constant ::= v(table:name
status)
 procedure:name

alternate:entrance:name

188: 63

recursive: directive ::= !RECURSIVE ;

189: 16, 211

reference ::= number

190: 24, 33, 246

< less than equal

= equal
> greater than

relational:operator ::=

>= greater than or equal, not less than

<> less than or greater than, not equal

<= less than or equal, not greater than

1911 180

remquo:procedure:call:statement ::=

REMQUD (actual:input:parameter ,
actual:input:parameter ;
actual:output:parameter ,
actual:output:parameter);

192: 43

formula
replacement;phrase := THEN
value;formula

193: 207

procedure:name
return:statement ::= RETURN;
alternate:entrance:name

194: 77, 81

scale ::= number

1951 63

sets:directive ::= |SETS data:name |

196: 18, 130

shift:function:Call ::= SHIFT (bit:formula , numeric:formula)

197: 25, 57, 234

letter sign ;:= numeral mark

198: 18, 130

signed; function: call ::= SIGNED (numeric: formula)

199: 82

count D count D

count D . count D

count D .

significand ::=

count D * count D

count * count D

count D count *

200: 130

significand:function:call ::= SIG (numeric:formula)

201: 132

significand:specifier ::= number

2021 130

signum: function: call ::= SIGNUM (numeric: formula)

203: 207

simple:assignment:statement ::= variable = formula ;

204: 175

simple:integer:variable ::= simple:variable

2051 49, 75, 131

simple:item:declaration ::=

environmental:specifier

ITEM item:name

allocation:specifier item:description packing:specifier

[bitinumber] = + constant

206: 90, 91, 109, 143, 208, 243

simple:item:name ::= name

2071 219

simple:assignment:statement
assignment:statement
exchange:statement
go:to:statement
exit:statement
test:statement
simple:statement
zap:statement
stop:statement
loop:statement
conditional:statement
switch:statement
procedure:call:statement
direct:statement

208: 150, 204

simple:variable ::= simple:item:name @ pointer:formula

209: 130

formula size:function:call ::= SIZE () data:block:name

210: 132

size: specifier ::= number

2111 63

skipidirective ::= !SKIP reference ;

212: 92

skip:format ::= X

213: 63

space:directive ::= |SPACE character ;

214: 109

spacer ::= number

2151 216

null:declaration
specified:table:body ::=
specified:table:item:declaration
BEGIN specified:table:item:declaration END

2161 235

specified; table; declaration : = specified; table; heading specified; table; body

2171 216

specified:table:heading ::=

environmental:specifier
TABLE table:name
allocation:specifier

: allocation:increment dimension:list

structure:specifier

words:per:entry bits:per:entry bit:number entries:per:word

packingspecifier item:description packing:specifier

[bit:number , word:number] =
constant:list ;

218: 131, 215

specified:table:item:declaration ::=

ITEM item: name item: description

packing:specifier [bit:number

, wordinumber] = constant ;

219: 36, 45, 112, 149, 179, 232

null:statement simple:statement statement ::= compound:statement named:statement

number]

27 AUG 74

```
220: 5, 38, 71, 90, 104, 138, 146, 149, 232
 statement:name ::= name
221: 187, 222, 233
      primitive
  status ::= name
       letter
2221 157, 223
  status:constant ::= V( status )
223: 132, 224
Status:list ::=
                    number 1 status:constant
```

224: 54

status:list:declaration ::= STATUS status:list:name
status:list ;

status:constant

225: 132, 187, 224

status:list:name ::= name

226: 207

stop:statement ::= STOP ;

227: 166, 217

structure:specifier ::=

228: 164, 168

subordinate;overlay;declaration ;:= OVERLAY
subordinate;overlay;expression ;

229: 231

item:name
subordinate;overlay;element ::=
 (subordinate;overlay;expression)

233:

27 AUG 74

```
230: 228, 229
subordinate:overlay:expression ::=
subordinate:overlay:string :
subordinate:overlay:string
```

231: 230
subordinate:overlay:string :=
subordinate:overlay:element

```
232: 207

switch; statement ::=

SWITCH numeric; formula ; statement; name :

BEGIN [ number ] statement

END :
```

primitive
ideogram
name
letter:control:variable
symbol ::= abbreviation
number
constant
comment
directive:key
status

234: 25

system:dependent:character

Most computer systems can read and write more
characters than are encompassed in the set of JOVIAL
sign. The entire set that can be handled is know as
the set of characters. The characters that are not
signs are known as system:dependent:characters.

235: 49, 51, 75

ordinary:table:declaration
table:declaration ::=
specified:table:declaration

236: 5, 52, 67, 90, 109, 118, 138, 155, 166, 187, 217, 251, 252

table:name ::= name

237: 117
table:variable ::= item:name [index] @
pointer:formula

238: 43

WHILE

conditional:formula terminator:phrase ::= UNTIL

valueiterminator

239: 207

testistatement ::= TEST character

2401 63

time:directive ::= |TIME character ;

241: 63

trace:directive ::= !TRACE (conditional:formula) name ;

2421 130

type:function:call ::= TYPE (formula)

2431 61

number
upper:bound ::=
simple:item:name

244: 63

uses:directive ::= !USES data:name ;

245: 97, 192, 246

value: formula ::= [formula]

246: 238 value:terminator ::=

WHILE value:formula relational:operator variable UNTIL variable relational:operator value:formula

247: 5, 6, 14, 70, 203, 246

pointer; variable numeric; variable variable ::= bit; variable character; variable format; variable

248; 5, 6, 14, 70, 203, 246

named:variable
variable ::= letter:control:variable
functional:variable

249: 217, 218

wordinumber is number

250: 217

words:per:entry ::= number

251: 130

words:per:entry:function:call ::= NWDSEN (table:name

252: 207

table:name
zap:statement ::= ZAP
entry:variable

DLS 27=AUG=74 10:17 31027

JOVIAL J73

27 AUG 74

6 14	Column 7 15		8	1 9	10 2	3 11	4 12	5 13
6 E Row	Column 7 F	Code	8	1 9	A 2	3 B	4 C	5 D
0				space	0	9	P	
p 1				1	1	A	Q	a
9 2				п	2	В	R	b
3					3	c	S	c
8				s	4	D	T	d
t 5				8	5	E	U	e
u 6				6	6	F	V	£
V 7					7	G	W	g
W 8					8	Н	X	h
x 9				,	9	1	Y	1
					1	J	Z	1
2								
11				,	4	L	1	k 1 m
13						M	1	m
10 2 11 12 13 14 15				;	> ?	K L M N		n

Notes: row 0, column 3: zero
row 1, column 3: one
row 7, column 2: prime, often rendered as a vertical mark
in JOVIAL
row 12, column 6: a lowercase letter
row 15, column 4: an uppercase letter

Figure 2=1, Characters

^{.2} All of the character values indicated in the body of Figure 2=1 can be represented in character; constants (except

for system-dependent limitations). Artifices are required, however, to represent some of the values. Any spaces within the delimiting primes, except within a three-character code, represent characters of value "space", Primes, semicolons, and dollarisigns have special meanings. Therefore, in order to represent a single occurrence of one of these signs, two of them are used in succession. If a succession of these signs is desired as part of the value represented by a character:constant, the entire string is doubled. In summary:

2n primes are used to represent n primes,

2n semicolons are used to represent n semicolons,

2n dollar; signs are used to represent n dollar; signs,

character:constant is that single prime terminates the constant. The reason for doubling semicolons inside a character:constant is the same. Although it is illegal, a single semicolon terminates a character:constant; and for the same reason it terminates a comment, to avoid turning the whole program:declaration inside out if the correct terminator is omitted. The reason for doubling dollar:signs is that a single dollar:sign introduces the codes described in the next two paragraphs.

4 Any character represented in the body of Figure 2=1, if it is acceptable at all by the system as a character value, may be represented by a three character code beginning with a dollar:sign. The second character is a column code from the figure; i.e., any numeral or one of the letters from A through F. The third character is any character from the body of the figure that can be recognized by the compiler. The character specified by such a code is the one at the intersection of the column designated by the column code and the row in which the third character is found. For example, the percent mark can be represented by any of several three character codes, including these two:

\$25

\$2U

*5 Within a character:constant, there is a recognition mode for letters. Initially, the mode is "general", in which all characters, including uppercase and lowercase letters, and the three-character codes are recognized as described above. The mode can be changed to "lowercase", however, by including the two-character mode code consisting of dollar:sign followed by uppercase or lowercase L. All letters following

such a mode code in a character; constant, regardless of the case used, are considered to be in lowercase. The two-character mode consisting of dollar; sign followed by uppercase or lowercase U sets the "uppercase" mode, in which all letters are considered uppercase. The three-character codes pevail, without changing the mode, regardless of the mode. Hence, the appropriate case can be specified for one letter in a stream of letters. For example, here are four character; constants with the value "De Gaulle":

De Gaulle

DS6E GS6AS7US6LS6LS6E

DSLE S4GAULLE

"Sudslesu gslaulle" (none of these are ones)

,6 If the count is present in a character:constant, there must be no spaces between the count and the first prime, and the count gives the number of concatenated repetitions of the character values represented within the primes. Examples:

2 TOM is equivalent to "TOMTOM"

Of#' is equivalent to "********

3' ' is equivalent to ' '

.7 Notice that it is indeed the values that are repeated, not the characters making up the constant before evaluation. Thus, 2°TSLOM° is equivalent to 'TomTom'; it is not equivalent to 'Tomtom'.

,8 The system may impose a limit on the number of characters in strings representable by character:constants, character:variables, or character:formulas. The size of a character:constant is the number of characters represented in the value; not the number of characters between the primes.

fixed:c	onstant	value	size		preci	sion
19A0	19		5		0	
19A3	19		8		3	
19A=2	16		3		=2	
2.3A0	2		2		0	
2.3A=1	2		1		-1	
2.3A2	2,25		4		2	
2,345	2,28125			7		5
2,3Å6	2,296875			8		6

	Left		Right s	ymbol	starts w	ith:	
	ends in	numeral	letter	\$			"
cn	numeral		SR		SR	SR	SR
SR Se en	letter	SR SR SR	SR	SR SR SR	SR SR SR	SR SR SR	SR
SP							

Input Buffer 1,2E3=b485bb3b7	Field 1 2 3	5N, 6N, SNSN 1,2E3 485 37
+46b7,00015A1B, blank)	1	illegal field (contains
	2	,00015
	3	1,

bit:formula	110	01011	100	01010111
10000101 padded	01111100	01011	100	01010111
10000101	01111100			
selected	0101	1100	0101	0111
10000101				

1		The second second	1 1 Day 24		140
7	0	undefined	=3,7	2	0,3
1	2	1	4,6	1,5	0,1
2	2	0	-0,1	1,5	1.4
3	2	1	1	=2	-1
= 3	2	1	3,7	=2	=0,3
3.7	2	1.7	=3.7	=2	=1.7

First or Only Character

Meaning

I Number of integer bits

A Number of fraction bits (bits after the

point).

Z Maximum size I+A the system normally allows

fixed and integer arithemetic.

Y An even larger maximum size I+A allowed under evaluation:control (often about 2*z).

v value,

Second Character

Meaning: "Of the ... "

- first operand
- 2 Second operand
- M Modulus (for x\y),
- N Numerator (for x/y or x\y),
- D Denominator (for x/y).

JOVIAL J73

I	Integer operand (if the other is fixed),
A	Fixed operand (if the other is integer),
R	Result (preliminary result if S exists),
s	Result required by evaluation:control,
В	Base in exponentation,
E	Exponent.

Value of orig	inal Value of	Value of bit:formula
bittformula	numeric: formula re	sulting from SHIFT
11111	3	11000
11111	-1.7	01111
00000100000	5	1000000000
00000100000	-3	0000000100
101	3	000
101	-3	000
101	=2	001

bit:formu	la	6	bit:formula	result
10	1	101		
111001		00011110101	11100100011	110101
00010000		0000010	0001000000	00010
0	0	00		

P	q	NOT P	p OR q	p EQV q	p AND q	P XOR q
0	0	1	0	1	0	0

0	1 0 1	1	1	0	0 0 1	1
1	0	0	1	0	0	1
1	1	0	1	1	1	1 1 0

```
= (assignment) == (exchange)
        EGV XOR
2
        OR
3
        AND (logical)
4
        NOT
        = < > <= >= <> (relational)
5
        * / \ ( with or without evaluation:control )
8
9
        **
        indexing @ ( pointing, evaluation:control )
10
88
        ( attribute:association )
```

In the algorithm it is necessary to consider several operands and operations simultaneously. The following diagram shows the relationships. All are pegged in relation to the present operand. Any operation may replace #.

A # B # C # D # E # F # G # H # I # J # K

the next operation

the prior operand

the next operand

the prior operation the current operation

the present operand

The leftmost operand of the formula is initally the present operand.

The next operand becomes Evaluate next operand, Is there a current the present operand. operation?

Yes

Is there a next operation present with higher precedence value than the current operation? no

The value of the operand becomes the of the formula.

no

Combine the present operand The prior operand becomes and the next operand in the present operand. accordance with the current Exit operation. The result becomes the present operand (which has been evaluated). Is there a prior operation no

yes

Figure 4=2. Combination Algorithm

ABC Operation		XYZ typ	Bit	Int	Fix
Float		Convert	ed to		
ABC assignment XYZ	Char	Char	Bit	Bit	Bit
Bit (also parameter Bit	Bit	Bit	Bit	Bit	Bit
matching and Int exchange, both	Bit Fix	Bit Bit	Int Bit	Int Fix	Int Fix
Fix ways) Float Bit	Bit	Float	Float	Float	
ABC arithmetic XYZ Float Float	Float	Note 1	Note 2	Float	
XYZ arithmetic ABC Scale Float	Other	Note 3	Note 4	Scale	
ABC relational XYZ	Char	Note 5	Int	Note 6	Note

6 Note	6					
Bit	Note 6	Int	Note 6	Note 6	Note 6	
or Int	Note 6	Int	Int	Scale	Float	
XYZ relati	onal ABC	Float	Note 6	Int	Float	
Float Floa	t					
ABC & XYZ	Char	Char	Bit	Bit	Bit	Bit
XYZ & ABC	Other	Bit	Bit	Bit	Bit	Bit
ABC logica	1 XYZ	Any	Bit	Bit	Bit	Bit
Bit						
XYZ logica	1 ABC					
Indexing,	pointing		Note 7	Int	Int	Int
Int						

Figure 4=3, Type Conversion

Entrance used	AL	T (proces	durein	ame)	
integer	st	atus	constar	1t		
normal	0		V (pr	ocedu	re:name)
first alternat	e	1		V (first	
alternatetentr	anceiname)				
second alterna	te	2		V (second	
alternate:entr	anceiname)				
etc. etc.			et	C.		

parameter type:fi	unction: call		
qualified; status; con:	stant type		value
status:constant			
bit:formula	0		V(BIT)
V(TYPE:BIT)			
integer: formula		1	
V(INT)	V(TYPE:INT)		
(signed or unsigned)			
fixed:formula	2		V(FIX)
V(TYPE:FIX)			
(signed or unsigned)			
floating:formula		3	
V(FLOAT)	V(TYPE:FLOAT)		

character:formula V(BYTE)

V(TYPE:BYTE)

START

D== skip A1, do A2

A? E=3

1 == do A1

O== skip B1

Dee skip D1, do D2

CNULL B?

do B2

or none), skip A2

1== d0 B1

1== do D1

Skip p2 (if any and

A2

E=2

D?

O== skip C1, do C2 (NULL or none), skip B2

and A2 C?

1 == do C1

Skip C2 (if any), B2 and A2

E=1 EXIT

No terminator:phrase Terminator:phrase

Same as 1A except execute controlled:

No initial:phrase, 1A, Leave control:variable 1B,

replacement; phrase, alone, Execute controlled;

or increment:phrase istatement just once, istatement

zero or one

time depending on terminator:phrase,

Initial:phrase 2A, Initialize control: 2B, Same as 2A except only :variable, Execute execute controlled: controlled:statement :statement zero or one just once, time depending on terminator:phrase.

Replacement:phrase 3A, Leave control:variable 3B, Same as 3A except only alone for the first test in accordance

only alone for the first test in accordance execution. Before each with terminator:phrase subsequent execution of the before every execution

controlled:statement, of the controlled:
replace the value of the ;statement ==even

control:variable. Repeat first one, executions "forever".

Increment:phrase 4A, Same as 3A except add 4B, Same as 4A except only to value of control:variable test as in 3B, instead of replacing value.

Initial:phrase and 5A, Initialize control: 5B, Same as 5A except replacement:phrase :variable, Execute controlled: check for termination

statement once, Replace value before each execution.

of control:variable before each subsequent execution. Repeat executions "forever".

Initial:phrase and 6A. Initialize control: 6B. Same as 6A, except increment:phrase evariable. Execute controlled: check for termination

istatement once. Add to value before each execution.

of control; variable before each subsequent execution. Repeat executions "forever".

start	ALPHA	1	Set	BETA	to	3

=

? 2 or 3 Set GAMMA to the value of BETA

4 If GAMMA equals 2 set BETA to 2

6 Set BETA to the value of GAMMA

Set ALPHA to 7 next

<1, 5 or >6

Undefined

Format:Lists Input Buffer Field * * 10C 10C .. 1 *28,355* 28.3b *bABCD *bABb *28.3bs27bABC* 2 "babcob" "D\$27bbbb" "ABbbbbbbbbbbb" "ABbbbb" 3 ALPHABET AbTHERMOPILED "ALPHAD" "ALPHABBETS27" "Abbbbb" 12 "BET\$27Ab" "THERMOPILE" "THERMO"

Bah Humbug 4B3PS3PS3PS3P 000 042 616 821 487 56D 627 567 5B5PS5P

28ELM M4TB7

1,2E3=b485bb3b7 2 3	=485 37	1,2E3
+46b7.00015A1B. (contains blank)	1	illegal field
2 3	00015	

1573.64	+SD4 +1573	=3ZDDR	-SDSZSZSZ 1 5 7 3	+SD","ZZ","DDR +15,74
=27	=0027	=27	=2 7	=27
0,0	0000	00	0	00
=10740	undefined	=10740	undefined	-1,07,40

			Format:Lists
Input Buffer	Field	"SPEEDB", DDD, "MI	PH ,DDDSSSS
SPEED OO MPH		1	100
	2		100

+ZZDD.DZZ =4Z*3DR =4Z* =4Z2*R 1573.6405 +1573.64 1573641 1573 157 =27 =27.0 =27000 =27 =3 0.0 00.0 000 =10740 undefined undefined undefined

1573,6400 1573,6410 1573,0000 1570,0000 =27 =27 =30 0,0 0,0 0,0 0,0 undefined undefined undefined =10740

+ 6DE+3ZR = SD*6ZSES=3Z* = S3D, SES=3DR + S3*5DSES+S3Z + 39.7528 + .397528E+2 397528 E 1 398. E = 001 + 39752 E + 4 = .008711246 = .871125E=2 = 8711246 E = 3 = 871. E = 005 = 87112

PROGRAM AA XX (table:name)

PROC BB XX (item:name)

PROC CC no occurrence of XX

PROC DD

XX used but not declared

PROC EE

Example: Table MN has 2 items, AB and XY, and 4 entries, 0, 1, 2, and 3.

Item AB occupies 2 words.

Item XY occupies 1 word.

Note: 12 consecutive computer words are shown in each illustration above.

Tight Structure

entry [0] entry [1] entry [2] entry [3] entry [4] entry [5]

A table of six entries is medium packed, three entries to the word.

OVERLAY AA, AB, AC : BA, (BX : BY, BZ), BC ;

AC AA AB

BA BX BC

BY BZ

	STRUCTURE GG : DD		AA,100),(BB	: EI	Ε)	CC,E	E,DD
cc	AA	A	A		сс			
	100	1	00					
EE	BB EE		ВВ					
DD		DD						
	200				2	200		
FF				FF				
GG				GG				

Figure 7=4. Allocation of a Related Structure

entrance	number		stat	us:constant	
normal first alter	0		vc	procedure:nam	e)
	ntrance: name	,			
second alte			2	V(
alternatese	ntrance: name)			

RELATIVE
WORD
0 1 AB(0,0,0) SERIAL PARALLEL
1 AB(0,0,0)

```
2 AB[0,0,0]
                     1 AB[0,0,1]
2
     XY[0,0,0]
                     1 AB[0,1,0]
3
   1 AB[0,0,1]
                     1 AB[0,1,1]
4
   2 AB[0,0,1]
                    1 AB[0,2,0]
5
     XY[0,0,1]
                     1 AB[0,2,1]
6
   1 AB[0,1,0]
                       AB[0,3,0]
                     1
   2 AB[0,1,0
                     1 AB[0,3,1]
8
     XY[0,1,0]
                     1 AB[1,0,0]
   1 AB[0,1,1]
                     1 AB[1,0,1]
10
  2 AB[0,1,1]
                    1 AB[1,1,0]
     XY(0,1,1)
                    1 AB[1,1,1]
11
12 1 AB[0,2,0]
                    1 AB[1,2,0]
13 2 AB(0,2,01
                     1 AB[1,2,1]
14
     XY[0,2,0]
                    1 AB[1,3,0]
                    1 AB[1,3,1]
15 1 AB[0,2,1]
16 2 AB(0,2,1)
                    1 AB(2,0,0)
17
     XY[0,2,1]
                     1 AB[2,0,1]
18 1 AB[0,3,0]
                    1 AB[2,1,0]
19 2 AB[0,3,0]
                    1 AB[2,1,1]
20
                                       1 AB[2,2,0]
              XY[0,3,0]
21
            1 AB[0,3,1]
                                       1 AB[2,2,1]
22
            2 AB[0,3,1]
                                       1 AB[2,3,0]
23
                                       1 AB[2,3,1]
              XY[0,3,1]
24
                                       2 AB[0,0,0]
            1 AB[1,0,0]
                                       2 AB[0,0,1]
25
            2 AB(1,0,0)
62
              XY[2,2,0]
                                         XY[1,3,0]
63
            1 AB[2,2,1]
                                         XY[1,3,1]
64
            2 AB[2,2,1]
                                         XY[2,0,0]
65
              XY[2,2,1]
                                         XY[2,0,1]
66
            1 AB[2,3,0]
                                         XY[2,1,0]
67
            2 AB[2,3,0]
                                         XY[2,1,1]
68
              XY[2,3,0]
                                         XY[2,2,0]
69
                                         XY[2,2,1]
            1 AB[2,3,1]
            2 AB[2,3,1]
70
                                         XY[2,3,0]
71
              XY[2,3,1]
                                         XY[2,3,1]
```

Figure 10=1

Indexing and Storage Allocation

Bits Bits Bits 12=21 22=31 0=1 2=11 12=21 22=31

0	BB[0,0]	BB[0,1]	bB[0,2]	BB[0,0]
BB[0,1]	BB[0,2]			
1	BB[0,3]	BB[0,4]	BB[0,5]	BB[0,3]
BB[0,4]	BB [0,5]			
2	BB[0,6]	BB[0,7]		BB(0,6)
BB[0,7]	BB[1,0]	The state of the last		
3	BB[1,0]	BB[1,1]	BB[1,2]	BB[1,1]
BB[1,2]	BB[1,3]			
4	BB[1,3]	BB[1,4]	BB[1,5]	BB[1,4]
BB[1,5]	BB[1,6]			
5	BB[1,6]	BB[1,7]		BB[1,7]
BB[2,0]	BB[2,1]	24.00		
6	BB[2,0]	BB[2,1]	BB[2,2]	BB[2,2]
BB [2,3]	BB(2,41		DD 40 F4	DD co FA
7	BB [2,3]	BB[2,4]	BB[2,5]	BB[2,5]
BB[2,6]	BB[2,7]	DD 40 41		DD 63 A1
8	BB [2,6]	BB[2,7]		BB[3,0]
BB[3,1]	BB[3,2]	DD / 2 41	DD # 2 21	BB[3,3]
BB[3,4]	BB(3,0)	BB[3,1]	BB[3,2]	pp[3,3]
10	BB(3,5)	BB # 2 41	BB[3,5]	BB[3,6]
BB[3,7]	BB[3,3] BB[4,0]	pp[3,41	pp (312)	00 (3101
11	BB[3,6]	BB [3,7]		BB[4,1]
BB [4,2]	BB [4,3]	00/3/11		potatiti
12	BB [4,0]	BB[4,1]	BB14-21	BB[4,4]
BB [4,5]	BB[4,6]	ppfalli	ppfalel	00/4/41
13	BB[4,3]	BB 14.41	BB[4,5]	BB[4,7]
BB (5,01	BB [5,1]		or falsi	22.21.1
14	BB [4,6]	BB[4.7]		BB [5,2]
BB [5,3]	BB [5,4]			
15	BB [5,0]	BB [5,1]	BB 15.21	BB (5,5)
BB[5,6]	BB [5,7]			
16	BB [5,3]	BB [5,4]	BB [5,5]	
17	BB [5,6]	BB [5,7]		
A SHARE SELECTION OF THE SELECTION OF TH				

Figure 10=2

Indexing and Allocating Tight Structure Tables