

Data For Paul's September Seminar

MON

DAILY ANALYSIS REPORT:

DAY: Monday, August 20, 1973: 8:00 - 17:00

TOTAL SYSTEM CPU: 3.204

(ARC)

IDENT	CPU HRS	CON HRS	CPU/CON	% SYS	CON/CPU:1
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(STAFF)

(JMB)	.042	.815	.052	1.311	19.405
(DCE)	.059	2.487	.024	1.841	42.153
(SRL)	.002	.042	.048	.062	21.000
(NDM)	.168	3.680	.046	5.243	21.905
(JCN)	.035	.466	.075	1.092	13.314
(DVN)	.046	1.942	.024	1.436	42.217
(PR)	.044	1.005	.044	1.373	22.841
(RWW)	.024	.938	.026	.749	39.083
	-----	-----		-----	
(TOTAL)	.420	11.375		13.107	

(PSO)

(JML)	-	-	-	-	-
(BAH)	.085	4.972	.017	2.653	58.494

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(MEJ)	-	-	-	-	-	1f1d3
(KIRK)	-	-	-	-	-	1f1d4
	-----	-----		-----		1f1d5
(TOTAL)	.085	4.972		2.653		1f1d6
						1f1d7
(NIC)						1f1e
(JDC)	.003	.066	.045	.094	22.000	1f1e1
(EJF)	-	-	-	-	-	1f1e2
(CBG)	-	-	-	-	-	1f1e3
(MDK)	-	-	-	-	-	1f1e4
(MLK)	.072	3.960	.018	2.247	55.000	1f1e5
(JBN)	.112	7.613	.015	3.496	67.973	1f1e6
	-----	-----		-----		1f1e7
(TOTAL)	.187	11.639		5.837		1f1e8
						1f1e9
(HARDWARE)						1f1f
(MEH)	-	-	-	-	-	1f1f1
(JR)	-	-	-	-	-	1f1f2
(EKV)	-	-	-	-	-	1f1f3
	-----	-----		-----		1f1f4
(TOTAL)	-	-		-		1f1f5
						1f1f6
(TENEX)						1f1g
(DIA)	.520	5.764	.090	16.230	11.085	1f1g1
(WRF)	.109	5.992	.018	3.402	54.972	1f1g2

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(KEV)	-	-	-	-	-	1f1g3
(DCW)	.019	1.332	.014	.593	70.105	1f1g4
	-----	-----		-----		1f1g5
(TOTAL)	.648	13.088		20.225		1f1g6
						1f1g7
(NLS)						1f1h
(CFD)	.200	5.016	.040	6.242	25.080	1f1h1
(JDH)	.055	2.435	.023	1.717	44.273	1f1h2
(CHI)	.148	4.661	.032	4.619	31.493	1f1h3
(DSK)	.092	2.779	.033	2.871	30.207	1f1h4
(HGL)	-	-	-	-	-	1f1h5
(EKM)	.043	3.886	.011	1.342	90.372	1f1h6
(JEW)	.246	6.546	.038	7.678	26.610	1f1h7
	-----	-----		-----		1f1h8
(TOTAL)	.784	25.323	-	16.791		1f1h9
						1f1h10
(OVERHEAD)						1f2
PETERS	.179	8.596	.021	5.587	48.022	1f2a
BACKGROUND	-	-	-	-	-	1f2b
CAT	-	-	-	-	-	1f2c
DOCB	-	-	-	-	-	1f2d
DOCUMENTATION	.085	2.992	.028	2.653	35.200	1f2e
GILBERT	-	-	-	-	-	1f2f
NETINFO	-	-	-	-	-	1f2g
NIC-WORK	-	-	-	-	-	1f2h

Data For Paul's September Seminar

OPERATOR	-	-	-	-	-	1f2i
PRINTER	-	-	-	-	-	1f2j
SYSTEM	-	-	-	-	-	1f2k
	-----	-----		-----		1f2l
(TOTAL)	.264	11.588		8.240		1f2m

(XEROX)

NAME	CPU HRS	CON HRS	CPU/CON	% SYS	CON/CPU:1	
DEUTSCH	.026	.256	.102	.811	9.846	1f3d
(CMG)GESCHKE	-	-	-	-	-	1f3e
MITCHELL	.017	.250	.068	.531	14.706	1f3f
(WHP)PAXTON	-	-	-	-	-	1f3g
(EHS)SAT-WTE	.056	1.838	.030	1.748	32.821	1f3h
(RES)SWEET	-	-	-	-	-	1f3i
	-----	-----		-----		1f3j
(TOTAL)	.099	2.344		3.090		1f3k

(RADC)

NAME	CPU HRS	CON HRS	CPU/CON	% SYS	CON/CPU:1	
BAIR	.004	.228	.018	.125	57.000	1f4d
BERGS	.031	1.149	.027	.968	37.065	1f4e

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BETHK	.019	1.006	.019	.593	52.947	1f4f
CAVAN	.076	4.131	.018	2.372	54.355	1f4g
KENNE	.009	.207	.043	.281	23.000	1f4h
MCNAM	.095	1.706	.056	2.965	17.958	1f4i
PANAR	.033	2.150	.015	1.030	65.152	1f4j
STONE	.114	4.836	.024	3.558	42.421	1f4k
THAYER	.028	1.359	.021	.874	48.536	1f4l
TOMAINI	.013	1.117	.012	.406	85.923	1f4m
	-----	-----		-----		1f4n
TOTAL	.422	17.888		13.171		1f4o

(NETUSERS) TOP FIVE

NAME	CPU HRS	CON HRS	CPU/CON	% SYS	CON/CPU:1	
HELP	.057	4.121	.014	1.779	72.298	1f5d
UCSB	.044	1.318	.033	1.373	29.955	1f5e
MARRAH	.039	1.642	.024	1.217	42.103	1f5f
ILLINOIS	.028	1.297	.022	.874	46.321	1f5g
CASE-10	.021	1.734	.012	.655	82.571	1f5h
	-----	-----		-----		1f5i
(TOTAL)	.189	10.112		5.898		1f5j

(NET) TOTAL	CPU HRS	CON HRS	CPU/CON	% SYS	CON/CPU:1	1f6
						1f6a

Data For Paul's September Seminar

NET .293 15.518 .019 9.145 - 1f6b

1f6c

1g

TUE

2

DAILY ANALYSIS REPORT:

2a

2b

DAY: Tuesday, August 21, 1973 (8 HOURS/DAY)

2c

2d

TOTAL SYSTEM CPU: 3.463

2e

2f

(ARC)

2f1

IDENT	CPU HRS	CON HRS	CPU/CON	% SYS	CON/CPU:1
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2f1a

2f1b

(STAFF)

2f1c

(JMB)	.091	2.013	.045	2.628	22.121	2f1c1
(DCE)	.213	6.499	.033	6.151	30.512	2f1c2
(SRL)	.145	3.074	.047	4.187	21.200	2f1c3
(NDM)	.006	.356	.017	.173	59.333	2f1c4
(JCN)	.102	2.808	.036	2.945	27.529	2f1c5
(DVN)	.067	2.406	.028	1.935	35.910	2f1c6
(PR)	.003	.036	.083	.094	12.000	2f1c7
(RWW)	.010	.176	.057	.289	17.600	2f1c8
	-----	-----		-----		2f1c9
(TOTAL)	.637	17.368		18.402		2f1c10

2f1c11

Data For Paul's September Seminar

(PSO)						2f1d
(JML)	-	-	-	-	-	2f1d1
(BAH)	.224	5.725	.039	6.468	25.558	2f1d2
(MEJ)	-	-	-	-	-	2f1d3
(KIRK)	-	-	-	-	-	2f1d4
	-----	-----		-----		2f1d5
(TOTAL)	.224	5.725		6.468		2f1d6
						2f1d7
(NIC)						2f1e
(JDC)	-	-	-	-	-	2f1e1
(EJF)	.040	1.769	.023	1.155	44.225	2f1e2
(CBG)	.050	5.067	.010	1.444	101.340	2f1e3
(MDK)	-	-	-	-	-	2f1e4
(MLK)	.034	2.049	.017	.982	60.265	2f1e5
(JBN)	.065	3.726	.017	1.877	57.323	2f1e6
	-----	-----		-----		2f1e7
(TOTAL)	.189	12.611		5.458		2f1e8
						2f1e9
(HARDWARE)						2f1f
(MEH)	-	-	-	-	-	2f1f1
(JR)	-	-	-	-	-	2f1f2
(EKV)	-	-	-	-	-	2f1f3
	-----	-----		-----		2f1f4
(TOTAL)	-	-		-		2f1f5
						2f1f6

Data For Paul's September Seminar

(TENEX)						2f1g
(DIA)	.132	4.676	.028	3.812	35.424	2f1g1
(WRF)	.047	3.582	.013	1.357	76.213	2f1g2
(KEV)	.101	6.279	.016	2.917	62.168	2f1g3
(DCW)	.006	.233	.026	.173	38.833	2f1g4
	-----	-----		-----		2f1g5
(TOTAL)	.286	14.770		8.259		2f1g6

(NLS)						2f1h
(CFD)	.109	3.419	.032	3.148	31.367	2f1h1
(JDH)	.042	3.479	.012	1.213	82.833	2f1h2
(CHI)	.466	8.778	.053	13.457	18.837	2f1h3
(DSK)	.104	2.885	.036	3.003	27.740	2f1h4
(HGL)	-	-	-	-	-	2f1h5
(EKM)	.040	4.620	.009	1.155	115.500	2f1h6
(JEW)	.159	4.608	.035	4.591	28.981	2f1h7
	-----	-----		-----		2f1h8
(TOTAL)	.920	27.789		26.567		2f1h9

(OVERHEAD)						2f2
PETERS	.077	5.993	.013	2.224	77.831	2f2a
BACKGROUND	-	-	-	-	-	2f2b
CAT	-	-	-	-	-	2f2c
DOCB	-	-	-	-	-	2f2d
DOCUMENTATION	.441	8.661	.051	13.764	19.639	2f2e

Data For Paul's September Seminar

GILBERT	-	-	-	-	-	2f2f
NETINFO	-	-	-	-	-	2f2g
NIC-WORK	-	-	-	-	-	2f2h
OPERATOR	-	-	-	-	-	2f2i
PRINTER	-	-	-	-	-	2f2j
SYSTEM	.073	5.701	.013	2.108	78.096	2f2k
	-----	-----		-----		2f2l
(TOTAL)	.591	20.355		18.096		2f2m

(XEROX)

NAME	CPU HRS	CON HRS	CPU/CON	% SYS	CON/CPU:1	
						2f3
						2f3a
						2f3b
						2f3c
DEUTSCH	.007	.060	.117	.202	8.571	2f3d
(CMG)GESCHKE	-	-	-	-	-	2f3e
(JGM)MITCHELL	-	-	-	-	-	2f3f
(WHP)PAXTON	-	-	-	-	-	2f3g
(EHS)SAT-WTE	.009	.196	.046	.281	21.778	2f3h
(RES)SWEET	-	-	-	-	-	2f3i
	-----	-----		-----		2f3j
(TOTAL)	.016	.256		.483		2f3k

(RADC)

NAME	CPU HRS	CON HRS	CPU/CON	% SYS	CON/CPU:1	
						2f4
						2f4a
						2f4b

Data For Paul's September Seminar

						2f4c
BAIR	.002	.249	.008	.058	124.500	2f4d
BERGS	.008	.208	.038	.231	26.000	2f4e
BETHK	.014	.622	.023	.404	44.429	2f4f
CAVAN	.046	3.429	.013	1.328	74.543	2f4g
KENNE	.022	.960	.023	.635	43.636	2f4h
MCNAM	.003	.323	.009	.087	107.667	2f4i
PANAR	.026	2.077	.013	.751	79.885	2f4j
RADC	.023	1.403	.016	.664	61.000	2f4k
STONE	.011	1.232	.009	.318	112.000	2f4l
TOMAI	.004	.651	.006	.116	162.750	2f4m
	-----	-----		-----		2f4n
TOTAL	.160	11.154	.014	4.620		2f4o

(NETUSERS) TOP FIVE

NAME	CPU HRS	CON HRS	CPU/CON	% SYS	CON/CPU:1	
						2f5a
BELL	.221	7.451	.030	6.382	33.715	2f5d
MITRE-TIP	.083	6.353	.013	2.397	76.542	2f5e
UCLA-NMC	.043	2.172	.020	1.242	50.512	2f5f
BBN-NET	.018	.416	.043	.520	23.111	2f5g
NBS-TIP	.016	.412	.039	.462	25.750	2f5h
	-----	-----		-----		2f5i
(TOTAL)	.381	16.804		11.003		2f5j

Data For Paul's September Seminar

						2f5k
(NET) TOTAL	CPU HRS	CON HRS	CPU/CON	% SYS		2f6
						2f6a
NET	.435	35.152	.012	12.561		2f6b
						2f6c
						2g

WED

DAILY ANALYSIS REPORT:

DAY: Wednesday, August 22, 1973: 8:00 - 17:00

TOTAL SYSTEM CPU: 5.155

(ARC)

IDENT	CPU HRS	CON HRS	CPU/CON	% SYS	CON/CPU:1	3f1a
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3f1b

(STAFF)

3f1c

(JMB)	.015	.449	.033	.433	29.933	3f1c1
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(DCE)	.041	1.254	.033	1.184	30.585	3f1c2
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(SRL)	.067	3.017	.022	1.935	45.030	3f1c3
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(NDM)	.165	4.321	.038	4.765	26.188	3f1c4
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(JCN)	.072	1.921	.037	2.079	26.681	3f1c5
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(DVN)	.004	.034	.118	.116	8.500	3f1c6
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(PR)	.047	1.929	.024	1.467	41.043	3f1c7
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(RWW)	-	-	-	-	-	3f1c8
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Data For Paul's September Seminar

	-----	-----				3f1c9
(TOTAL)	.411	12.925			11.979	3f1c10
						3f1c11
(PSO)						3f1d
(JML)	-	-	-	-	-	3f1d1
(BAH)	.001	.029	.034	.029	29.000	3f1d2
(MEJ)	.053	7.176	.007	1.530	135.396	3f1d3
(KIRK)	-	-	-	-	-	3f1d4
	-----	-----				3f1d5
(TOTAL)	.054	7.205			1.559	3f1d6
						3f1d7
(NIC)						3f1e
(JDC)	.003	.043	.070	.087	14.333	3f1e1
(EJF)	.033	1.844	.018	.953	55.879	3f1e2
(CBG)	.047	3.623	.013	1.357	77.085	3f1e3
(MDK)	.006	.226	.027	.173	37.667	3f1e4
(MLK)	.075	3.966	.019	2.166	52.880	3f1e5
(JBN)	.034	6.196	.005	.982	182.235	3f1e6
	-----	-----				3f1e7
(TOTAL)	.198	15.898			5.718	3f1e8
						3f1e9
(HARDWARE)						3f1f
(MEH)	-	-	-	-	-	3f1f1
(JR)	-	-	-	-	-	3f1f2
(EKV)	-	-	-	-	-	3f1f3

Data For Paul's September Seminar

	-----	-----		-----		3f1f4
(TOTAL)	-	-		-		3f1f5
						3f1f6
(TENEX)						3f1g
(DIA)	.459	11.819	.039	13.254	25.749	3f1g1
(WRF)	.079	2.780	.028	2.281	35.190	3f1g2
(KEV)	.144	5.778	.025	4.158	40.125	3f1g3
(DCW)	.072	2.952	.024	2.079	41.000	3f1g4
	-----	-----		-----		3f1g5
(TOTAL)	.754	23.329		21.772		3f1g6
						3f1g7
(NLS)						3f1h
(CFD)	.140	4.715	.030	4.043	33.679	3f1h1
(JDH)	.050	3.020	.017	1.444	60.400	3f1h2
(CHI)	.230	6.100	.038	6.642	26.522	3f1h3
(DSK)	.132	4.196	.031	3.812	31.788	3f1h4
(HGL)	-	-	-	-	-	3f1h5
(EKM)	-	-	-	-	-	3f1h6
(JEW)	.211	6.431	.033	6.093	30.479	3f1h7
	-----	-----		-----		3f1h8
(TOTAL)	.763	24.462		15.392		3f1h9
						3f1h10
(OVERHEAD)						3f2
(JCP)	.096	7.703	.012	2.772	80.240	3f2a
BACKGROUND	.091	7.022	.013	2.628	77.165	3f2b

Data For Paul's September Seminar

CAT	-	-	-	-	-	3f2c
DOCB	-	-	-	-	-	3f2d
DOCUMENTATION	.016	.400	.040	.499	25.000	3f2e
GILBERT	-	-	-	-	-	3f2f
NETINFO	-	-	-	-	-	3f2g
NIC-WORK	-	-	-	-	-	3f2h
OPERATOR	-	-	-	-	-	3f2i
PRINTER	.477	7.023	.068	13.774	14.723	3f2j
SYSTEM	.001	.006	.167	.029	6.000	3f2k
SYSTEM	.088	14.023	.006	2.541	159.352	3f2l
SYSTEM	1.566	7.025	.223	45.221	4.486	3f2m
	-----	-----		-----		3f2n
(TOTAL)	2.335	35.499		64.692		3f2o

(XEROX)

						3f3
						3f3a
NAME	CPU HRS	CON HRS	CPU/CON	% SYS	CON/CPU:1	3f3b
						3f3c
DEUTSCH	.008	.094	.085	.231	11.750	3f3d
(CMG)GESCHKE	-	-	-	-	-	3f3e
(JGM)MITCHELL	-	-	-	-	-	3f3f
(RES)SWEET	-	-	-	-	-	3f3g
	-----	-----		-----		3f3h
(TOTAL)	.008	.094		.231		3f3i
						3f3j

Data For Paul's September Seminar

(RADC)

NAME	CPU HRS	CON HRS	CPU/CON	% SYS	CON/CPU:1	DIR
BAIR	.004	.296	.014	.116	74.000	
BETHK	.005	.157	.032	.144	31.400	
KENNE	.043	1.908	.023	1.242	44.372	
PANAR	.049	1.961	.025	1.415	40.020	
STONE	.080	4.172	.019	2.310	52.150	
TOMAI	.046	2.149	.021	1.328	46.717	
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TOTAL	.228	10.644		6.584		

(PER CENT TOTAL DISK CAPACITY)

(NETUSERS) TOP FIVE

NAME	CPU HRS	CON HRS	CPU/CON	% SYS	CON/CPU:1
MITRE-TIP	.081	3.737	.022	2.339	46.136
SU-AI	.032	1.092	.029	.924	34.125
UCLA-NMC	.028	1.101	.025	.809	39.321
USC	.021	.540	.039	.606	25.714
ILLINOIS	.020	.481	.042	.578	24.050
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(TOTAL)	.182	6.951		5.256	

Data For Paul's September Seminar

(NET) TOTAL	CPU HRS	CON HRS	CPU/CON	% SYS		
						3f5k
						3f6
						3f6a
NET	.394	14.190	.028	7.643		3f6b
						3f6c
(OTHER)	CPU HRS	CON HRS	CPU/CON	% SYS	CON/CPU:1	
						3f7
						3f7a
JIMB	.008	1.659	.005	.231	207.375	3f7b
						3f7c

THU

DAILY ANALYSIS REPORT:

DAY: Thursday, August 23, 1973 8:00 - 17:00

TOTAL SYSTEM CPU: 2.875

(ARC)

IDENT	CPU HRS	CON HRS	CPU/CON	% SYS	CON/CPU:1	
						4f1
						4f1a
						4f1b

(STAFF)

(JMB)	.135	4.252	.032	3.898	31.496	4f1c
(DCE)	.146	6.366	.023	4.216	43.603	4f1c1
(SRL)	.009	1.210	.007	.260	134.444	4f1c2
(NDM)	.024	1.144	.021	.693	47.667	4f1c3
						4f1c4

Data For Paul's September Seminar

(JCN)	.027	.610	.044	.780	22.593	4f1c5
(DVN)	.004	.023	.174	.116	5.750	4f1c6
(PR)	.052	1.856	.028	1.623	35.692	4f1c7
(RWW)	.006	.116	.052	.173	19.333	4f1c8
	-----	-----		-----		4f1c9
(TOTAL)	.403	15.577		11.759		4f1c10
						4f1c11
(PSO)						4f1d
(JML)	.001	.195	.005	.029	195.000	4f1d1
(BAH)	.070	3.816	.018	2.021	54.514	4f1d2
(MEJ)	.009	.225	.040	.260	25.000	4f1d3
(KIRK)	-	-	-	-	-	4f1d4
	-----	-----		-----		4f1d5
(TOTAL)	.080	4.236		2.310		4f1d6
						4f1d7
(NIC)						4f1e
(JDC)	-	-	-	-	-	4f1e1
(EJF)	.037	2.204	.017	1.068	59.568	4f1e2
(CBG)	.034	3.410	.010	.982	100.294	4f1e3
(MDK)	-	-	-	-	-	4f1e4
(MLK)	.126	3.229	.039	3.638	25.627	4f1e5
(JBN)	.137	6.147	.022	3.956	44.869	4f1e6
	-----	-----		-----		4f1e7
(TOTAL)	.334	14.990		9.644		4f1e8
						4f1e9

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(HARDWARE)						4f1f
(MEH)	.008	.132	.061	.231	16.500	4f1f1
(JR)	-	-	-	-	-	4f1f2
(EKV)	-	-	-	-	-	4f1f3
	-----	-----		-----		4f1f4
(TOTAL)	.008	.132		.231		4f1f5
						4f1f6
(TENEX)						4f1g
(DIA)	.477	7.761	.061	13.774	16.270	4f1g1
(KEY)	.159	6.151	.026	4.591	38.686	4f1g2
(DCW)	.016	.684	.023	.462	42.750	4f1g3
	-----	-----		-----		4f1g4
(TOTAL)	.652	14.596		18.827		4f1g5
						4f1g6
(NLS)						4f1h
(CFD)	.041	3.051	.013	1.184	74.415	4f1h1
(JDH)	.012	.519	.023	.347	43.250	4f1h2
(CHI)	.071	2.325	.031	2.050	32.746	4f1h3
(DSK)	.229	5.746	.040	6.613	25.092	4f1h4
(HGL)	-	-	-	-	-	4f1h5
(EKM)	-	-	-	-	-	4f1h6
(JEW)	.206	5.429	.038	5.949	26.354	4f1h7
	-----	-----		-----		4f1h8
(TOTAL)	.559	17.070		16.143		4f1h9
						4f1h10

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(OVERHEAD)						4f2
(JCP)	-	-	-	-	-	4f2a
BACKGROUND	-	-	-	-	-	4f2b
CAT	-	-	-	-	-	4f2c
DOCB	-	-	-	-	-	4f2d
DOCUMENTATION	.216	7.338	.029	6.742	33.972	4f2e
GILBERT	-	-	-	-	-	4f2f
NETINFO	-	-	-	-	-	4f2g
NIC-WORK	-	-	-	-	-	4f2h
OPERATOR	-	-	-	-	-	4f2i
PRINTER	-	-	-	-	-	4f2j
SYSTEM	.001	.009	.111	.029	9.000	4f2k
	-----	-----		-----		4f2l
(TOTAL)	.217	7.347		6.771		4f2m

(XEROX)						4f3
NAME	CPU HRS	CON HRS	CPU/CON	% SYS	CON/CPU:1	4f3b
DEUTSCH	.007	.129	.054	.202	18.429	4f3d
(CMG)GESCHKE	-	-	-	-	-	4f3e
(JGM)MITCHELL	-	-	-	-	-	4f3f
(WHP)PAXTON	-	-	-	-	-	4f3g
(EHS)SAT-WTE	.062	2.048	.030	1.935	33.032	4f3h
(RES)SWEET	-	-	-	-	-	4f3i

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	-----	-----	-----			
(TOTAL)	.069	2.177		2.137		4f3j
						4f3k
						4f3l
(RADC)						4f4
						4f4a
NAME	CPU HRS	CON HRS	CPU/CON	% SYS	CON/CPU:1	
						4f4b
						4f4c
BAIR	.014	.890	.016	.404	63.571	4f4d
BETHK	.013	.425	.031	.375	32.692	4f4e
CAVAN	.046	1.621	.028	1.328	35.239	4f4f
KENNE	.003	.071	.042	.087	23.667	4f4g
PANAR	.124	4.969	.025	3.581	40.073	4f4h
STONE	.035	2.644	.013	1.011	75.543	4f4i
	-----	-----		-----		4f4j
TOTAL	.235	10.621	.022	6.786	45.196	4f4k

(NETUSERS) TOP FIVE

NAME	CPU HRS	CON HRS	CPU/CON	% SYS	CON/CPU:1	
						4f5
						4f5a
						4f5b
						4f5c
MITRE-TIP	.104	3.864	.027	3.003	37.154	4f5d
UCSB	.099	5.236	.019	2.859	52.889	4f5e
BBN-NET	.021	.737	.028	.606	35.095	4f5f
NSRDC	.021	.461	.046	.606	21.952	4f5g
UCLA-NMC	.014	.504	.028	.404	36.000	4f5h

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	-----	-----		-----			4f5i
(TOTAL)	.259	10.802		7.478			4f5j
							4f5k
(NET) TOTAL	CPU HRS	CON HRS	CPU/CON	% SYS			4f6
							4f6a
NET	.295	12.764	.023	10.261			4f6b
							4f6c
(OTHER)	CPU HRS	CON HRS	CPU/CON	% SYS	CON/CPU:1		4f7
							4f7a
JIMB	.019	2.182	.009	.549	114.842		4f7b
							4f7c

FRI

DAILY ANALYSIS REPORT:

DAY: Friday, August 24, 1973 8:00 - 17:00

SYTEM TOTAL: 4.651

(ARC)

IDENT	CPU HRS	CON HRS	CPU/CON	% SYS	CON/CPU:1		5f1a
-------	---------	---------	---------	-------	-----------	--	------

5f1b

(STAFF)

5f1c

(JMB)	-	-	-	-	-		5f1c1
-------	---	---	---	---	---	--	-------

(DCE)	.038	.650	.058	1.097	17.105		5f1c2
-------	------	------	------	-------	--------	--	-------

Data For Paul's September Seminar

(SRL)	.022	1.202	.018	.635	54.636	5f1c3
(NDM)	.026	1.044	.025	.751	40.154	5f1c4
(JCN)	.054	1.434	.038	1.559	26.556	5f1c5
(DVN)	.191	5.234	.036	5.515	27.403	5f1c6
(PR)	-	-	-	-	-	5f1c7
(RWW)	.004	.290	.014	.116	72.500	5f1c8
	-----	-----		-----		5f1c9
(TOTAL)	.335	9.854		9.673		5f1c10
						5f1c11
(PSO)						5f1d
(JML)	-	-	-	-	-	5f1d1
(BAH)	.156	5.157	.030	4.505	33.058	5f1d2
(MEJ)	.020	2.021	.010	.578	101.050	5f1d3
(KIRK)	-	-	-	-	-	5f1d4
	-----	-----		-----		5f1d5
(TOTAL)	.176	7.178		5.083		5f1d6
						5f1d7
(NIC)						5f1e
(JDC)	-	-	-	-	-	5f1e1
(EJF)	.031	.897	.035	.895	28.935	5f1e2
(CBG)	-	-	-	-	-	5f1e3
(MDK)	-	-	-	-	-	5f1e4
(MLK)	.092	6.070	.015	2.657	65.978	5f1e5
(JBN)	.131	7.201	.018	3.783	54.969	5f1e6
	-----	-----		-----		5f1e7

Data For Paul's September Seminar

(TOTAL)	.254	14.168		7.335		5f1e8
						5f1e9
(HARDWARE)						5f1f
(MEH)	-	-	-	-	-	5f1f1
(JR)	-	-	-	-	-	5f1f2
(EKV)	-	-	-	-	-	5f1f3
	-----	-----		-----		5f1f4
(TOTAL)	-	-		-		5f1f5
						5f1f6
(TENEX)						5f1g
(DIA)	.065	1.667	.039	1.877	25.646	5f1g1
(WRF)	.048	1.768	.027	1.386	36.833	5f1g2
(KEV)	.005	.197	.025	.144	39.400	5f1g3
(DCW)	.002	1.145	.002	.058	572.500	5f1g4
	-----	-----		-----		5f1g5
(TOTAL)	.120	4.777		3.465		5f1g6
						5f1g7
(NLS)						5f1h
(CFD)	.167	6.192	.027	4.822	37.078	5f1h1
(JDH)	.012	.314	.038	.347	26.167	5f1h2
(CHI)	.302	11.456	.026	8.721	37.934	5f1h3
(DSK)	.286	5.835	.049	8.259	20.402	5f1h4
(HGL)	-	-	-	-	-	5f1h5
(EKM)	-	-	-	-	-	5f1h6
(JEW)	.253	5.030	.050	7.306	19.881	5f1h7

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	-----	-----	-----			5f1h8
(TOTAL)	1.020	23.827	29.455			5f1h9
						5f1h10
(OVERHEAD)						5f2
PETERS	.037	4.171	.021	2.512	47.943	5f2a
BACKGROUND	.100	7.006	.014	2.888	70.060	5f2b
CAT	-	-	-	-	-	5f2c
DOCB	-	-	-	-	-	5f2d
DOCUMENTATION	.317	6.691	.047	9.894	21.107	5f2e
GILBERT	-	-	-	-	-	5f2f
NETINFO	.030	.634	.047	.866	21.133	5f2g
NIC-WORK	-	-	-	-	-	5f2h
OPERATOR	-	-	-	-	-	5f2i
PRINTER	.544	7.006	.078	15.709	12.879	5f2j
SYSTEM	.066	6.982	.009	1.906	105.788	5f2k
SYSTEM	.868	7.009	.124	25.065	8.075	5f2l
	-----	-----	-----			5f2m
(TOTAL)	2.012	39.499	58.840			5f2n
						5f2o
(XEROX)						5f3
						5f3a
NAME	CPU HRS	CON HRS	CPU/CON	% SYS	CON/CPU:1	5f3b
						5f3c
DEUTSCH	.029	1.159	.025	.837	39.966	5f3d
(CMG)GESCHKE	-	-	-	-	-	5f3e

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(JGM)MITCHELL	-	-	-	-	-	5f3f
(WHP)PAXTON	-	-	-	-	-	5f3g
(EHS)SAT-WTE	.019	.962	.020	.593	50.632	5f3h
(RES)SWEET	-	-	-	-	-	5f3i
	-----	-----		-----		5f3j
(TOTAL)	.048	2.121		1.430		5f3k

(RADC)

NAME	CPU HRS	CON HRS	CPU/CON	% SYS	CON/CPU:1	DIR	
BAIR	.002	.076	.026	.058	38.000		5f4a
BETHK	.011	.370	.030	.318	33.636		5f4b
CAVAN	.051	1.247	.041	1.473	24.451		5f4c
KENNE	.062	2.660	.023	1.790	42.903		5f4d
MCNAM	.006	.105	.057	.173	17.500		5f4e
PANAR	.046	2.061	.022	1.328	44.804		5f4f
STONE	.027	.648	.042	.780	24.000		5f4g
	-----	-----		-----			5f4h
(TOT)	.205	7.167		5.920		000	5f4i

(NETUSERS) TOP FIVE

NAME	CPU HRS	CON HRS	CPU/CON	% SYS	CON/CPU:1	
						5f5a
						5f5b
						5f5c

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MITRE-TIP	.116	7.376	.016	3.350	63.586	5f5d
NSRDC	.064	4.118	.016	1.848	64.344	5f5e
UCSB	.061	3.241	.019	1.761	53.131	5f5f
UCLA-NMC	.053	2.600	.020	1.530	49.057	5f5g
BELL	.019	.859	.022	.549	45.211	5f5h
	-----	-----		-----		5f5i
(TOTAL)	.313	18.194		9.038		5f5j
						5f5k
(NET) TOTAL	CPU HRS	CON HRS	CPU/CON	% SYS		5f6
						5f6a
NET	.418	23.221	.018	8.987		5f6b
						5f6c
(OTHER)	CPU HRS	CON HRS	CPU/CON	% SYS	CON/CPU:1	5f7
						5f7a
JIMB	.057	4.669	.012	1.646	81.912	5f7b
						5f7c
						5g

Data For Paul's September Seminar

(J19543) 7-OCT-73 12:15; Title: Author(s): Beauregard A.
Hardeman/BAH; Distribution: /BAH; Sub-Collections: SRI-ARC; Clerk: BAH;

RCTE again

Haven't created completely updated RCTE doc., but was planning to, and mentioning it in Correction rfc. Haven't seen the rfc on IAC SE, yet. Will wait till I do. John D. ok'd update also. D/

1

RCTE again

(J19544) 7-OCT-73 17:28; Title: Author(s): David H. Crocker/DHC;
Distribution: /JBP; Sub-Collections: NIC; Clerk: DHC;

19544 Distribution
Jonathan B. Postel,

Proposed software capabilities and database structure for HELP query

INTRODUCTION

1

The following describes the software capabilities and database structure that in my opinion will provide the best NLS Query System given the limitations in searching speed.

1a

Also, there is an attempt to make sure that databases built for a TNLIS query language will be compatible with a reasonable DNLS query language using the Mouse. I think this aspect of the NLS Query language, daily growing in importance, has been largely ignored.

1b

SOFTWARE CAPABILITIES

2

Links

2a

I suggest that we do away with warps in the general query system until such time as they are implemented as part of the general NLS viewspec system.

2a1

Instead, there should be:

2a2

one "formatting" link allowed per statement located close to the beginning or else at the very end. (preferably the beginning for reasons stated under -- DNLS);

2a2a

and

2a2a1

any number of non-formatting or "reference" links. These would be imbedded in the text of a node and not be menued, made to disappear, or even searched by the software unless the user specifically commands it to search.

2a2b

A querspec [in square brackets] would specify the number to start the substructure menu (e.g.: [m=5]). "Reference" links interspersed in the text of a node will be searched only when the user specifies a number that is smaller than the first one in the menued substructure.

2a2b1

This would allow placing multiple links in statements preceded by an editor supplied number, but not slow the system down to search for them and make them disappear (would solve some problems with "Show also" and not look bad for links that are just stacked names and contain no viewspecs, directory, or file fields. See -- DATABASE EXAMPLE).

2a2b2

If there are viewspecs in a link to the addressed node, the formatting link at the addressed node should be ignored. If

Proposed software capabilities and database structure for HELP query

there are no viewspecs in the link, the link at the addressed node should be executed. The following advantages fall out of this method of implementation:

- 1. Different views of a branch can be defined other than that defined by the addressed node's "formatting" link. 2a3
- 2. You can link to duplicate names that contain a link to the original but are placed for logical multiple name searches. 2a3a
- 3. A file finding file (like -- nls,sysgd,) can be used from another file while in the query language. All intra-file links addressing a name can go to a single file where the names followed by a link to the proper file are maintained. 2a3b
- 4. Unsightly Viewspecs need not show up in visible links. 2a3c

Note that viewspec handling in the HELP system is inconsistent with regular NLS in that viewspecs are reset after every command either by a default, or by the addressed node if they are not defined in a link to the addressed node. 2a3d

Notice there are two types of links each of which has two specific uses. Both types can be found in a single statement. 2a4

The "formatting" link defines conceptual substructure (see -- kelley, file, conceptual). Its two uses are: 2a5

- 1. formatting substructure only: contains no address, only viewspecs. 2a5a
- 2. link to a statement that conceptually belongs in substructure but is duplicated somewhere else: uses only one link in a statement. 2a5a1

The "reference" link accesses information that belongs in the addressed node, but 2a5a2

- 1. is duplicated elsewhere; or 2a5b
- 2. doesn't fit. 2a5b1

COMMANDS 2a5b2

I suggest that there be two commands to handle the display of these two types of links. One terse command to find things quickly in substructure, and the other for showing a verbose view of an entire branch. 2b

Proposed software capabilities and database structure for HELP query

The terse command would use only the "formatting" link with a default of viewspecs ebt (one line, one level more). 2b1a

The verbose command would ignore the "formatting" link and would always turn viewspec s on (all lines). 2b1b

Both commands operate as Print Branch. The search algorithm would find only one occurrence unless a special character was input (like *) or content-analyzer--set-definition type input was made. 2b1c

I propose we use the ZOG convention of just typing what you want to know followed by a command terminator. No preceding keyword. 2b2

For the terse command, the user terminates his input with a <CR>. 2b2a

A terminating questionmark specifies the verbose view. 2b2b

Alt Mode used immediately after the herald would echo "Quit". Typing Quit<CR> or Help Quit<CR> in the Help subsystem would give you this information. 2b2c

Also, typing ? immediately preceding the herald would tell you about the commands available. 2b2d

Any number of < should return the user that number of places and echo the name. 2b2e

Any number of † should take the user up that number and echo the name. 2b2f

No other commands should be necessary, but can be accessed when preceded by a space. 2b2g

Advantages 2b3

While using Help, the user would not need to remember command verbs (like show). Since TENEX recognition scheme will probably be used, I think it is an unnecessary hassle to type SHOW everytime. 2b3a

Allows the experienced user a more flexible way of getting the specific information she wants with the least amount of superfluous data in the way. 2b3b

would allow "maps" of the database structure. 2b3c

Proposed software capabilities and database structure for HELP query

- Would allow placing more information in the addressed node since all lines are printed only when desired. 2b3d
- Would give the user an option of a coherent description of a topic using all lines of several nodes in a branch. 2b3e
- Would be compatible with a reasonable DNLS query language (see--DNLS). 2b3f
- Types of statements available in substructure. 2c
1. Menued Nodes (default) 2c1

Both named and unnamed. Executable links would be invisible. 2c1a
 2. Comment Nodes visible to the user but not menued. 2c2

Preceeded by "close bracket"). No executable links. 2c2a
 3. Invisible nodes for the database maintainer. 2c3

Preceeded by percent sign. 2c3a
- DNLS Query 2d

Whether or not the "jump to mouse" command is ever accepted as a DNLS Query Language (see--file,dnls), the DNLS user should be able to jump to both "formatting" links and "reference" links using the same command action with the mouse. For this reason, the "formatting" link should be the first one in a statement. Otherwise, it will be impossible for the DNLS user to take any other type of link because the command parser will have no way of knowing whether the user is specifying a "formatting" link or a "reference" link. 2d1

Note that system supplied menu numbers are an unnecessary drain in DNLS. 2d2

DATABASE STRUCTURE 3

A distinction needs to be made between the menus and the structure of the database. To a degree, they are the same. However, with the use of visible links, the invisible network and "Show also" the difference arises and can, if desired, be made complete. 3a

I propose that the database be structured specifically to accomodate logical stacked name searches. 3a1

proposed software capabilities and database structure for HELP query

This may require "duplicating" some nodes under different categories by linking to the original text. When warps are implemented with a loop detector, links that define conceptual substructure (formatting links) could act as extensions of the real substructure and eliminate these "empty" statements.

3a1a

Information for which there is no place in substructure should be freely placed in the glossary. That is, there is no pressure to make sure everything is placed in substructure, only that it is mentioned so the user knows he can get it. "Show also", the invisible network, and visible links should be used to fill out any menu that is not completed by the substructure of a node.

3a2

A lot of duplication can be saved in the "Show also" sections of each node if we adopt the convention that any word the user sees in all caps can be used with the SHOW command. This would take care of the Globals and could also allow another class of acronyms that might be called "DEFINITIONS". They would be those that are not important enough to be included in the list of Globals, are not used to solve the listing of alternatives problem (as locals were originally invented to do), and whose occurrences are too numerous to be conveniently used as locals (e.g.: IDENTLIST).

3a2a

Over-all structure

3b

Clipped view

3b1

Define statements

3b1a

Concepts (primarily for the beginner)

3b1a1

Commands (easy access for the advanced)

3b1a2

Function

See the EXAMPLE of single nodes

3b1a3

Glossary

Contains definitions that have no place in the classifying structure.

3b1a4

command data

3b1b

Function ##<function>##

3b1b1

Syntax (command summary)

3b1b2

Proposed software capabilities and database structure for HELP query

Example (Scenarios)	3b1b3
Effects	3b1b4
Advanced	3b1b5
Renamed-commands	3b1b6
Thesarus	3b1c
synonyms	3b1c1
antonyms	3b1c2
plurals	3b1c3
alternate spellings	3b1c4
unclassified	3b1c5
other	3b1c6
Expanded view	3b2
Define statements	3b2a
Concepts (primarily for the beginner)	3b2a1
entering systems	3b2a1a
commanding	3b2a1b
READING	3b2a1c
hardcopy	3b2a1c1
online	3b2a1c2
printing (TNLS only)	3b2a1c2a
specifying (viewspecs)	3b2a1c2b
querying	3b2a1c2c
writing	3b2a1d
appending	3b2a1d1
breaking	3b2a1d2

Proposed software capabilities and database structure for HELP query

copying	3b2a1d3
deleting	3b2a1d4
merging	3b2a1d5
moving	3b2a1d6
replacing	3b2a1d7
capitalizing	3b2a1d8
sorting	3b2a1d9
substituting	3b2a1d10
transposing	3b2a1d11
file manipulating structures	3b2a1e
creating	3b2a1e1
deleting	3b2a1e2
expunging	3b2a1e3
archiving	3b2a1e4
updating	3b2a1e5
structure within a file.	3b2a1e6
message sending and receiving	3b2a1f
HELP GETTING	3b2a1g
calculating	3b2a1h
programming	3b2a1i
terminal characteristics	3b2a1j
Commands (easy access for the advanced)	3b2a2
entering systems	3b2a2a
commanding	3b2a2b
addressing	3b2a2c

Proposed software capabilities and database structure for HELP query

viewing	3b2a2d
hardcopy	3b2a2d1
online	3b2a2d2
printing (TNLS only)	3b2a2d2a
specifying (viewspecs)	3b2a2d2b
QUERYING	3b2a2d2c
inserting text	3b2a2e
editing	3b2a2f
(append)	3b2a2f1
(break) statement	3b2a2f2
(copy STRING)	3b2a2f3
(copy STRUCTURE)	3b2a2f4
(copy archived) directory	3b2a2f5
(copy directory)	3b2a2f6
(copy sequential) file	3b2a2f7
(delete ENTITY)	3b2a2f8
(edit) statement	3b2a2f9
(merge)	3b2a2f10
(move STRING)	3b2a2f11
(move STRUCTURE)	3b2a2f12
(replace)	3b2a2f13
(reset case) mode	3b2a2f14
(reset filter)	3b2a2f15
(set case ENTITY)	3b2a2f16
(set case mode)	3b2a2f17

Proposed software capabilities and database structure for HELP query

(set filter)	3b2a2f18
(sort)	3b2a2f19
(substitute)	3b2a2f20
(transpose)	3b2a2f21
file manipulating	3b2a2g
journalizing	3b2a2h
help getting	3b2a2i
calculating	3b2a2j
programming	3b2a2k
Function	
See the EXAMPLE of single nodes	3b2a3
(editor)	
1. <editing> ##[m=2]##	3b2a3a
(journal)	
1. <journalizing> ##[m=2]##	3b2a3b
(query)	3b2a3c
(help)	
1. <concepts help> ##[m=2]##	3b2a3c1
(programs)	
1. <programing> ##[m=2]##	3b2a3d
(calculator)	
1. <calculating> ##[m=2]##	3b2a3e
(number)	3b2a3f
(ident)	3b2a3g
Glossary	
Contains definitions that have no place in the classifying structure.	3b2a4
command data	3b2b
Function ##<function>##	3b2b1

Proposed software capabilities and database structure for HELP query

Syntax	(command summary)	3b2b2
Example	(Scenarios)	3b2b3
Effects		3b2b4
	This includes things like confirm options, where your CM is left, possible side effects, etc.	3b2b4a
Advanced		3b2b5
	This could include the syntax for single character recognition mode, full syntax, additional commands.	3b2b5a
Renamed-commands		3b2b6
	(x-set) renamed ##<set case>##	3b2b6a
Thesarus		3b2c
	synonyms	3b2c1
	antonyms	3b2c2
	plurals	3b2c3
	alternate spellings	3b2c4
	unclassified	3b2c5
	other	3b2c6

EXAMPLE of a single node with substructure under Insert in the FUNCTION branch.

3c

STRING

Allows you to insert inside a statement.

1. <SYNTAX INSERT STRING>
2. <EXAMPLE INSERT STRING>
3. <EFFECTS INSERT STRING>
4. <ADVANCED INSERT STRING>

Show also: define STATEMENT, define STRING

5. <Copy>, 6. <Replace>, 7. <Delete>. ##[m=8]##

3c1

8. Character
9. Word
- 10 Link
- 11 Number

Proposed software capabilities and database structure for HELP query

12 Visible
13 Invisible

3cla

Proposed software capabilities and database structure for HELP query

(J19545) 7-OCT-73 22:39; Title: Author(s): Kirk E. Kelley/KIRK;
Distribution: /DIRT DCE; Sub-Collections: SRI-ARC DIRT; Clerk: KIRK;
Origin: <KELLEY>QUERY.NLS;3, 7-OCT-73 22:30 KIRK ;

19545 Distribution

James H. Bair, Richard W. Watson, Elizabeth J. (Jake) Feinler, Harvey
G. Lehtman, Kirk E. Kelley, Laura E. Gould, N. Dean Meyer, Jeanne M.
Beck, Charles F. Dornbush, Dirk H. Van Nouhuys, Michael D. Kudlick,
Diane S. Kaye, James C. Norton, Douglas C. Engelbart,

Use of NLS control characters with TYCOM

● Just trying to get around the carriage return problem on the TYCOM

Use of NLS control characters with TYCOM

(NLSControlCharacters)

CA=↑D,);ECHO=/;

This is a test of the replacement of carriage reurn by an astrix for the command accept (CA) I just hit a CR, I don't know if this ends up in the string of text or not.

The carriage return does end up as a literal in the string of text..It doesn't appear that one can change the carriage return key to another function...I tried setting it to "null", which if it works, should givea nothing character in the string of text.. we'll see what happens, though i don't expect it to work.

Right It doesn't work..will have to call SRI and see if there isanother way around this...One possible way is to replace all CR's with a SPACE.

This might allow one to use the TYCOM, although it's kind of kludgy!!

(NLSControlCharacters)

CA=↑D,*;ECHO=*;

This is a test of the replacement of carriage reurn by an astrix for the command accept (CA) I just hit a CR, I don't know if this ends up in the string of text or not.

The carriage return does end up as a literal in the string of text..It doesn't appear that one can change the carriage return key to another function...I tried setting it to "null", which if it works, should givea nothing character in the string of text.. we'll see what happens, though i don't expect it to work.

Right It doesn't work..will have to call SRI and see if there isanother way around this...One possible way is to replace all CR's with a SPACE. This might allow one to use the TYCOM, although it's kind of kludgy!!

This statempnj was inserted fsing jhe TYCOM itself, just to sep if ther is any problem i= using the carriage return as a carriage return, instead of as a command accepj. Things seem to go smoothly on the input , I am curious to see what happens on the oujpt.

The use of the / as the command accept seems better than * or !, since they both require shifting. The / is seldom used (even though it is indicated as necessary in searching for a literal), since it

Use of NLS control characters with TYCOM

is not reall required. It is near the carriage return key and seems to be a "natural" indicator of the end of a statement

6

The substitute bit works (as evidenced by the differences if plex 4a and plex 1.

7

Use of NLS control characters with TYCOM

(J19546) 8-OCT-73 06:39; Title: Author(s): Duane L. Stone/DLS;
Distribution: /TFL; Sub-Collections: RADG; Clerk: DLS;
Origin: <STONE>CHARCHANGE.NLS;1, 13-SEP-73 13:01 DLS ;

19546 Distribution
Thomas F. Lawrence,

Your Status at Berkeley/Change of Address

In your ident entry in the identfile I noticed that at University of Michigan, you were listed as Principal Investigator. What will your status be at University of California at Berkeley? i.e. will you be the Principal Investigator there also? Please let me know on this. In the meantime I will change your address. Marcia Keeney.

1

Your Status at Berkeley/Change of Address

(J19547) 8-OCT-73 09:45; Title: Author(s): Marcia Lynn Keeney/MLK;
Distribution: /MOM; Sub-Collections: SRI-ARC; Clerk: MLK;

NIC directory page allocation

Vint, This morning we upped your page allocation to 75 pages. Hope
this helps out a little. JAKE

1

NIC directory page allocation

(J19548) 8-OCT-73 11:08; Title: Author(s): Elizabeth J. (Jake)
Feinler/JAKE; Distribution: /VGC; Sub-Collections: NIC ; Clerk: JAKE;

19548 Distribution
Vinton G. Cerf,

Documentation Suited to Distant Users

INTRODUCTION 1

For the record, this is another attempt to record the status of the documentation which is put out for distant users, and to recommend some steps to improve it. 1a

SITUATION 2

For the present, and for a year or two at least, both online and offline (hardcopy) versions of user documents are necessary to aid the growth of networking and of online capabilities. 2a

To meet various needs, these media are required: 2b

Hardcopy documents 2b1

Online documents to be printed out in hardcopy at distant offices 2b2

Online documents to be viewed selectively in distant offices 2b3

The situation is that the effort of making offline directories and catalogs is more than NIC has been able to adequately support, and these are not issued frequently enough. Online versions of these documents have less priority than offline, because the need has been less, and less well expressed. Online copies have been provided, but they have been a sop to the demand, with one or more of the following drawbacks: 2c

Links from Locator aren't given. 2c1

Links from Locator lead to superceded versions. 2c2

Links from Locator lead to deleted files. 2c3

Links from Locator don't work for other reasons, locked files, etc. 2c4

Locator is so bulky that the documents which would supply needed information are buried in the mass, and the user gets mired and gives up. 2c5

Copies are versions with directives for printing for reduction; these wrap around on the screen or tty and produce an unsatisfactory document. 2c6

Copies are so full of statement names and directives that they must go through Output Processor to be readable, and on large files this is not practicable for quick reference. 2c7

Documentation Suited to Distant Users

Copies are produced by programs which are run only every six months or so, and information is out of date, although the inherent advantage of online files is that they can be kept more up to date than printed copies.

2c8

REMEDIES

3

Simplify the locating of important documents.

3a

Locator should be revised with an eye to the novice information seeker as well as the novice NLS user.

3a1

A printed scenario for uses of online functional documents should be inserted in each functional document in hardcopy.

3a2

A very simple scenario for online uses should be available in HELP.

3a3

Keep online files reasonably up to date.

3b

Provide for weekly updating of directories and catalogs, manually if running programs is not practical.

3b1

Check to assure that accesses currently work as advertised.

3c

A weekly task after updating should be to assure that these minimum basic files are actually approachable by the novice.

3c1

Process the online files for online reference.

3d

Files should be broken into manageable size so that content analysis is feasible.

3d1

Online files should be produced specifically for online readers; selective printout should be clean information, free of file processing extranea.

3d2

If for various reasons programs are not written or cannot be run to achieve clean printout from data files, then other means such as substitution and deletion by file process or by work on individual statements should be used to accomplish this.

3d3

Process the online files for distant printout.

3e

Online documents should be produced in a form which allows them to be printed on a distant tty. They should even exist in a form which permits simply loading and printing to produce a usable document.

3e1

Documentation Suited to Distant Users

(J19549) 8-OCT-73 11:30; Title: Author(s): Jeanne B. North/JBN;
Distribution: /SRI-ARC; Sub-Collections: NIC SRI-ARC; Clerk: JBN;
Origin: <NIC-WORK>ONLDOC.NLS;3, 4-OCT-73 13:08 JBN ;

A comment about the new command language

Comments about the New Command Language

1

Comment:

1a

I do not think the novice or any user will benefit from having to type out the keywords in full. My experience has been that the new user benefits the most from first character recognition and echo of the command. It also helps to have this the default mode so that only more advanced users have to adjust the feedback.

1a1

During teaching and demonstrations, the response from novices was frequently that the command language was cumbersome and complex, requiring too much from the user. This was more common among programmers who were used to more cryptic languages.

1a1a

The most effective mode would probably be that more recent commands that have the same initial alphanumeric be preceded by a space. I think this is what is planned but I'm not sure yet.

1a1b

A comment about the new command language

(J19550) 8-OCT-73 14:12; Title: Author(s): James H. Bair/JHB;
Distribution: /DIRT; Sub-Collections: SRI-ARC DIRT; Clerk: JHB;
Origin: <BAIR>LANG.NLS;1, 8-OCT-73 14:09 JHB ;

User Programs Concepts for the Help Data Base

(programming) user programming

In addition to all the stock capabilities of NLS, special functions may be programmed, using SRI-ARC's procedure-oriented programming language, LLO. These programs may serve as complex filters through which you may view a file, or they may actually modify the file. Full documentation can be found in the LLO Users' Guide.

1

(LLO) programming language

LLO is the procedure-oriented programming language used at SRI-ARC. The NLS system itself is written in LLO. Special features and filters may be added to the system in the form of LLO programs. LLO was designed to provide powerful text handling abilities in the context of the NLS environment. Documentation can be found in the LLO Users' Guide.

1a

(content) analyzer

The viewspecs i, j, and k allow control over the NLS feature called the Content Analyzer. When in effect, only those statements which pass certain requirements specified in a filter will be printed. Some commands (e.g. substitute) can be set to work only on those statements which pass the Content Analyzer filter. Complex filters written in LLO can modify the NLS files. Documentation can be found in the LLO Users' Guide.

1b

(filter) capabilities

A filter may be set up so that only statements passing certain requirements will pass. The viewspecs i, j, and k control the effect of the filter. The Print command is always affected. Some commands (Copy, Delete, Move, Substitute) can optionally make use of the filter for the execution of that command only. A description of how to write filters can be found in the LLO Users' Guide.

1c

(available) user programs

You can add to the stock NLS capabilities by writing user programs for special applications. These programs may serve as Content Analyzer filters, as special sort algorithms, or may modify the file. A library of available programs provides for many of the common applications. The list of available programs can be found in the file (user-progs,-contents,). They may be loaded and used through the programs subsystem.

1d

(commands) in Programs subsystem

Control over user programs is through the Programs subsystem. Programs may be compiled, loaded into the user programs buffer, and used. A complete explanation of the commands accompanies instructions on using LLO to write filters and programs in the LLO Users' Guide.

1e

User Programs Concepts for the Help Data Base

(file) commands

Existing user programs (in the user programs library) may be loaded and used by entering the Programs subsystem. The code file can be loaded into the programs buffer space, deleted from it, and run or instituted as a filter while it is there.

Complete documentation can be found in the L10 Users' Guide.

1e1

(compiling) user programs

Once a program has been written as an NLS file, it may be compiled, either directly into the programs buffer or into a file which may be subsequently loaded into the buffer. Compiling means translating L10 code into machine-executable instructions. The Compile command in the Programs subsystem allows text to be compiled to a file, to the buffer or as a filter pattern.

Complete documentaion can be found in the L10 Users' Guide.

1f

(running) programs

Once a program has been loaded into the programs buffer, it may be used. If it is a Content Analyzer, Sort key extractor, or Sequence generator program, it may be Instituted. Then viewspecs control its effect. If it is an executable program, the Programs subsystem command Run Program will pass control to the program. Control automatically returns to the user on the program's completion. Complete documentation can be found in the L10 Users' Guide.

1g

(instituting) compiled programs

Once a program has been loaded into the programs buffer, if it is a Content Analyzer filter, a Sort key algorithm, or a Sequence generator program, it must be Instituted as that function. Many programs may be loaded into the buffer at any time, but only one may be instituted for each function. The controlling viewspecs pass control to the instituted program only. Complete documentation can be found in the L10 Users' Guide.

1g1

User Programs Concepts for the Help Data Base

(J19551) 8-OCT-73 15:09; Title: Author(s): N. Dean Meyer/NDM;
Distribution: /DIRT; Sub-Collections: SRI-ARC DIRT; Clerk: NDM;

Jim: Welcome! Got yor message. I know of no simple way to move one line over to the left margin. The simplest way that I can think of to do it is to move the left margin over, then back again. For instance, if you wished a line to begin at position zero, and if the statement is at level two and LMbase is at zero, you could put the directive in the previous line, then reset LM to its previous value in the current line. Give me a call anytime for more help on this or anything. See you soon. Dean

1

(J19552) 8-OCT-73 15:17; Title: Author(s): N. Dean Meyer/NDM;
Distribution: /JHB; Sub-Collections: SRI-ARC; Clerk: NDM;

Hi Ric, I'm now at SRI...what an improvement. One of my things will be training for the utility. The Bay area is something else...ever been here? If not you should schedule a trip, preferably when the winter sets in up there in snow country. Say, I hear that you are moving...what's the story? Take care, Jim

1

(J19553) 8-OCT-73 15:28; Title: Author(s): James H. Bair/JHB;
Distribution: /RLT; Sub-Collections: SRI-ARC; Clerk: JHB;

19553 Distribution
Ric L. Treleaven,

Modifications to NIC Directory Programs

Jeanne: A while back, I spent a number of hours developing formats for the offline Directories, and modifying the Catalog programs so that they would produce files with the new directives. Have you run a complete set using the new programs to test those modifications both on the printer and COM? If you have, please tell me the results of your experiments. I will run the files through COM at the next opportunity. If you have not, all that work and my enthusiasm for helping in that area may be lost.

As far as the online version is concerned, I am still willing to try to modify the programs to produce a well formatted set of files automatically. As I remember, BAH was going to retrieve the source code file from archive so that we could begin work there. Please mail me a quickprint of that file and of the initial generating procedures and the tables if you wish me to try my hand in that area.

-- Dean

1

Modifications to NIC Directory Programs

(J19554) 8-OCT-73 15:37; Title: Author(s): N. Dean Meyer/NDM;
Distribution: /JBN JCN(fyi) BAH(fyi) CHI(fyi); Sub-Collections: SRI-ARC;
Clerk: NDM;

Dear Mr. McKensie:

I would again like to thank you for you explanation and cooperation with regard to the Net problem. I am no longer at RADG but would like to continue to get any news about Net problems, releases, etc., at my new location at SRI-ARC. Just include JHB in your distribution and Ill get it. Be "talking" to you.
Sincerely, Jim Bair

1

(J19555) 8-OCT-73 16:10; Title: Author(s): James H. Bair/JHB;
Distribution: /AAM; Sub-Collections: SRI-ARC; Clerk: JHB;

Supporting JEW's suggestion in (19420,) of an ident to collect user questions

Jim: I like your suggestion in (19420,), of an ident that provides an explicit collection point for user questions. It is consistent with a general push towards such as usage-generated feedback and reference data, which I think are good things that we should explore wherever we can.

1

One small, specific comment: Seems that the term "Help" if applied to this ident and its resulting collection of data would create confusion with the HELP data base that is explicitly designed to support the user-learning, in-context facility. I would resist having two "Helps" around that are both related to user matters, but yet are different things. Perhaps the term "Questions" might be more appropriate for the ident you are discussing?

2

Supporting JEW's suggestion in (19420,) of an ident to collect user questions

(J19556) 8-OCT-73 17:22; Title: Author(s): Douglas C. Engelbart/DCE;
Distribution: /JCN RWW JEW CHI DVN KIRK NDM; Sub-Collections: SRI-ARC;
Clerk: DCE;

margin note addition to nls

(to:journal)

1

i suggest a margin note part of a statement. this would act as marginal notes for the specified statement. there would be an option of printing these notes or not printing them. they would be inserted with a special insert statement or through a special address reference (e.g. m.la2 to mean the margin of .la2). all editing (change, replace, delete, etc) will not (repeat not) effect any change in the address referncing of the text body itself (so one does not need to know what is in the margin for referncing). in a very real sense the margin will act as a separate file with identical statement structure. this could be simulated in display nls by splitting your screen in two, but the advantages of having it within the same file as the text body seems to me worth it. of course typewriter nls would have no other choice.

1a

the motivation for this suggestion stems from the desire to have all the advantages of the hardcopy environemtn incorporated into nls

1b

robert liebermaa nsrdc (rll)

1c

margin note addition to nls

(J19557) 8-OCT-73 18:09; Title: Author(s): Robert N. Lieberman/RLL;
Distribution: /NP JCN RWW; Sub-Collections: NIC NP; Clerk: RLL;

USERS joins USING?

BE IT KNOWN THIS DAY TO ONE AND ALL:

The Group USERS has been added to USING, so that all journal mail distributed to USING will also get delivered to USERS. Nancy and I agree that USERS need to get copies of USING documents and this seems to me the simplest way to guarantee it. Much simpler than having everyone remember to distribute to BOTH USERS and USING.

Cheers. Dave/

1

USERS joins USING?

(J19558) 8-OCT-73 18:51; Title: Author(s): David H. Crocker/DHC;
Distribution: /USING; Sub-Collections: NIC USING; Clerk: DHC;

19558 Distribution

John D. Day, Robert P. Blanc, Barbara Noble, Barbara Noble, Robert P. Blanc, Susan S. Poh, Kirk E. Kelley, Laura E. Gould, Harvey G. Lehtman, Allan R. Alberts, Alan R. Hill, Jon E. Berger, Mil E. Jernigan, Paul Rech, Joe B. Wyatt, Charles H. Irby, Robert H. Thomas, Edward P. Schelonka, Robert D. (Bob) Bressler, Steve D. Crocker, Jonathan B. Postel, Leroy (Lee) C. Richardson, Frank G. Brignoli, Elizabeth #j (jake) Feinler, Michael D. Kudlick, James E. (Jim) White, Michael A. Padlipsky, Kenneth L. Bowles, A. Wayne Hathaway, Jean Iseli, David H. Crocker, Nancy J. Neigus, Stephen M. Wolfe, Ronald M. Stoughton, Jim O. Calvin,

USERS business

Hi, again, Jake: Please add Tony Hearn to USES. Ident=ACH.

Also, please forgive, but please remove Barbara Noble (BN) and Robert Blanc (RPB) from USERS. nancy and i decided they should be in USING; so I put them there.

thanks. Dave/

1

USERS business

(J19559) 8-OCT-73 18:53; Title: Author(s): David H. Crocker/DHC;
Distribution: /JAKE; Sub-Collections: NIC; Clerk: DHC;

Journal mail Hardcopies

Hardcopy printouts of Journal mail "Messages" should not take 3 bloody pages, the way they currently do!

1

Journal mail Hardcopies

(J19560) 8-OCT-73 18:56; Title: Author(s): David H. Crocker/DHC;
Distribution: /BUGS; Sub-Collections: NIC BUGS; Clerk: DHC;

Verify Roberta

Would you make Roberta Carrier (RJC) at radc verified?
.....thaks.

1

Verify Roberta

(J19561) 8-OCT-73 19:48; Title: Author(s): Dirk H. Van Nounuys/DVN;
Distribution: /MLK RJC(for your information); Sub-Collections: RADC
SRI-ARC; Clerk: DVN;

Append is a Pig

I just ran the user program append on a file about about 600 statements, almost all one-line or less. It took 3 minutes CPU time, almost, a third of a second per statement. Surely there is a way to make it less piggy?

1

Append is a Pig

(J19562) 8-OCT-73 20:09; Title: Author(s): Dirk H. Van Nounuys/DVN;
Distribution: /CHI EKM HGL NDM; Sub-Collections: SRI-ARC; Clerk: DVN;

Changes to TENEX Linking

This is in reply to Ken Victor's proposal to modify TENEX linking procedures, see RFC 576, NIC 19324, dated 26 September 1973. 1

Certain of Ken's suggestions are very good and should alleviate an existing problem in the present TENEX environment. However, there are two portions of this modification proposal which will create problems, which are illustrated below: 2

(1) Suppose, to use Ken's identification of linkers, Mr. A is linked to Messrs. B, C, D, and E and is in the middle of a formal discussion, possibly a demonstration of system features to sponsors and clients. The group is expecting Mr. F to join them shortly. Mr. A's bell rings, he naturally assumes it is Mr. F requesting permission to link in with the group. Mr. A ↑C's to EXEC, puts on RECEIVE LINKS and instead, the linker is Johnnie Z, who without stopping to find out what is going on pops up with some highly personal remark. Under the proposed scheme in RFC 576, when Mr. A puts on RECEIVE LINKS and receives the unexpected link from Johnnie Z, Johnnie Z will also automatically be linked to Messrs. B, C, D, and E, without any choice on Johnnie's part or on Mr. A's part, or on the part of Messrs. B, C, D, and E, who CERTAINLY did not want the link or expect it ... it will be done automatically by the system. Now Johnnie wanted only to talk to his old friend A, and in ordinary circumstances A would have welcomed the link. But as a result of the inability to express a personal preference on anyone's part, an embarrassing situation occurs. 2a

Even if the unexpected link is no more than Mr. A's secretary asking for his timecard or saying his wife is calling, the information coming out on Mr. A's terminal SHOULD BE PRIVATE ONLY TO MR. A. Under the present TENEX linking procedures, this is true...Johnnie Z's indiscrete remark would have appeared ONLY on Mr. A's terminal, Mr. A. could have said, "Mr. Z I'm sorry I cannot talk now, I am giving a demonstration, could you please break links?" and no more confusion or discomfort would have occurred to anyone, beyond the momentary delay Mr. A had while answering the link. 2a1

Now, it might be said that the TENEX linking announcement coming up on Messrs. B, C, D, and E's terminals, LINK FROM Z, TTYX before Johnnie's brash comment, plus a possible added feature of announcement coming up on Johnnie's TTY listing the people to whom he is linking, would be sufficient to warn Johnnie against unfortunate comments. In practice, any experienced Net user knows this is not so. In the present state of TELNET and individual system buffering because of IMP slowness en route and overloaded systems, Johnnie could well have input his linking command and at least a line and a half

Changes to TENEX Linking

of unwise text before the proper information came up on his terminal ... then too late to do anything about it!

2a2

(2) Suppose that Messrs. A, B, and C have been linked while Mr. A was actively working, preparing a script, or some similar function, in which the TELNET.TYPESCRIPT was intended for use in a later procedure and an attempt to get a clean typescript was being made. B and C were acting in an advisory capacity, and Mr. A felt sure that his typescript, which was recording some fairly difficult procedures was going according to plan. B and C dropped out while the processes were still proceeding on Mr. A's terminal. According to the proposed change, when B and C dropped out that left Mr. A "exposed", eligible to receive links, which he certainly does not want in these circumstances. The only way Mr. A. can avoid receiving a link is to stop his process, breaking into his typescript, go into EXEC, put on REFUSE LINKS, return to his process and start over again, making a "bad spot" in his typescript and causing unnecessary delay. Under the present TENEX linking procedures, Mr. A could have put on REFUSE LINKS as soon as he had his desired links established with B and C, and have been protected against receiving unwanted links. While it is true that many people working on TENEX systems will never have occasion to use the available TENEX facilities such as the TELNET.TYPESCRIPT, or do not record processes involving this sensitive an operation, there are many others who do. It is felt that those who do have occasion to perform demanding work of this kind, should be able to take advantage of the full flexibility of the TENEX system, secure in the knowledge that they can know what to expect from the system.

2b

A basic premise in the TENEX linking procedure as established by BBN and the authors is that TENEX links are PRIVATE conversations. This JSYS change, as presently proposed, automatically destroys that entire concept. The TENEX user would no longer be able to control his linking according to his own preferences.

2b1

Much of the present possibility of confusing situations involved in TENEX linking is NOT a result of the TENEX linking capabilities as they now exist, but is occasioned because of the average TENEX user's habitual allowance of his link status to remain at the default of RECEIVE LINKS -- that is, his failure to put on REFUSE LINKS when logging in. When working in this receiving mode, one is eligible to receive links at any time, and therefore, it should be recognized that an anomalous situation can occur at any time. This is not really the fault of the system, but rather must be recognized as a normal possibility inherent in defaulting to the RECEIVE LINKS status in which most people elect to work. Another misunderstanding which seems to be prevalent in the TENEX community -- at least was told to me by

Changes to TENEX Linking

people who should have known better -- and which can add to the possibility of confusing situations, is that when A and B link, they seldom either think to put on REFUSE LINKS while they are conversing. If they both put on REFUSE LINKS, it will in no way interfere with their already established link, but will prevent the person who puts on REFUSE LINKS from receiving any more links until the mode is changed to RECEIVE LINKS. It has been stated to me that if one is linked, and then puts on REFUSE LINKS, it will break his established link, but this is not true; it in no way affects any established links, seen or unseen through an enabled "silent", or unannounced link. 3

The ability I would like to see added to the present TENEX linking facility is a mode, or command, accessible in EXEC which would allow a person who is in REFUSE LINKS mode and whose "link bell" is ringing to find out who is requesting a link before he opens his online door, so to speak. Sometimes it would be a great help to be able to ensure that the link one is about to receive is a wanted link instead of an unexpected and perhaps unwanted link. This would also encourage more people to work in a REFUSE LINKS status, since it would give them the further ability to control their linking that they do not now have. 4

In summary, I advocate an increase in the user's ability to control his own working environment, his own online capabilities, rather than a more structured environment in which the user has little choice of his own workshop environment. 5

Changes to TENEX Linking

(J19563) 8-OCT-73 20:34; Title: Author(s): Mil E. Jernigan/MEJ;
Distribution: /NIC SRI-ARC JI; Keywords: TENEX-links; Sub-Collections:
NIC SRI-ARC; Clerk: MEJ;
Origin: <JERNIGAN>LINKS.NLS;1, 7-OCT-73 11:26 MEJ ;

LISP

● <SU-HP>FOO.NLS;1, 8-OCT-73 21:48 LMM ;

As I recall, the ordinary stuff like COND's and EQ's were
the same; the problems that I had were
with regard to loading in hand assembled code. The loader
(not LAP) had some real problems of incompatibility.

I might be able to point you to the right people who have
been keeping up with UCI-LISP and the new fixes to it..
essentially

though, the interpreter works the same; the compiler
is different (the stack discipline differs) and
so compiled LISP must be recompiled.

● Let me know what's up.. You can reach me via sndmsg, to:
MASINTER@PARC, MASINTER@ISI, LMM@SAIL; or call
(415)321-2300 x 4878.

larry

1
1a
1b
1c
1d
1e
1f
1g
1h
1i
1j
1k
1l
1m
1n
1o
1ol

LISP

(J19564) 8-OCT-73 21:51; Title: Author(s): Larry M. Masinter/LMM;
Distribution: /DGR; Sub-Collections: NIC; Clerk: LMM;

19564 Distribution
D. Glenn Ricart,

Tickler - 8 - 19 Oct 73

(om2) 8 October - Monday HOLIDAY111 1

0830 hrs. Branch Chief's Meeting 1a

ISIS Due Date - D. White - Final Report, Contract F30602-73-C-0062 for technical review. 1b

(ot2) 9 October - Tuesday 2

Due Date ISIM - Unsolicited Proposal DO 49 - 74, "Evaluation of File Design" 2a

Col Thayer on TDY 2b

(ow2) 10 October - Wednesday 3

Col Thayer on TDY 3a

0830 hrs. Branch Chief's Meeting 3b

laboratory activity reports are due tomorrow. 3c

Due Date - ISIM/ISIS - 1152's required today for Term III, University of Southern California - Courses to be offered are Man Machine Factors in Systems Management and Aerospace Management Communication Theory. If you need info, see your secretary. 3d

Supervisor's Commanders Call - 10:00 hrs. Bldg. 106 3e

(oth2) 11 October - Thursday 4

Col Thayer on TDY 4a

0900 hrs. Lt Col Ed Hinton, Major Falk and Mr. Robert Archibald from Wright-Patterson will be here to discuss Avionics Software - Those to be concerned - F. Tomaini and R. Nelson 4b

Laboratory Activity Reports due today: Bucciero must have them by 1000, ISM must have them by 1100, and DOT must have them by 1600. 4c

ISF Confessions 0830 hrs. 4d

Due Date - Roger Panara - Forecasts vs. Actual Commitment & Obligation 4e

(of2) 12 October - Friday 5

Col Thayer on TDY 5a

Tickler - 8 - 19 Oct 73

Dry Run for Center - ODDR&E Briefing at 1:30 hrs. Bldg. 106 Room A-119 - This for the Commander 5b

Inputs to Annual Revision of Project 5550 PMP are required - R. Panara 5c

Due Date - P. Iuorno - From Col Thayer - A-Job 5d

Timecards due today. 5e

Bobbie: Travel figures due by noon. 5f

Due Date - ISIM/ISIS - Military Personnel Authorizations 5g

Due Date - ISIM/D. VanAlstine - Final Report for Contract F30602-73-C-0024 5h

(om3) 15 October - Monday 6

Frank Tomaini and Dick Nelson will be on TDY all this week!!!!!! 6a

15 - 26 October presentations to the Commander (Dry-Runs) for the DL Technical Review begin!!! 6b

0830 hrs. Branch Chief's Meeting 6c

Backup Material must be submitted to DORP today for the DL Technical Review. 6d

Due Date - Review of Documents for Revision to Distribution Statements - Calicchia & Iuorno Completed 6e

Due Date for ISI - Military Personnel Authorizations 6f

Dr. George Borden visit - Focal Point - Ed Kennedy 6g

(ot3) 16 October - Tuesday 7

Confessions are this Thursday. Topic write-ups must be collected tomorrow. 7a

(ow3) 17 October - Wednesday 8

0830 hrs. Branch Chief's Meeting 8a

laboratory activity reports are due tomorrow. 8b

Collect topic write-ups today by noon for confessions. 8c

Tickler - 8 - 19 Oct 73

R & T Selection of the Month is due in ISI.	8d
Due Date - ISIM/ISIS - Excess Property List - Completed	8e
(oth3) 18 October - Thursday	9
Laboratory Activity Reports due today: Bucciero must have them by 1000, ISM must have them by 1100, and DOT must have them by 1600.	9a
0830 hrs. ISI Confessions today!!	9b
(of3) 19 October - Friday	10
R & T Selection of the Month is due in ISM.	10a
Bobbie: Travel figures due by noon.	10b

19565 Distribution

Roberta J. Carrier, Donna R. Robilotta, David L. Daughtry, Richard H. Thayer, Frank J. Tomaini, Mike A. Wingfield, Edmund J. Kennedy, Ray A. Liuczi, Richard Calicchia, John W. Johnson, Donald Van Alstine, Dean F. Bergstrom, William P. Bethke, Frank S. LaMonica, William E. Rzepka, Rocco F. Iuorno, Frank P. Sliwa, Thomas J. Bucciero, Robert E. Doane, David A. Luther, Roger B. Panara, John L. McNamara, Joe P. Cavano, Duane L. Stone, Marcelle D. Petell, Josephine R. Stellato, Robert K. Walker, Thomas F. Lawrence, James H. Bair,

WWMCCS study team briefing

Mr Robert Walker will brief the WWMCCS Software Team #3 on 10 October (Wednesday) on the procedures necessary to load WWMCCS software on the H635. The current team is investigating JTSA release 3.1 and expect to load JTSA release 4.0 when it is available. All persons interested in attending the briefing should see Mr Walker for exact time and place.

1

19566 Distribution

Frank J. Tomaini, Richard H. Thayer, John L. McNamara, William P.
Bethke.

ARPANEWS Abstracts, (19530,)

Jeanne--

In response to your response:

1. RFC 528 - It was to that sentence that I most strenuously objected. Mechanically minor does not mean hardware changes. Computer hardware is electronic and hasn't been mechanical for over 30 years. Mechanically refers to mechanism, as in algorithm.
 2. RFC 530 - Some people cannot be trusted to write abstracts of their own material.
 3. RFC 499 - The sentences of that RFC implied far more than the actual facts contained in the paper.
- I was fully aware of the verbatim quoting in the abstracts. I still believe they need to be understood.

1

19567 Distribution
Jeanne B. North,

Laison meeting notes

these are notes on the meet with the laison personnel it does help in that it helps put the study in perspective

Liaison meeting notes

The following are some quotes and observations made at the meet held on 18 sept. when the liaison men from the major air commands and air staff were welcome and briefed and the study.

1

General Larsen

1a

There has to be a better way of doing business, the af cannot survive if it does not somehow come up with procedure policies etc which streamline and make more cost effective its operation.

1a1

He also said that from his experience as a manager he had yet to see where the computer was useful to any mg,t type of decision.

1a2

some vp of mitre -

1b

Don,t be afraid to be innovative. he described many case where mg,t is bound to resist any new ideas since it will impinge on the way they are used to doing business

1b1

Lt Col O, Keefe

1c

Stressed that it be kept in mind this study is aimed a tbase level services not at specific mission or functional org,s

1c1

i might comment that this is a confusing issue since in effect that is what the b-3500 does not do in many cases. It does support many fuctional programs with supply being the classic example

1c1a

The objective is to provide better services than are now being provided for same or less money.

1c2

He also stated that there is a urgency to this study since they want to get it into the pam I think was the words for 1974.

1c3

Also, the data systems design Center will implent the plan we come up with.

1c4

This will include how info is stored and concepts for handling info.

1c4a

Laison meeting notes

(J19568) 9-OCT-73 06:24; Title: Author(s): John L. McNamara/JLM;
Sub-Collections: RADC; Clerk: JLM;
Origin: <MCNAMARA>MIN/LAISON.NLS;1, 20-SEP-73 13:35 JLM ;

notes on meet with admin personnel

Frank Allen made his pitch on this project the following are some notes and observations of the talk.

1

Stated this excludes tech manuals, functional mg, intelligence and command and control

1a

envisioned terminals which will interface to all systems so each individual will require only one terminal

1b

First time it is quite clear and he said it one of the problems is no one knows what admin cost us today so it is hard to show cost savings

1c

Was asked how could he show cost savings since without them it seems generally agreed it will never get off the ground

1d

He described the place in Baltimore where they put out 45 tons of paper work per day, I still can't believe it. He stated that all ready bases were beginning to feel the pinch on paper shortages. - Seems as though you could make a case for parts of the project on that alone - Odd though, F Allen does not like to focus on that arguing that the real cost are in the every day office admin

1d1

He does believe some kind of soft copy should be available which hard copy can be made from, commented that Mitre has a comparable system in their lab right now.

1e

Commented that only 6 bases are now using OCR, s to read messages for input into the system

1f

It would seem off hand that if you go the route of terminals for many of the air force types you will not need OCR, s

1f1

Described the reg, manuals and publications which they are responsible for

1g

There are 1 million pages, of these - they do include graphics which means if you go the approach of having them available on line for review and only make hard copy on demand you will require a system that can cope with graphic

1g1

That was when the Mitre project which is experimenting with getting hard copy off from a tv type terminal was mentioned - have to find out more about that

1g1a

I did see a fantastic demo at Xerox labs in Menlo park by Bob Taylor where the kind of quality they were getting was

notes on meet with admin personnel

really something else probably should mention the mitre guy who maybe could visit etc. lg1b

He then briefly mentioned a number of systems going in which he feels will have a bearing on administration. lg2

Postal Directory and Base Locator lg2a

i guess they are talking about using the MPC system somehow to keep track of all personnel from one central location and feeding the base 3500 with their subset. lg2a1

Micro Form system-our old friend lg2b

Minicaps a micor job for the Supply catalogs lg2c

He sounded like the 3500 may be asked to maintain a index of the micro form of the supply catalogs lg2c1

He then described their planned program to create admin centers much like IBM,s word processing centres where one would call in and dictate his work and get a quick turn around draft. lg2d

The pentagon is being used as a application area lg2d1

their are now 1200 clerk typist in the pentagon lg2d1a

he also commented there were 3600 typewriters. lg2d1b

the men in the question period really pushed hard that th admin types should realize the disparity in devices to clerks is because there is a lot of typing done by people who are not generally recognized as needing typing skills lg2d1b1

their proposal is to pool 600 of the tyoist into a number of word processing centers leave 600 in the individual offices for other kinds of jobs and release 600 clerks lg2d1c

There was quite a bit of debate on this approach many arguing you could not get girls or i should say people to do that kind of work. lg2d1c1

I don,t know IBM is doing but they have fleability in hiring salaries and the like lg2d1c2

I do think this plan resulted from the previous dir

notes on meet with admin personnel

of admin who talked of ggreat length of the IBM system and how one could not sell this kind of overall program without cost or peopple savigs and urged that this was a concrete way to staart. I am not clear on the status of this should check with f allen 1g2d1c3

The other cost savings he mentioned was mail 1g2d1d

He stated the air force is charged annually 37 million \$ in fact to the admin budeget i think 1g2d1d1

He desribed just by a sampling technique they were able to prove that it was to high for their amount of mail and are now being charged something like 20 mil which is a 12 mil savings-I should check this as i am a little unclear as i write this 1g2d1d1a

Few observations of questions asked etc, 1g2d1e

Col Hoffman observed that his counter part here major Zarra which was a surprise to him but did point ut there were new ways to get data prepared which no one up to now has faced up to 1g2d1e1

The theme of this meet and discussion and every other i have been to so far is that technology is here but how can we sell it and transition to it with cost reduction being the driving force of General Robbin,s charge to the study panel 1g2d1e2

Quick thought why not put a group like ad little to work on cost savins in area like regs and mail for instance if you used comm lines and sent messages around like mad 1g2d1e2a

Some concern by sstems design center types that if we give users to much capabilitiy they will swamp their machnies. Sure is a real possibly 1g2d1e2b

the counter to this was it hasn,t to date many ssstems start out with a high use rate but as the novelty wears off, the real use takes over- 1g2d1e2b1

I am not so sure that is a correct assumption-if we give them something really useful it may grow like mad, i am afraid i

notes on meet with admin personnel

lean to the thought that the reason the
current systems are not being swamped is
the system no the data is not that useful

lg2d1e2bla

notes on meet with admin personnel

(J19569) 9-OCT-73 06:30; Title: Author(s): John L. McNamara/JLM;
Distribution: /; Sub-Collections: RADC; Clerk: JLM;
Origin: <MCNAMARA>MIN/PROJECTADMIN.NLS;1, 21-SEP-73 07:09 JLM ;

iin house studt outline

(J19570) 9-OCT-73 07:13; Title: Author(s): John L. McNamara/JLM;
Distribution: /FJT; Sub-Collections: RADC; Clerk: JLM;
Origin: <MCNAMARA>OUTLINE.NLS;1, 9-OCT-73 07:08 JLM ;

in house studt outline

This is a outline of the job required on the Multi processing area. The study includes a pitch down here which has to be given to parts of the pnaeel no later than 1 Dec I will worl out the details with whoever is chosen as the guy or guys

in house studt outline

The following is a suggested approach to conducting the in-house studies, a breakdown of the suggested areas and some suggestions in each of the areas in terms of labs to contact, people, etc.

Tech reports forecasting the SOTA of the 1985 time frame are suggested in the following areas:

Review what has been said in the CCIP-85, STALOG, BCM and any other appropriate long range study.

The studies will include an outline of the paper as well as a tutorial here at MITRE to pitch the panel on what the author will say in the final report.

A discussion with one or more key researchers in the field.

There is some consultant money available if required.

A visit to any key AFSC lab or div if deemed appropriate.

An outline submitted to J McNamara by dates which will be established on a one by one basis.

A preliminary cut at the report will be prepared quite early so there can be some reaction between the study author and key study members.

A briefing or discussion presented here at MITRE. The author will give a tutorial to some extent as well as pitch pretty much what he thinks he will be saying in the final paper and hopefully will receive feedback from the panel members; as well as educate them in his particluar area of interest.

Finally, the paper itself which should be no more than 20 to 30 pages long. This will be appended to the SADPR-85 report.

Multiprocess Systems-RADC tentatively J McClean

Potential use of mini computers tied together. All kinds of questions of how they will be tied together and programmed etc.

This is really the whole area of muti-processing with special emphasis on minis because of their expected impact.

I happened to talk to J Cavano on the system. He had read the outline of my plan and reminded me that he had taken a two week course in minis at Michigan this past summer. Maybe he could co-author with John. Also, FT mentioned M. Kesselman.

in house studt outline

It is worth noting, I think, that in reading a couple of well written textbooks on how to do forecasting, it was stressed that one of the very real side benefits is the education one gets in doing the task.

112a

19570 Distribution
Frank J. Tomaini,

isadpr85 Study

This is the current plan of the study I will keep sending you a new version of the plan as things progress

isadpr85 Study

11 Sept.-SADPR-85

operating systems remarks by Lt Col O'Keefe

He stated that there was a lot of interest at the high levels in fact he apparently briefed yesterday a group of high level officers on the study. They stressed that the computer must be used to better help the AF to manage their resources

The current base level machines are running out of gas and room, ie the 3500's and the 1050's.

To upgrade these systems it is important that it be done in the context of an overall plan, thus the SADPR study was born.

He stated that the current systems were designed and implemented on a functional basis and that it may have been okay then but it is no longer acceptable and certainly not efficient.

Stated that the study was to deal with base level business and there were emerging technologies's around such as texteditors and communication systems like the ARPANET which offered the AF a much more efficient and powerful way of doing business.

He stated that the STALOG was considered a good study as a point of departure as well as the Base Comm Study.

The following is the organization of the study.

Director-Lt Col O'Keefe

Dep Dir-Lt Col Hoffman from the Data Design center

Requirements-Major Zara

Concepts and Technology-Lt Col Conrraty

Resources-Mr Zenlea

Mitre project officer-J Mitchell

The study team consists of 14 Officers, 4 Civilians and 5 Mitre

Their also around 8 liaison officers who are suppose to represent the major functions and commands. (jjournal,19177,1:w)

isadpr85 Study

He stated that J Mitchel had prepared a 1980 technology forecast which was just published.

1b8

He also stated which is probably most significant that the study would result in a DAR which would then be implemented. As I read the plan it does imply RED, though I am not too convinced at this point if they really mean it.

1b9

I was amazed to observe that Frank and I are the only troupes from the RED side of the house. It is heavily manned by systems design center people.

1b10

They intend to use the Redactron system for the preparation of the report, which is encouraging but I am nervous about their willingness to truly look at the 1980 time frame.

1b11

(plan) .H-"SADPR-85 STUDY PLAN";

isadpr85 Study

BACKGROUND

The study is to be conducted by using the three panels; requirements, concepts and technology and resources. The requirements panel is to identify what will be the workload of the 80's looking at both what is automated now and what should be automated, which is currently being accomplished manually. The technology panel will first look at technology through the use of previous reports, special studies, contracts and consultants to establish what one can expect to be possible within the time frame. It will then start to define concepts of operation which are concerned with: where will the computers be located (regional vs central), what kinds of operations will one be doing on the computer, etc. These will then be run through a cost model to determine the cost feasibility. This will probably be a iterative process. The end result should be one recommended concept of operation with a detailed cost picture and some general plans for implementation. When approved, the plan will be turned over to the Systems Design Center for implementation.

The concepts and technology panel is broken down into the following tasks:

Technical forecast-J McNamara

Communication-Major Fletchner,

Has been in AFCS and has been concerned with designing and implementing the net for ALS.

Criteria

APPROACH

The general plan is to use the recent studies; STALOG, BCM and CCIP-85 and fill in holes or update forecast with in-house studies where things have radically changed since the study. In addition A D Little is conducting a similar forecast under contract with more emphasis on forecasting cost. From this, McNamara will be responsible for producing a 6 to 10 page report summarizing the predicted states of technology in the late 70's or early 80's.

The following is a suggested approach to conducting the in-house studies, a breakdown of the suggested areas and some suggestions in each of the areas in terms of labs to contact, people, etc.

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isadpr85 Study

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A briefing or discussion presented here at MITRE. The author will pitch pretty much what he thinks he will be saying in the final paper and hopefully will receive feedback from the panel members; as well as educate them in his particluar area of interest.

Finally, the paper itself which should be no more than 20 to 30 pages long. This will be appended to the SADPR-85 report.

Software Engineering-Judy Clapp, MITRE

Since the major cost factors of the systems can be attributed to software, it is important to assess the potential aids for producing programs-structured programming, automatic programming, etc.

I have met with her and suggested she talk with ARPA probably Steve Crocker since my impression is that they are or intend to fund this area heavily.

However since this is Dick's bag, I would like to solicit his guidance. For instance, should we come to RADC or have him come down here? How about SAMSO?

Multiprocess Systems-RADC tentatively J McClean

Potential use of mini computers tied together. All kinds of questions of how they will be tied together and programmed etc.

isadpr85 Study

This is really the whole area of multi-processing with special emphasis on minis because of their expected impact.

I happened to talk to J Cavano on the system. He had read the outline of my plan and reminded me that he had taken a two week course in minis at Michigan this past summer. Maybe he could co-author with John. Also, FT mentioned M. Kesselman.

It is worth noting, I think, that in reading a couple of well written textbooks on how to do forecasting, it was stressed that one of the very real side benefits is the education one gets in doing the task.

Security-S Lipner, MITRE

The whole question of what we can expect to be possible and what it will cost us.

I chatted with Steve and expressed some concern that he might present a biased view, since he is on a program with a specific approach. I commented that not every one agreed with his approach; for instance, Steve Crocker stated he questioned the whole bit. He agreed and said he would welcome a chance to bring his antagonists so to speak and explore their objections and react with them. He is in the process of deciding who we should invite to this kind of a session.

I welcome any suggestions in this area.

Operating Systems-B Griffin, Mitre

The trend of what operating systems will require or better provide in the time frame, will be important to the development of a plan of operation.

I talked to him and we explored who he could talk to about what to expect in the years to come from the main frame manufacturers. He said he had a good friend in IBM who is in charge of all system software development and felt he was a good pulse. I suggested maybe someone at MIT and he agreed. I am supposed to come up with a name. We also agreed to talk with DEC. Again, I welcome any ideas, since this is a toughy in that no one here builds OS's.

Networks and Distributed Data Bases-P Tasker, Mitre

isadpr85 Study

There is little doubt that the kind of data processing one will predict will require the use of networks.

He is very anxious to talk with the right people. He is involved in the AFSC netting of the 6600's.

He is interested in chatting with people who are using a net or who have built one. It turns out that Major Fletcher, who is on the study, was involved in the ALS net so he is one source.

I suggested that T Lawrence was a good source for ARPANET info and will have him call Pete and maybe visit him.

We also agreed to search the NET files for other sources.

One other source is SDC-Clark Wiessman who is doing distributed dns over the net.

Communications Cost factors-Major Fletcher, AFCS

Some of the data processing configurations being considered by SADPR-85 will draw heavily on long distance communications for remote access to regional computers and for computer networks. An in-house study, as well as a contractual study, examining both DOD plans and commercial plans will be conducted.

RADC is one source I suggested to the Major. He has agreed to visit RADC or invite them down.

Another source is ARPA. I heard there pitch that they were going to build a network for DOD.

C. Strom is visiting us this AM.

Data Handling Technology-B Gurken, Mitre

One of the most rapidly growing technical areas is that of I/O devices. The impact of the anticipated devices on the ADP environment of the 1980's will be considered.

This will cover such areas as OCR's, terminals, voice recognition, source data input devices, etc.

I have reviewed the first draft in this area. We talked of who one might talk to, but did not come up with any names. We did agree that he will give his description of devices to AD Little, who will give us some expected cost figures.

isadpr85 Study

Augmented knowledge Worker-D Stone & J McNamara, RADC

The trend of the future is to use the computer to help not only the office worker but the knowledge worker himself, who spends a great deal of his time in all forms of information transfer, which up to now have all been done with pencil and paper. This task will assess the status in terms of practicality of systems like AKW at SRI, which provide a set of basic tools common to all knowledge workers. It should also cover text editing systems and any other technology which is aimed at making the knowledge worker more productive in modern society.

References

(jjournal,19176,1:w)

Data Processing Equipment Cost Factors

A market study will be conducted by some appropriate firm to help in predicting what will be available in the 80's.

Software Cost Factors

This will examine the trend within industry to make software packages generally available, such as GDMS. Also it will cover cost to develop our own and maintain as well.

Communications Cost factors

DCA and AFCS plans will be examined in-house.
Commercial trends will be examined under contract.

Transition Planning

The conversion of over 100 sites to new equipments and concept will be difficult and expensive. The experience of large corporations in carrying out similar conversions will be tapped through a contracted study.

Following are some of the questions which will be addressed:

Permit prototype development and testing to minimize risk.

Keep all parts of the AF working with consistent system and data products.

isadpr85 Study

Keep the yearly expenditures at an acceptable level.

Keep overall cost at a minimum.

Consultants

It is expected that a number of consultants will be needed in a few important areas to help in the prediction of trends.

In-House studies

Schedule

the following is a first cut at th schedule of the events involved in the production of the in-house studies

	sept	oct	nov	dec	jan	feb	
S Eng			s	1 2		3	4
Multi			s	1	2	3	4
Sec s	1	2	3			4	
Os,s s	1	2	3			4	
Net/d	s	1		2	2		4
Datah	1	2	3				4
AKW	s		1	2	3	4	
ADL							
LAB/vi							
RADC			5				
SAMSO			5				
HRL			5				
Other Visits							
NAIH			5				
IBM			5				

isadpr85 Study

Tech Summary 1 2 3 4

s=outline,

1=first brief cut of paper 6 to 10 pages,

2=pitch here to some of the study team,

3=first full draft,

4=final paper

5=when trip will take place.

isadpr85 Study

(J19571) 9-OCT-73 07:17; Title: Author(s): John L. McNamara/JLM;
Distribution: /RHT2 FJT; Sub-Collections: RADC; Clerk: JLM;
Origin: <MCNAMARA>SADPR85.NLS;1, 9-OCT-73 06:51 JLM ;

Additional info for Tickler

Col Thayer on TDY 1

Dry Run for Center - ODDRSE Briefing at 1:30 hrs. Bldg. 106 Room
A-119 - This for the Commander 2

Inputs to Annual Revision of Project 5550 PMP are required - R.
Panara 3

Due Date - R. Iuorno - From Col Thayer - A-Job 4

Timecards due today. 5

Bobbie: Travel figures due by noon. 6

Due Date - ISIM/ISIS - Military Personnel Authorizations 7

Due Date - ISIM/D. VanAlstine - Final Report for Contract
F30602-73-C-0024 8

Bob Mulhauser from Auerbach will be here to discuss topics in the
following areas: Modeling Simulation WWMCCS DMS, Comparison of File
Structure of WWMCCS, IDS, DM-1, etc. Please indicate interest and
priority, if interested. Point of Contact - Ray Liuzzi. 9

19572 Distribution

Roberta J. Carrier, Donna R. Robilotta, David L. Daughtry, Richard H. Thayer, Frank J. Tomaini, Mike A. Wingfield, Edmund J. Kennedy, Ray A. Liuczi, Richard Calicchia, John W. Johnson, Donald Van Alstine, Dean F. Bergstrom, William P. Bethke, Frank S. LaMonica, William E. Rzepka, Rocco F. Iuorno, Frank P. Sliwa, Thomas J. Bucciero, Robert E. Doane, David A. Luther, Roger B. Panara, John L. McNamara, Joe P. Cavano, Duane L. Stone, Marcelle D. Petell, Josephine R. Stellato, Robert K. Walker, Thomas F. Lawrence, James H. Bair,

Additional info for Tickler

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AUTHORIZATIONA

DAO/Mrs. Haggerty/7403/2167

1

Commercial Air Category "Z" Authorizations

2

AC BC CA CC CD CDP CDS CS DA DC DC DH DO DT FT IN IR IS OC OI PM RB
SP TI TU XP

3

1. Commercial Air Category "Z" to and from the overseas area is a Special Authorization in travel orders according to AFM 10-3, para 1-21(f). Such special authorizations require the approval of the Orders Approving Official/Division Chief. However, present RADC policy requires command section approval of all overseas travel requests (AFSC Form 198).

4

2. In those instances when Category "Z" is needed, activities will justify it on AF Form 1820, "Request/Justification for Special Authorizations" and attach it to the AFSC Form 198. Upon receipt of the AFSC Form 198 in DAO, the package will be reviewed for completeness and forwarded to the Command Section for final review and approval.

5

3. The use of AF Form 1820 should overcome our present difficulties and will serve to flag Category "Z" requests for the Command Section.

6

JAMES J. CATANZARO

7

Chief, Documentation/DA

8

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Arvolo Chan, Edmund J. Kennedy,

AUTHORIZATIONA

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Re ARPANEWS Abstracts (19567,) and earlier dialogue

Nancy -- If you found the verbatim quoted text and abstracts to be unsatisfactory, wherefore your suggestion that we require authors to write abstracts? You are suggesting authors can't be trusted to write their own papers, which while it may be true, is not remediable by Newsletter editors. If the reader has to overcome authors' shortcomings, he can probably overcome editors' as well.

One perfectionist solution I can think of is to ask you to prepare abstracts, and to then submit them to the authors to verify your interpretation (for instance that algorithms are mechanical, but that electronic mechanisms do not exist).

You disappoint me with quibbling criticisms, because we get very little of any kind, and we need good, dependable, feedback on points where it's within reason to improve.

--Jeanne

1

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Nancy J. Neigus, Michael D. Kudlick, Alex A. McKenzie, Jean Iseli,
Mil E. Jernigan,

Re ARPANEWS Abstracts (19567,) and earlier dialogue

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