JAN 6 - 12, 1974

WEEKLY ANALYSIS REPORT:

WEEK: JAN 6 - 12, 1974 (24 HOURS/DAY)

TOTAL SYSTEM CPU: 66.766

(ARC)	CPU HRS	CON HRS	CPU/CON	% SYS	CON/CPU:1
(DOC)					
(JMB)	.021	.283	.074	.031	13.476
(NDM)	.372	10.914	.034	.557	29.339
CAT	11.324	19.103	.593	16.961	1.687
DOCB	-	-	-	-	-
DOCUM	.114	4.199	.027	.171	36.833
TOTAL	11.831	34.499	.343	17.720	
(FAC)					
(RAB)	.009	.211	.043	.013	23.444
(MEH)	.402	9.802	.041	.602	24.383
(JCP)	1.403	47.450	.030	2.101	33.820
(JR)	-	-	-	-	-
(EKV)	-	-	-	-	-
HRDWRE	.188	18.047	.010	.282	95.995
HARDWARE	.074	3.211	.023	.111	43.392

OPRATR	2.167	30.713	.071	3.246	14.173	6a3h
	-----	-----		-----		6a3i
TOTAL	4.243	109.434	.039	6.355		6a3j
						6a3k
(NIC)						6a4
(JDC)	.017	.501	.034	.025	29.471	6a4a
(EJF)	-	-	-	-	-	6a4b
(CBG)	.015	.267	.056	.022	17.800	6a4c
(MDK)	.610	13.261	.046	.914	21.739	6a4d
(MLK)	.378	34.383	.011	.566	90.960	6a4e
(JBN)	.215	9.778	.022	.322	45.479	6a4f
NETINFO	-	-	-	-	-	6a4g
NIC-WORK	-	-	-	-	-	6a4h
	-----	-----		-----		6a4i
TOTAL	1.235	58.190	.021	1.849		6a4j
						6a4k
(PRO)						6a5
(DIA)	1.994	45.209	.044	2.987	22.673	6a5a
(CFD)	-	-	-	-	-	6a5b
(WRF)	.536	10.364	.052	.803	19.336	6a5c
(JDH)	.440	24.892	.018	.659	56.573	6a5d
(CHI)	.731	27.702	.026	1.095	37.896	6a5e
(DSK)	.584	24.929	.023	.875	42.687	6a5f
(HGL)	.477	11.073	.043	.714	23.214	6a5g
(EKM)	.366	16.193	.023	.548	44.243	6a5h

(KEV)	2.101	39.351	.053	3.147	18.730	6a5i
(DCW)	3.281	53.886	.061	4.914	16.424	6a5j
(JEW)	1.128	21.422	.053	1.689	18.991	6a5k
	-----	-----		-----		6a5l
TOTAL	11.638	275.021	.042	17.431		6a5m
						6a5n
(PSO)						6a6
(JML)	.012	.534	.022	.018	44.500	6a6a
(BAH)	.227	8.217	.028	.340	36.198	6a6b
(MEJ)	.512	36.073	.014	.767	70.455	6a6c
(KIR)	1.555	51.691	.030	2.329	33.242	6a6d
	-----	-----		-----		6a6e
TOTAL	2.306	96.515	.024	3.454		6a6f
						6a6g
(STA)						6a7
(JHB)	.335	18.037	.019	.502	53.842	6a7a
(DCE)	.521	18.767	.028	.780	36.021	6a7b
(SRL)	.615	19.092	.032	.921	31.044	6a7c
(JCN)	.553	14.995	.037	.828	27.116	6a7d
(DVN)	1.071	30.403	.035	1.604	28.387	6a7e
(PR)	.106	3.036	.035	.159	28.642	6a7f
(RWW)	.250	11.301	.022	.374	45.204	6a7g
	-----	-----		-----		6a7h
TOTAL	3.451	115.631	.030	5.168		6a7i
						6a7j

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(GROUP) TOTALS 6a8

GROUP	CPU HRS	CON HRS	CPU/CON	% SYS	
					6a8a
					6a8b
(DOC)	11.831	34.499	.343	17.720	6a8c
(FAC)	4.243	109.434	.039	6.355	6a8d
(NIC)	1.235	58.190	.021	1.849	6a8e
(PRO)	11.638	275.021	.042	17.431	6a8f
(PSO)	2.306	96.515	.024	3.454	6a8g
(STA)	3.451	115.631	.030	5.168	6a8h
	-----	-----		-----	6a8i
TOTAL	34.704	689.290	.050	51.977	6a8j
					6a8k

(STATS) 6a9

HIGHEST CPU: DCW 3.281 hrs LOWEST CPU: RAB .009 hrs 6a9a

HIGHEST CON: DCW 53.88 hrs LOWEST CON: RAB .211 hrs 6a9b

HIGHEST CPU/CON: JMB .074 HIGHEST CON/CPU:1: MLK 90.980 6a9c

6a9d

	CPU HRS	CON HRS	CPU/CON	% SYS	CON/CPU:1	
(NET)						6c
						6c1
TOTAL	7.498	338.414	.022	11.230	45.134	6c2
						6c3

TOP FIVE 6c4

--------						6c5
CASE-10	1.014	43.116	.024	1.519	42.521	6c6
MITRE-TIP	.891	35.755	.025	1.335	40.129	6c7
UCLA-NMC	.707	30.343	.023	1.059	42.918	6c8
GUEST	.685	38.661	.018	1.026	56.439	6c9
NSRDC	.603	26.658	.023	.903	44.209	6c10
	-----	-----		-----		6c11
TOTAL	3.900	174.533	.022	5.842		6c12
						6c13
(SYS)						6d
SYSTEM	2.880	172.961	.017	4.314	60.056	6d1
SYSTEM	1.056	73.759	.014	1.582	69.848	6d2
SYSTEM	12.418	358.990	.035	18.600	28.571	6d3
BACKGROUND	2.393	173.393	.014	3.584	72.458	6d4
PRINTER	7.393	172.938	.043	11.073	23.392	6d5
	-----	-----		-----		6d6
TOTAL	22.204	705.321	.031	33.257		6d7
(WOR)						6e
						6e1
ENERGY	.163	10.281	.016	.244	63.074	6e2
GILBERT	-	-	-	-	-	6e3
JIMB	.011	.774	.014	.016	70.364	6e4
MARTINEZ	.016	1.833	.009	.024	114.562	6e5
MARRAH	-	-	-	-	-	6e6
	-----	-----		-----		6e7

TOTAL	.190	12.888	.015	.284		6e8
						6e9
(XOX)						6f
						6f1
(LPD)DEUTSCH	.040	.640	.062	.060	16.000	6f2
(CMG)GESCHKE	-	-	-	-	-	6f3
(JGM)MITCHELL	-	-	-	-	-	6f4
(WHP)PAXTON	-	-	-	-	-	6f5
(EHS)SAT-WTE	.005	.074	.068	.007	14.800	6f6
(RES)SWEET	-	-	-	-	-	6f7
	-----	-----		-----		6f8
TOTAL	.045	.714	.130	.067		6f9
						6f10
(RAD)						6g
						6g1

NAME	CPU HRS	CON HRS	CPU/CON	% SYS	CON/CPU:1	
						6g3
BERGS	.151	8.226	.018	.226	54.477	6g4
CARRIER	.081	3.870	.021	.121	47.778	6g5
CAVAN	.169	26.511	.006	.253	156.870	6g6
DAUGHTRY	.048	2.109	.023	.072	43.938	6g7
IUORN	.107	4.916	.022	.160	45.944	6g8
KENNE	.165	9.028	.018	.247	54.715	6g9
LAFORGE	.026	1.121	.023	.039	43.115	6g10
LAMON	.151	5.604	.027	.226	37.113	6g11

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LAWRE	.128	5.604	.023	.192	43.781	6g12
LIUZZI	.011	.828	.013	.016	75.273	6g13
MCNAM	.030	2.463	.012	.045	82.100	6g14
PANAR	.276	12.698	.022	.413	46.007	6g15
STONE	.372	16.767	.022	.557	45.073	6g16
THAYE	.072	4.661	.015	.108	64.736	6g17
TOMAI	.021	.511	.041	.031	24.333	6g18
WINGFIELD	.003	.041	.073	.004	13.667	6g19
	-----	-----		-----		6g20
TOTAL	1.811	104.958	.017	2.710		6g21
(PER CENT TOTAL DISK CAPACITY)						6g22
						6g23
						7

BAH 11-FEB-74 15:24 21858

JAN 6 - 12, 1974

(J21858) 11-FEB-74 15:24; Title: Author(s): Beauregard A. Hardeman/BAH; Distribution: /WAR; Sub-Collections: SRI-ARC WAR; Clerk: BAH;

JAN 13-19, 1974: A WEEK IN REVIEW

WEEKLY ANALYSIS REPORT: 1

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WEEK: JAN 13-19, 1974 (24 HOURS/DAY) 3

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TOTAL SYSTEM CPU: 28.058 5

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(ARC)	CPU HRS	CON HRS	CPU/CON	% SYS	CON/CPU:1	6a
						6a1
(DOC)						6a2
(JMB)	.058	1.998	.029	.207	34.448	6a2a
(NDM)	.064	2.629	.024	.228	41.078	6a2b
CAT	.022	.339	.065	.078	15.409	6a2c
DOCB	-	-	-	-	-	6a2d
DOCUM	.095	4.658	.020	.339	49.032	6a2e
AUERBCH	.001	.281	.004	.004	281.000	6a2f
	-----	-----		-----		6a2g
TOTAL	.240	9.905	.024	.856		6a2h
						6a2i
(FAC)						6a3
(RAB)	-	-	-	-	-	6a3a
(MEH)	.057	1.634	.035	.203	28.667	6a3b
(JCP)	1.417	22.860	.062	5.050	16.133	6a3c
(JR)	-	-	-	-	-	6a3d
(EKV)	-	-	-	-	-	6a3e
HRDWRE	.001	.046	.022	.004	46.000	6a3f

OPRATR	.400	13.536	.030	1.426	33.840	6a3g
	-----	-----		-----		6a3h
TOTAL	1.875	38.076	.049	6.683		6a3i
						6a3j
(NIC)						6a4
(JDC)	.003	.054	.056	.011	18.000	6a4a
(EJF)	.496	8.571	.058	1.768	17.280	6a4b
(CBG)	-	-	-	-	-	6a4c
(MDK)	.254	4.559	.056	.905	17.949	6a4d
(MLK)	.314	10.293	.031	1.119	32.780	6a4e
(JBN)	.084	3.420	.025	.299	40.714	6a4f
NETINFO	-	-	-	-	-	6a4g
NIC-WORK	-	-	-	-	-	6a4h
	-----	-----		-----		6a4i
TOTAL	1.151	26.897	.043	4.102		6a4j
						6a4k
(PRO)						6a5
(DIA)	.313	11.324	.028	1.116	36.179	6a5a
(WRF)	.009	.436	.021	.032	48.444	6a5b
(JDH)	.815	39.569	.021	2.905	48.551	6a5c
(CHI)	.932	28.485	.033	3.322	30.563	6a5d
(DSK)	.095	3.276	.029	.339	34.484	6a5e
(HGL)	.226	4.867	.046	.805	21.535	6a5f
(EKM)	.050	4.080	.012	.178	81.600	6a5g
(KEV)	.177	8.422	.021	.631	47.582	6a5h

(DCW)	2.338	26.338	.089	8.333	11.236	6a5i
(JEW)	.087	1.957	.044	.310	22.494	6a5j
	-----	-----		-----		6a5k
TOTAL	5.042	128.754	.039	17.971		6a5l
						6a5m
(PSO)						6a6
(JML)	.011	.536	.021	.039	48.727	6a6a
(BAH)	.196	4.847	.040	.699	24.730	6a6b
(MEJ)	.274	23.606	.012	.977	86.153	6a6c
(KIR)	.847	29.573	.029	3.019	34.915	6a6d
	-----	-----		-----		6a6e
TOTAL	1.328	58.562	.023	4.734		6a6f
						6a6g
(STA)						6a7
(JHB)	.040	3.893	.010	.143	97.325	6a7a
(DCE)	.301	8.429	.036	1.073	28.003	6a7b
(SRL)	.232	5.084	.046	.827	21.914	6a7c
(JCN)	.838	16.383	.051	2.987	19.550	6a7d
(DVN)	.165	5.047	.033	.588	30.588	6a7e
(PR)	.175	6.131	.029	.624	35.034	6a7f
(RWW)	.128	5.387	.024	.456	42.086	6a7g
	-----	-----		-----		6a7h
TOTAL	1.879	50.354	.037	6.698		6a7i
						6a7j
(GROUP) TOTALS						6a8

JAN 13-19, 1974: A WEEK IN REVIEW

GROUP	CPU HRS	CON HRS	CPU/CON	% SYS	
					6a8a
					6a8b
(DOC)	.240	9.905	.024	.856	6a8c
(FAC)	1.875	38.076	.049	6.683	6a8d
(NIC)	1.151	26.897	.043	4.102	6a8e
(PRO)	5.042	128.754	.039	17.971	6a8f
(PSO)	1.328	58.562	.023	4.734	6a8g
(STA)	1.879	50.354	.037	6.698	6a8h
	-----	-----		-----	6a8i
TOTAL	11.515	312.548	.037	41.044	6a8j
					6a8k

(STATS) 6a9

HIGHEST CPU: DCW 2.338 hrs LOWEST CPU: JDC .003 hrs 6a9a

HIGHEST CON: JDH 39.569 hrs LOWEST CON: JDC .054 hrs 6a9b

HIGHEST CPU/CON: DCW .089 HIGHEST CON/CPU:1: JHB 97.325 6a9c

6a9d

	CPU HRS	CON HRS	CPU/CON	% SYS	CON/CPU:1	
(NET)						6b
						6c
						6c1
TOTAL	3.140	169.590	.019	11.191		6c2
						6c3
TOP FIVE						6c4
--------						6c5

MITRE-TIP	.599	29.650	.020	2.135	49.499	6c6
GUEST	.386	16.038	.024	1.376	41.549	6c7
NSRDC	.244	9.690	.025	.870	39.713	6c8
SDAC-TIP	.188	8.383	.022	.670	44.590	6c9
UCSB	.171	5.061	.034	.609	29.596	6c10
	-----	-----		-----		6c11
TOTAL	1.588	68.822	.023	5.660		6c12
						6c13
(SYS)						6d
SYSTEM	5.145	204.368	.025	5.478	40.000	6d1
BACKGROUND	1.079	41.121	.026	3.846	38.110	6d2
PRINTER	6.122	74.346	.082	21.819	12.144	6d3
	-----	-----		-----		6d4
TOTAL	12.346	319.835	.039	44.002		6d5
(WOR)						6e
						6e1
ENERGY	.072	3.791	.019	.257	52.653	6e2
GILBERT	-	-	-	-	-	6e3
JIMB	.001	.016	.062	.004	16.000	6e4
MARTINEZ	.024	1.719	.014	.086	71.625	6e5
	-----	-----		-----		6e6
TOTAL	.097	5.526	.018	.347		6e7
						6e8
(XOX)						6f
						6f1

JAN 13-19, 1974: A WEEK IN REVIEW

COWAN	.004	.212	.019	.014	53.000
DEUTSCH	.005	.058	.086	.018	11.600
	-----	-----		-----	
TOTAL	.009	.270	.033	.032	

(RAD)

NAME	CPU HRS	CON HRS	CPU/CON	% SYS	CON/CPU:1	
BERGS	.004	.061	.066	.014	15.250	
CARRIER	.023	1.309	.018	.082	56.913	
CAVAN	.074	4.942	.015	.264	66.784	
IUORN	.012	.374	.032	.043	31.167	
KENNE	.157	6.169	.025	.560	39.293	
LAMON	.071	1.517	.047	.253	21.366	
LAWRE	.122	4.664	.026	.435	38.230	
MCNAM	.018	1.295	.014	.064	71.944	
PANAR	.122	5.912	.021	.435	48.459	
RZEPK	.042	2.811	.015	.150	66.929	
STONE	.279	9.200	.030	.994	32.975	
THAYE	.006	.107	.056	.021	17.833	
TOMAI	.016	.489	.033	.057	30.563	
	-----	-----		-----		-----
TOTAL	.946	38.850	.024	3.372		

JAN 13-19, 1974: A WEEK IN REVIEW

**BAH 11-FEB-74 15:26 21859
JAN 13-19, 1974: A WEEK IN REVIEW

(J21859) 11-FEB-74 15:26; Title: Author(s): Beauregard A. Hardeman/BAH; Distribution: /WAR; Sub-Collections: SRI-ARC WAR; Clerk: BAH;

JAN 20 - 26, 1974: A WEEK IN REVIEW

WEEKLY ANALYSIS REPORT: 1

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WEEK: JAN 20 - 26, 1974 (24 HOURS/DAY) 3

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TOTAL SYSTEM CPU: 59.588 5

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(ARC)	CPU HRS	CON HRS	CPU/CON	% SYS	CON/CPU:1	6a
						6a1
(DOC)						6a2
(JMB)	.219	6.923	.032	.368	31.612	6a2a
(NDM)	.597	33.301	.018	1.002	55.781	6a2b
CAT	4.872	11.396	.428	8.176	2.339	6a2c
DOCB	-	-	-	-	-	6a2d
DOCUM	.286	9.153	.031	.480	32.003	6a2e
AUERBCH	.036	1.997	.018	.060	55.472	6a2f
	-----	-----		-----		6a2g
TOTAL	6.010	62.770	.096	10.086		6a2h
						6a2i
(FAC)						6a3
(RAB)	.014	.459	.031	.023	32.786	6a3a
(MEH)	.147	4.701	.031	.247	31.980	6a3b
(JCP)	1.784	65.012	.027	2.994	36.442	6a3c
(JR)	-	-	-	-	-	6a3d
(EKV)	-	-	-	-	-	6a3e
HRDWRE	.048	.929	.052	.080	19.231	6a3f

OPRATR	.862	36.271	.024	1.447	42.078	6a3g
	-----	-----		-----		6a3h
TOTAL	2.855	107.372	.027	4.791		6a3i
						6a3j
(NIC)						6a4
(JDC)	.073	2.644	.028	.123	36.219	6a4a
(EJF)	.826	18.177	.045	1.386	22.006	6a4b
(CBG)	.003	.088	.034	.005	29.333	6a4c
(MDK)	.519	10.723	.048	.871	20.661	6a4d
(MLK)	.503	20.504	.025	.844	40.763	6a4e
(JBN)	.793	31.358	.025	1.331	39.544	6a4f
NETINFO	.004	.063	.063	.007	15.750	6a4g
NIC-WORK	-	-	-	-	-	6a4h
	-----	-----		-----		6a4i
TOTAL	2.721	83.557	.033	4.567		6a4j
						6a4k
(PRO)						6a5
(DIA)	1.399	31.947	.044	2.348	22.836	6a5a
(CFD)	-	-	-	-	-	6a5b
(WRF)	.933	69.764	.013	1.566	74.774	6a5c
(JDH)	1.852	79.565	.023	3.108	42.962	6a5d
(CHI)	.599	24.702	.024	1.005	41.239	6a5e
(DSK)	.651	25.921	.025	1.093	39.817	6a5f
(HGL)	.434	10.148	.043	.728	23.382	6a5g
(EKM)	.198	10.254	.019	.332	51.788	6a5h

JAN 20 - 26, 1974: A WEEK IN REVIEW

(KEV)	1.869	31.060	.060	3.137	16.619	6a5i
(DCW)	3.409	64.809	.053	5.721	19.011	6a5j
(JEW)	1.275	28.088	.045	2.140	22.030	6a5k
DUVALL	.004	.103	.039	.007	25.750	6a5l
	-----	-----		-----		6a5m
TOTAL	12.623	376.361	.034	21.185		6a5n
						6a5o
(PSO)						6a6
(JML)	.143	12.990	.011	.240	90.839	6a6a
(BAH)	.315	16.717	.019	.529	53.070	6a6b
(MEJ)	.712	44.725	.016	1.195	62.816	6a6c
(KIR)	1.145	35.166	.033	1.922	30.713	6a6d
	-----	-----		-----		6a6e
TOTAL	2.315	109.598	.021	3.886		6a6f
						6a6g
(STA)						6a7
(JHB)	.461	19.461	.024	.774	42.215	6a7a
(DCE)	.739	39.944	.019	1.240	54.051	6a7b
(SRL)	.481	13.144	.037	.807	27.326	6a7c
ANALYSIS	.002	31.307	-	-	0.000	6a7d
(JCN)	1.723	37.488	.046	2.892	21.757	6a7e
(DVN)	.635	16.247	.039	1.066	25.586	6a7f
(PR)	.234	10.398	.023	.393	44.436	6a7g
(RWW)	.358	13.910	.026	.601	38.855	6a7h
	-----	-----		-----		6a7i

JAN 20 - 26, 1974: A WEEK IN REVIEW

TOTAL	4.633	181.899	.025	7.773	6a7j
					6a7k

(GROUP) TOTALS 6a8

GROUP	CPU HRS	CON HRS	CPU/CON	% SYS	
					6a8a
					6a8b
(DOC)	6.010	62.770	.096	10.086	6a8c
(FAC)	2.855	107.372	.027	4.791	6a8d
(NIC)	2.721	83.557	.033	4.567	6a8e
(PRO)	12.623	376.361	.034	21.185	6a8f
(PSO)	2.315	109.598	.021	3.886	6a8g
(STA)	4.633	181.899	.025	7.773	6a8h
	-----	-----		-----	6a8i
TOTAL	31.157	921.557	.034	52.288	6a8j
					6a8k

(STATS) 6a9

HIGHEST CPU: DCW 3.409 hrs LOWEST CPU: CBG .003 hrs 6a9a

HIGHEST CON: JDH 79.565 hrs LOWEST CON: CBG .088 hrs 6a9b

HIGHEST CPU/CON: KEV .060 HIGHEST CON/CPU:1: JML 90.839 6a9c

6a9d

	CPU HRS	CON HRS	CPU/CON	% SYS	CON/CPU:1	
						6b

(NET) 6c

6c1

TOTAL	6.216	297.299	.021	10.432		6c2

JAN 20 - 26, 1974: A WEEK IN REVIEW

6c3

TOP FIVE 6c4

-------- 6c5

GUEST	.671	23.178	.029	1.126	34.542	6c6
UCLA-NMC	.581	24.996	.023	.975	43.022	6c7
MITRE-TIP	.536	32.394	.017	.900	60.437	6c8
UCSB	.495	23.672	.021	.831	47.822	6c9
SDAC-TIP	.465	19.843	.023	.780	42.673	6c10
	-----	-----		-----		6c11
TOTAL	2.748	124.083	.022	4.612		6c12

6c13

(SYS) 6d

SYSTEM	10.677	385.282	.028	17.918	35.714	6d1
PRINTER	6.807	128.488	.053	11.423	18.876	6d2
BACKGROUND	2.772	128.315	.022	4.652	45.455	6d3
	-----	-----		-----		6d4
TOTAL	20.256	642.085	.032	33.993		6d5

(WOR) 6e

6e1

ENERGY	.293	17.355	.017	.492	59.232	6e2
GILBERT	-	-	-	-	-	6e3
JIMB	.046	1.223	.038	.077	26.587	6e4
MARRAH	.020	1.894	.011	.034	94.700	6e5
MARTINEZ	.007	.560	.012	.012	80.000	6e6
	-----	-----		-----		6e7

TOTAL	.366	21.032	.017	.615		6e8
						6e9
(XOX)						6f
						6f1
DEUTSCH	.011	.176	.062	.018	16.000	6f2
PARC-MAXC	.001	.035	.029	.002	35.000	6f3
PARC-VTS	.007	.206	.034	.012	29.429	6f4
SWEET	.011	.874	.013	.018	79.455	6f5
	-----	-----		-----		6f6
TOTAL	.030	1.291	.023	.050		6f7
						6f8
(RAD)						6g
						6g1

NAME	CPU HRS	CON HRS	CPU/CON	% SYS	CON/CPU:1	DIR	
							6g3
BERGS	.154	5.876	.026	.258	38.156		6g4
CARRIER	.048	1.767	.027	.081	36.813		6g5
CAVAN	.083	4.438	.019	.139	53.470		6g6
DAUGHTRY	.001	.015	.067	.002	15.000		6g7
IUORN	.033	1.867	.018	.055	56.576		6g8
KENNE	.312	14.206	.022	.524	45.532		6g9
LAFORGE	.021	1.409	.015	.035	67.095		6g10
LAMON	.041	2.828	.014	.069	68.976		6g11
LAWRE	.116	6.466	.018	.195	55.741		6g12
MCNAM	.017	1.004	.017	.029	59.059		6g13

PANAR	.056	1.569	.036	.094	28.018		6g14
RZEPK	.213	12.002	.018	.357	56.347		6g15
STONE	.386	16.675	.023	.648	43.199		6g16
THAYE	.022	.714	.031	.037	32.455		6g17
TOMAI	.025	.847	.030	.042	33.880		6g18
WINGFIELD	.038	1.958	.019	.064	51.526		6g19
	-----	-----		-----		-----	6g20
TOTAL	1.566	73.641	.021	2.629		000	6g21
(PER CENT TOTAL DISK CAPACITY)						00.00%	6g22
							6g23
							7

BAH 11-FEB-74 15:28 21860

JAN 20 - 26, 1974: A WEEK IN REVIEW

(J21860) 11-FEB-74 15:28; Title: Author(s): Beauregard A. Hardeman/BAH; Distribution: /WAR; Sub-Collections: SRI-ARC WAR; Clerk: BAH;

JAN 27 - FEB 2, 1974: A WEEK IN REVIEW

WEEKLY ANALYSIS REPORT: 1

2

WEEK: JAN 27 - FEB 2, 1974 (24 HOURS/DAY) 3

4

TOTAL SYSTEM CPU: 48.628 5

6

(ARC)	CPU HRS	CON HRS	CPU/CON	% SYS	CON/CPU:1	6a
						6a1
(DOC)						6a2
(JMB)	.011	.567	.019	.023	51.545	6a2a
(NDM)	.665	31.483	.021	1.368	47.343	6a2b
CAT	-	-	-	-	-	6a2c
DOCB	-	-	-	-	-	6a2d
DOCUM	.086	3.792	.023	.177	44.093	6a2e
AUERBACH	.002	.027	.074	.004	13.500	6a2f
	-----	-----		-----		6a2g
TOTAL	.764	35.869	.021	1.572		6a2h
						6a2i
(FAC)						6a3
(RAB)	-	-	-	-	-	6a3a
(MEH)	.060	2.367	.025	.123	39.450	6a3b
(JCP)	2.486	71.580	.035	5.112	28.793	6a3c
(JR)	.009	.691	.013	.018	76.923	6a3d
(EKV)	-	-	-	-	-	6a3e
HRDWRE	.019	1.884	.010	.039	99.158	6a3f

OPRATR	.812	40.431	.020	1.670	49.792	6a3g
	-----	-----		-----		6a3h
TOTAL	3.386	116.953	.029	6.962		6a3i
						6a3j
(NIC)						6a4
(JDC)	.107	4.496	.024	.220	42.019	6a4a
(EJF)	.278	6.600	.042	.572	23.741	6a4b
(CBG)	.009	.141	.064	.019	15.667	6a4c
(MDK)	1.004	21.223	.047	2.065	21.138	6a4d
(MLK)	.719	34.497	.021	1.479	47.979	6a4e
(JBN)	.485	23.471	.021	.997	48.394	6a4f
NETINFO	.003	.049	.061	.006	16.333	6a4g
NIC-WORK	-	-	-	-	-	6a4h
	-----	-----		-----		6a4i
TOTAL	2.605	90.477	.029	5.358		**6a4j
						6a4k
(PRO)						6a5
(DIA)	.216	17.987	.012	.444	83.273	6a5a
(WRF)	.869	24.523	.035	1.787	28.220	6a5b
(JDH)	.687	24.881	.028	1.413	36.217	6a5c
(CHI)	.418	13.703	.031	.860	32.782	6a5d
(DSK)	1.100	28.086	.039	2.262	25.533	6a5e
(HGL)	.771	15.041	.051	1.586	19.508	6a5f
(EKM)	.161	10.181	.016	.331	63.236	6a5g
(KEV)	1.733	36.489	.047	3.564	21.055	6a5h

(DCW)	3.577	69.833	.051	7.356	19.523	6a5i
(JEW)	1.692	31.114	.054	3.479	18.389	6a5j
	-----	-----		-----		6a5k
TOTAL	11.224	271.838	.041	23.082		6a5l
						6a5m
(PSO)						6a6
(JML)	.049	5.740	.009	.101	117.143	6a6a
(JMB)	.011	.567	.019	.023	51.545	6a6b
(EAH)	.475	12.229	.039	.977	25.745	6a6c
(MEJ)	1.126	65.528	.017	2.316	58.195	6a6d
(KIR)	1.198	31.580	.038	2.464	26.361	6a6e
	-----	-----		-----		6a6f
TOTAL	2.848	115.077	.025	5.858		6a6g
						6a6h
(STA)						6a7
(JHB)	.611	19.440	.031	1.256	31.817	6a7a
(DCE)	.644	18.157	.035	1.324	28.194	6a7b
(SRL)	.814	11.917	.068	1.674	14.640	6a7c
(JCN)	2.459	74.478	.033	5.057	30.288	6a7d
(DVN)	.426	13.216	.032	.876	31.023	6a7e
(PR)	.181	6.400	.028	.372	35.359	6a7f
(RWW)	.334	9.246	.036	.687	27.683	6a7g
	-----	-----		-----		6a7h
TOTAL	5.469	152.854	.036	11.246		6a7i
						6a7j

JAN 27 - FEB 2, 1974: A WEEK IN REVIEW

(GROUP) TOTALS

GROUP	CPU HRS	CON HRS	CPU/CON	% SYS
(DOC)	.764	35.869	.021	1.572
(FAC)	3.386	116.953	.029	6.962
(NIC)	2.605	90.477	.029	5.358
(PRO)	11.224	271.838	.041	23.082
(PSO)	2.848	115.077	.025	5.858
(STA)	5.469	152.854	.036	11.246
TOTAL	26.296	783.068	.034	54.078

(STATS)

HIGHEST CPU: DCW 3.577 hrs LOWEST CPU: JR .009 hrs

HIGHEST CON: DCW 69.833 hrs LOWEST CON: CBG .141 hrs

HIGHEST CPU/CON: SRL .068 HIGHEST CON/CPU:1: JML 117.143

	CPU HRS	CON HRS	CPU/CON	% SYS	CON/CPU:1
(NET) TOTAL	6.157	292.002	.021	12.661	

TOP FIVE

--------						6c5
MITRE-TIP	.951	50.411	.019	1.956	53.008	6c6
UCLA-NMC	.921	48.014	.019	1.894	52.132	6c7
UCSB	.589	20.425	.029	1.211	34.677	6c8
NBS-TIP	.379	19.340	.020	.779	51.029	6c9
SDAC-TIP	.360	11.255	.032	.740	31.264	6c10
	-----	-----		-----		6c11
TOTAL	3.200	149.445	.021	6.580		6c12
						6c13
(SYS)						6d
SYSTEM	7.708	238.952	.032	15.851	31.250	6d1
PRINTER	6.307	76.794	.082	12.970	12.176	6d2
BACKGROUND	1.525	76.793	.020	3.136	50.356	6d3
	-----	-----		-----		6d4
TOTAL	29.498	392.539	.075	31.957		6d5
(WOR)						6e
						6e1
ENERGY	.524	21.931	.024	1.078	41.853	6e2
GILBERT	-	-	-	-	-	6e3
JIMB	.051	2.028	.025	.105	39.765	6e4
MARTINEZ	.009	.611	.015	.019	67.889	6e5
MARRAH	-	-	-	-	-	6e6
	-----	-----		-----		6e7
TOTAL	.584	24.570	.024	1.202		6e8
						6e9

JAN 27 - FEB 2, 1974: A WEEK IN REVIEW

(XOX) 6f

6f1

(LPD)DEUTSCH	.034	.341	.100	.070	10.029	6f2
PARC-VTS	.006	.221	.027	.012	36.833	6f3
SATTERTHWAITE	.003	.056	.054	.006	18.667	6f4
	-----	-----		-----		6f5
TOTAL	.043	.618	.070	.088		6f6

6f7

(RAD) 6g

6g1

NAME	CPU HRS	CON HRS	CPU/CON	% SYS	CON/CPU:1	
						6g2
						6g3
BERGS	-	-	-	-	-	6g4
BETHK	-	-	-	-	-	6g5
CAVAN	-	-	-	-	-	6g6
IUORN	-	-	-	-	-	6g7
KENNE	.002	.036	.056	.004	18.000	6g8
LAMON	-	-	-	-	-	6g9
LAWRE	-	-	-	-	-	6g10
MCNAM	-	-	-	-	-	6g11
PANAR	-	-	-	-	-	6g12
RADC	-	-	-	-	-	6g13
RZEPK	-	-	-	-	-	6g14
SLIWA	-	-	-	-	-	6g15
STONE	.008	.584	.014	.016	73.000	6g16

THAYE	-	-	-	-	-	6g17
TOMAI	-	-	-	-	-	6g18
	-----	-----		-----		6g19
TOTAL	.010	.620	.016	.020		6g20
(PER CENT TOTAL DISK CAPACITY)						6g21
						6g22
						7

BAH 11-FEB-74 15:30 21861

JAN 27 - FEB 2, 1974: A WEEK IN REVIEW

(J21861) 11-FEB-74 15:30; Title: Author(s): Beauregard A. Hardeman/BAH; Distribution: /WAR; Sub-Collections: SRI-ARC WAR; Clerk: BAH;

DCE 11-FEB-74 18:25 21862

All-ARC meeting on Wed 13 Feb

To all ARC staff: Unless otherwise notified, please reserve from 1030 to 1200 on Wed 13 Feb for an all-ARC meeting. Some question right now as to possible time conflicts, but I do want to have the meeting some time on Wed. If you have conflicts, please contact Jeanne Leavitt. Regards, Doug 1

DCE 11-FEB-74 18:25 21862

All-ARC meeting on Wed 13 Feb

(J21862) 11-FEB-74 18:25; Title: Author(s): Douglas C. Engelbart/DCE; Distribution: /SRI-ARC; Sub-Collections: SRI-ARC; Clerk: DCE;

DHC 11-FEB-74 20:31 21863

Addition to USERS
cc: KEENEY at SRI-ARC
- - - -

Marcia -- please add Buz Owen (SDAC-TIP) to USERS. I believe
his ident is ADO. Thanks. Dave.

1

2

DHC 11-FEB-74 20:31 21863

Addition to USERS
cc: KEENEY at SRI-ARC
- - - -

(J21863) 11-FEB-74 20:31; Title: Author(s): David H. Crocker/DHC ;
Distribution: /MDK ; Sub-Collections: NIC; Clerk: DHC;

DVN 11-FEB-74 22:28 21864

EPAC Problems and DRAFT Meeting File

Meeting File: 1

I have prepared a basic meeting file at Office-1. The first branch (enegy,meetings,1) is a dummy which can be coppied and edited to create the minutes of succeeding meetings. The second branch (energy,meetings,feb-7) renders the EPAC West meetng of that date in this format. I have left out part branch ? for later typein. The meeting file should cross-link to (energy,calendar,), but I have not put in the links because of the calendar problem noted below. I imagine journalizing branches out of the meeting file at some regular interval, say a month, and then using the keywords. Please comment. 1a

Problems:: 2

PASSWORDS: 2a

The of energy at Office 1 has gone back to what it was before last Firday ( ). Maybe that happened in the transfer of files over the weekend. I suppose everyone is used to trying both by this time, but I suggest we change it to the present password of <energy> at ARC. Rita and Dean will read this while the West sleeps. Why don't you go ahead and change it unles you see problems. 2a1

<ENERGY>@ARC 2b

This directory is now empty, but it is not clear to me that all the files moved to Office 1. 2b1

The directory has pages. I suggest we keep it for working space, backup files, etc., but keep all functional files (calendar, meetings, etc.) at office-1. 2b2

<ENERGY>Calendar 2c

The version of this file at Office 1 has not been read since January 28. If no one has used it, we should. If anyone has written on it since, tell me and I will try to get your work back from a dump. 2c1

RUNFILE MAIL-WEST 2d

Somehow Eileen and I screwedup running this file again. I think we were doing something dumb. I think we should try again linked to Dean. 2d1

UPDATING (ENERGY,MAIL,) 2e

Rita left (energy,mail.nls;) at office 1 locked. I logged in as her and updated. We should be careful abut that. 2e1

DVN 11-FEB-74 22:28 21864

EPAC Problems and DRAFT Meeting File

(J21864) 11-FEB-74 22:28; Title: Author(s): Dirk H. Van Nouhuys/DVN; Distribution: /NDM JCN JBN(fyi) RJ PGK ECW RAS OWW; Sub-Collections: SRI-ARC; Clerk: DVN;

JHB 11-FEB-74 21:59 21865

Visitlog, Richards from the Institute for Communication Research, S.U.

Good person to collaborate with on analysis.

JHB 11-FEB-74 21:59 21865

Visitlog, Richards from the Institute for Communication Research, S.U.

Visitlog 7-FEB-74, Bill Richards, Institute for Communication Research, Stanford U, PhD Grad. Student Major = Human Communication (member ICA), BS Mich State 71. Chairman = Parker. (321 6594) 1

Is interested in studying communication patterns affected by advanced technology. Currently is working on mathamatical networks which define interelationships among real world nodes mapped into computer programs that Bill wrote. He has seen a lot of computer applications and was very impressed by the demo of ours. Noted that many people aren't aware how far the technology has advanced, and are totally unaware of the advanced state exists as represented by NLS. 1a

Referred by Gerhard Hanneman -- see Visitlog, 7 Dec 73, Hanneman and Knight from Annenberg (GJOURNAL, 21306, 1:w) 1b

Documentation he was given:
AFOSR-3223, SRI-ARC 3954, SRI-ARC 19250, SRI-ARC 18368, and The Experiences with an AKW... (Bair) 1b1

JHB 11-FEB-74 21:59 21865

Visitlog, Richards from the Institute for Communication Research, S.U.

(J21865) 11-FEB-74 21:59; Title: Author(s): James H. Bair/JHB; Distribution: /RWW DCE PR MDK JCN DVN; Sub-Collections: SRI-ARC; Clerk: JHB;

DCW 12-FEB-74 06:15 21866

Some Random Bullshit

Bullshit, elocuently expressed by intelligent people, is still bullshit.

Being a participant in and experimental management system is sort of like having the designer and a mechanic working on your car while you are driving down the freeway(expressway?).

The most important aspect of system design is the expectations of the user.

The phrase "thousands of terminals" is still maddness.

Extrapolation like intuition is almost always wrong.

If someone finds the "real world" would they please notify me.

1

DCW 12-FEB-74 06:15 21866

Some Random Bullshit

(J21866) 12-FEB-74 06:15; Title: Author(s): Donald C. (Smokey) Wallace/DCW; Distribution: /SRI-ARC; Sub-Collections: SRI-ARC; Clerk: DCW;

JAKE 12-FEB-74 08:55 21868

More statistics for User-Def paper

There is a paper outlining some of the usage of the NIC but which also indicates network user interest from which we may want to quote or extract the group document distribution or 'traffic' under the section Who Are the Users of the Arpanet. The paper is (GJOURNAL,21624,1:x). Let me know what you think. 1

JAKE 12-FEB-74 08:55 21868

More statistics for User-Def paper

(J21868) 12-FEB-74 08:55; Title: Author(s): Elizabeth J. (Jake) Feinler/JAKE; Distribution: /UDEF; Sub-Collections: SRI-ARC UDEF; Clerk: JAKE;

MLK 12-FEB-74 11:32 21870

Addition to NSC

John Heafner at USC-ISI would like to added to the membership of the Network Speech Compression Group. As coordinator of the group, you have to OK this before I add him (or don't add him). His phone number is (213) 822-1511. Please let me know what you decide.
Marcia Keeney

1

MLK 12-FEB-74 11:32 21870

Addition to NSC

(J21870) 12-FEB-74 11:32; Title: Author(s): Marcia Lynn Keeney/MLK;
Distribution: /REK2; Sub-Collections: SRI-ARC; Clerk: MLK;

Documents/Literature Received W/E 8 Feb 74

The following documents arrived at SRI-ARC recently. They may be obtained from Mil Jernigan. Please note that these documents are NOT as yet coded in the Catalog data base and should be checked out from Mil with the understanding that they will not be passed on directly to others but will be returned promptly to Mil for proper processing. Thank you very much for your understanding in assisting us to properly record documents arriving for our collections.

1

Accessions, Week Ending 8 Feb 74

2

(T21071) Jacob Marschak. Economic Planning and the Cost of Thinking. In: Social Research, Vol. 33, Summer 1966, p.151-159. (Photoreprint)

2a

(T21070) Kenneth R. Smith (Center for Operations Research and Econometrics, Universite' Catholique de Louvain (Belgium)). The Effect of Uncertainty on Monopoly Price, Capital Stock and Utilization of Capital. In: Journal of Economic Theory, Vol. 1, 1969, p.48-59. (Photoreprint)

2b

(T21069) Jacob Marschak. Decision Making: Economic Aspects. In: International Encyclopedia of the Scoial Sciences, Vol. 4, 1968, p.42-55. 68 references. (Photoreprint)

2c

(T21067) Bolt Beranek and Newman Inc., Cambridge, Massachusetts. Interface Message Processors for the ARPA Computer Network - Quarterly Technical Report No. 4, 1 October 1973 to 31 December 1973. BBN Report No. 2717. January 1974, 36p. (NIC collection)

2d

(T21066) Philip Feldman (Bell Canada, Business Planning Group, H.Q. Planning Department, Montreal, Quebec, Canada). Group Judgmental Data in Cross Impact Analysis and Technology Assessment. Business Planning Paper No. 19. November 1973, 30p. (NIC collection)

2e

(T21065) Lawrence H. Day (Bell Canada, Business Planning Group, H.Q. Planning Department, Montreal, Quebec, Canada). Dimensions of Future Travel/Communications Substitutability. Business Planning Paper 18. October 1973, 29p. (NIC collection)

2f

Documents/Literature Received W/E 8 Feb 74

(T21064) Michael T. Bedford (Bell Canada, Business Planning Group, H.Q. Planning Department, Montreal, Quebec, Canada). Technology Assessment and the Future of Educational Technology. May 1973, 23p. (NIC collection)

2g

(T21063) Lawrence H. Day (Bell Canada, Business Planning Group, H.Q. Planning Department, Montreal, Quebec, Canada). The Future of Computer and Communications Services. Business Planning Paper 6. February 1973, 37p. (NIC collection)

2h

(T21062) Michael T. Bedford (Bell Canada, Business Planning Group, H.Q. Planning Department, Montreal, Quebec, Canada). A Technology Assessment of Future Home Communications Services - A Study Proposal. Business Planning Paper 12. May 1973, 17p. (NIC collection)

2i

(T21061) D. M. Atkinson (Bell Canada, Business Planning Group, H.Q. Planning Department, Montreal, Quebec, Canada). Three Papers on Telecommunications and Social Environment with an Impact on Business. Business Planning Paper 11. April 1973, 36p. Contains: "The Nature of Our Social Environment and Business Beyond 1973"; "Communications Environment of the 1980's"; and "The Impact of the Social Responsibility of Business on the Internal Auditor". (NIC collection)

2j

(T21059) Lawrence H. Day (Bell Canada, Business Planning Group, H.Q. Planning Department, Montreal, Quebec, Canada). Electronic Mail Services in the Information Age. Business Planning Paper 1. October 1972, 22p. (NIC collection)

2k

(T21058) Philip Feldman (Bell Canada, Business Planning Group, H.Q. Planning Department, Montreal, Quebec, Canada). Cross Impact Matrix Applications in Technology and Policy Assessment. Business Planning Paper No. 15. September 1973, 35p. (NIC collection)

2l

(T21057) IMC - Industrial Management Center, Inc., Austin, Texas. Technology Forecasting: A Workshop in Principles, Applications and Practice, 19th Short Course. January 6-10, 1974; Environmental Inputs to Technology Forecasting, 20th Short Course, January 13-17, 1974. Hilton Head Inn, Hilton Head, South Carolina. Undated, 16p.

2m

Documents/Literature Received W/E 8 Feb 74

(T21056) Donald E. Knuth (Stanford University, Computer Science Department, Stanford, California). Sorting and Searching - Errata and Addenda. STAN-CS-73-392. October 1973, 35p. (NIC collection)

2n

(T21055) J. M. Winett, A. J. Sames (Lincoln Laboratory, Massachusetts Institute of Technology, Lexington, Massachusetts). An Interface to the ARPA Network for the CO/CMS Time-Sharing System, Volume II, Flow Charts. Technical Note 1973-50. 28 November 1973, 174p. (NIC collection)

2o

(T21054) J. M. Winett, A. J. Sammes (Lincoln Laboratory, Massachusetts Institute of Technology, Lexington, Massachusetts). An Interface to the ARPA Network for the CP/CMS Time-Sharing System, Volume I. Technical Note 1973-50.28 November 1973. 116p. (NIC collection)

2p

(T21053) Project MAC, Massachusetts Institute of Technology, Cambridge, Massachusetts. Project MAC, Progress Report 10, July 1972-July 1973, undated (received 31 Jan. 1974), 253p. (NIC collection)

2q

(T21052) Steven P. Geiger (Massachusetts Institute of Technology, Engineering Robotics Group, Project MAC, Cambridge, Massachusetts). A User's Guide to the MACRO Control Language. Technical Memorandum 36. December 1973, 38p. (NIC collection)

2r

(T21051) Robert M. Metcalfe (Massachusetts Institute of Technology, Project MAC, Cambridge, Massachusetts). Packet Communication. MAC TR-114. December 1973, separately paged. (Ph.D. thesis) (NIC collection)

2s

MEJ 12-FEB-74 14:21 21872

Documents/Literature Received W/E 8 Feb 74

(J21372) 12-FEB-74 14:21; Title: Author(s): Mil E. Jernigan/MEJ;
Distribution: /SRI-ARC; Keywords: Catalog Accessions; Sub-Collections:
NIC SRI-ARC; Clerk: MEJ;
Origin: <JERNIGAN>ACCESSIONS.NLS;3, 12-FEB-74 14:06 MEJ ;

MLK 12-FEB-74 11:48 21873

Additions to the Network Graphics Group

John Heafner at USC-ISI would like to be added to the membershipe of the Network Graphics Group. As coordinator of the group, you have to OK this before I add him (or don't add him). His phone number is (213) 822-1511. Please let me know what you decide.
Marcia Keeney 1

MLK 12-FEB-74 11:48 21873

Additions to the Network Graphics Group

(J21873) 12-FEB-74 11:48; Title: Author(s): Marcia Lynn Keeney/MLK;
Distribution: /JCM; Sub-Collections: SRI-ARC; Clerk: MLK;

KEV 12-FEB-74 12:25 21874

imnls

John, 1

I'd like first to apologize for the long delay in getting back to you. I received your filled in questionnaire some months ago, however, i've been hung up on a number of other things since then and have not had any time at all to devote to IMLAC related matters. 1a

I hope to be able to configure an IMNLS and an IMLOAD for you within the next 2 weeks. When I have them done, I will notify you and we can work together on getting your IMLAC running DNLS. 1b

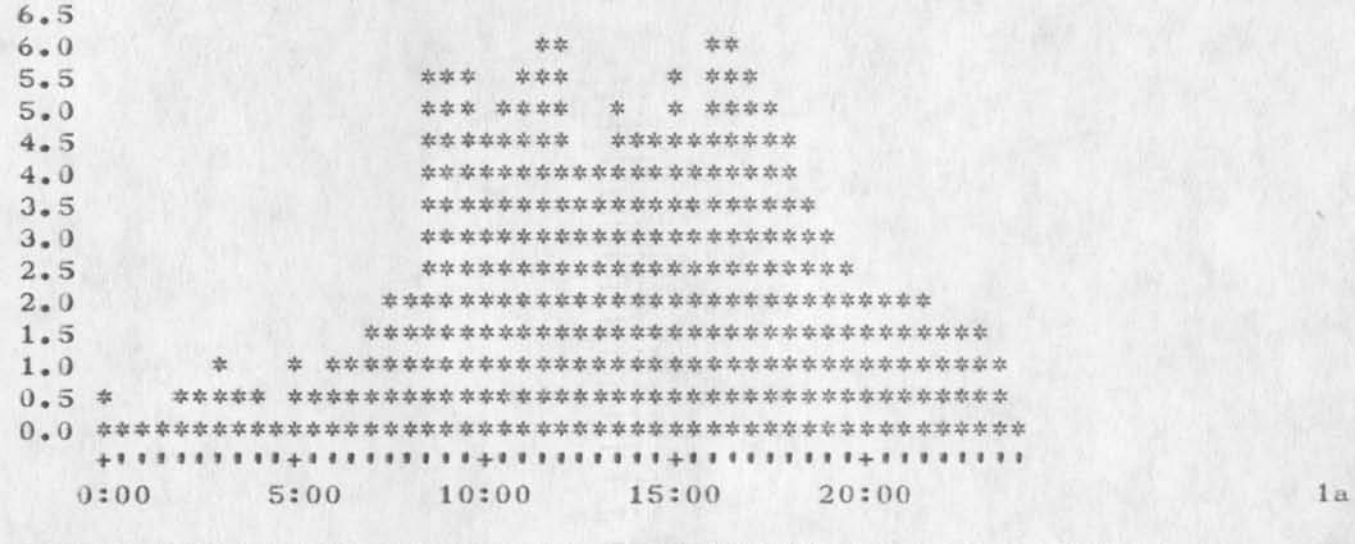
KEV 12-FEB-74 12:25 21874

imnls

(J21874) 12-FEB-74 12:25; Title: Author(s): Kenneth E. (Ken) Victor/KEV; Distribution: /JWB2; Sub-Collections: SRI-ARC; Clerk: KEV;

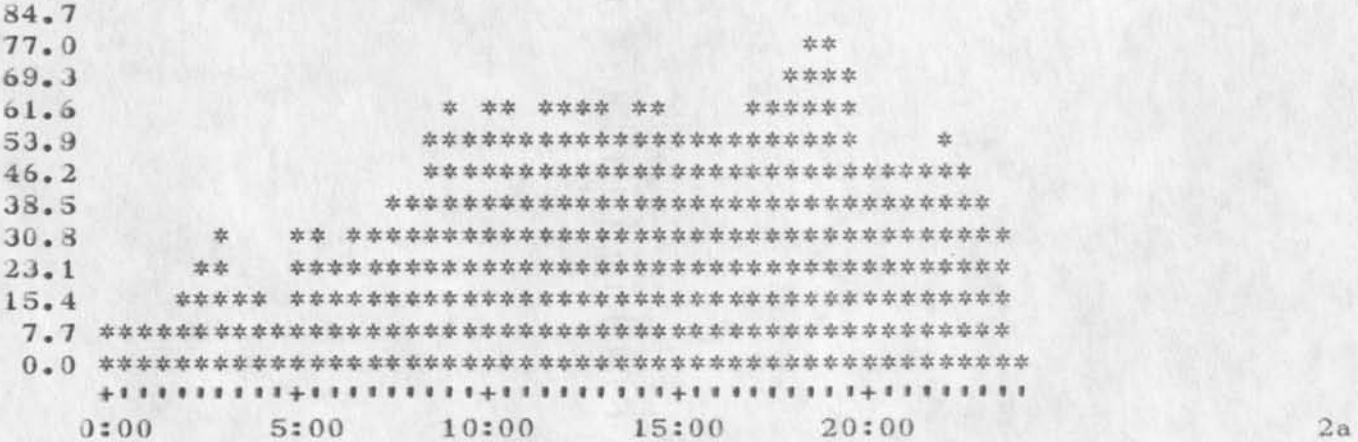
Superwatch Average Graphs for Week of 2/3/74

TIME PLOT OF AVERAGE NUMBER OF GO JOBS FOR WEEK OF 2/3/74
x axis labeled in units of hr:min, xunit = 30 minutes 1



1a

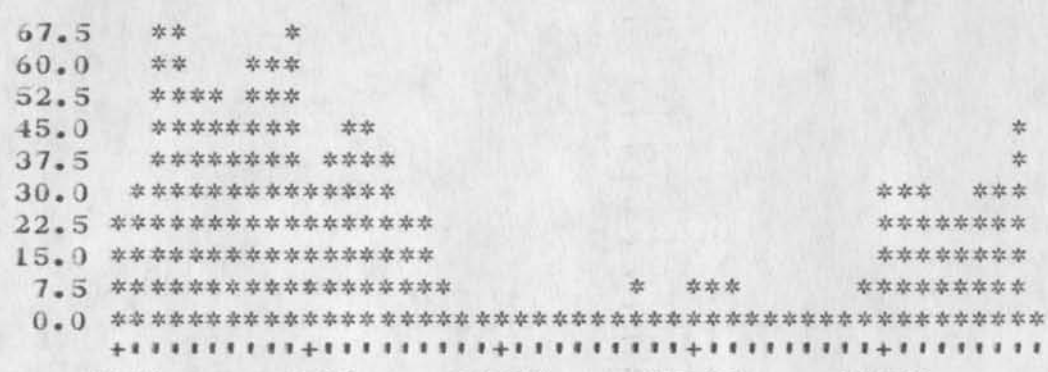
TIME PLOT OF AVERAGE PER CENT OF CPU TIME CHARGED TO USER ACCOUNTS
FOR WEEK OF 2/3/74
x axis labeled in units of hr:min, xunit = 30 minutes 2



2a

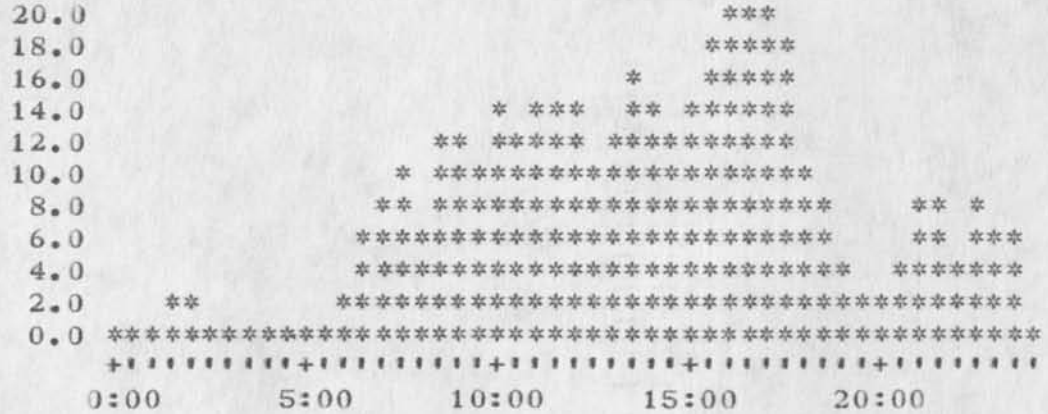
Superwatch Average Graphs for Week of 2/3/74

TIME PLOT OF AVERAGE IDLE TIME FOR WEEK OF 2/3/74
x axis labeled in units of hr:min, xunit = 30 minutes 3



3a

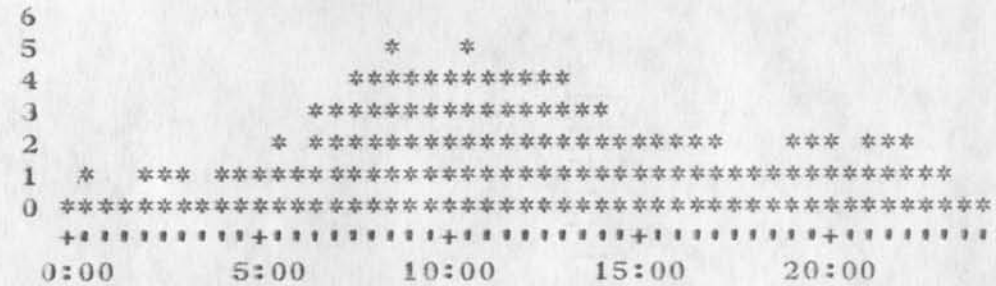
TIME PLOT OF AVERAGE PER CENT OF SYSTEM USED IN DNLS FOR WEEK OF 2/3/74
x axis labeled in units of hr:min, xunit = 30 minutes 4



4a

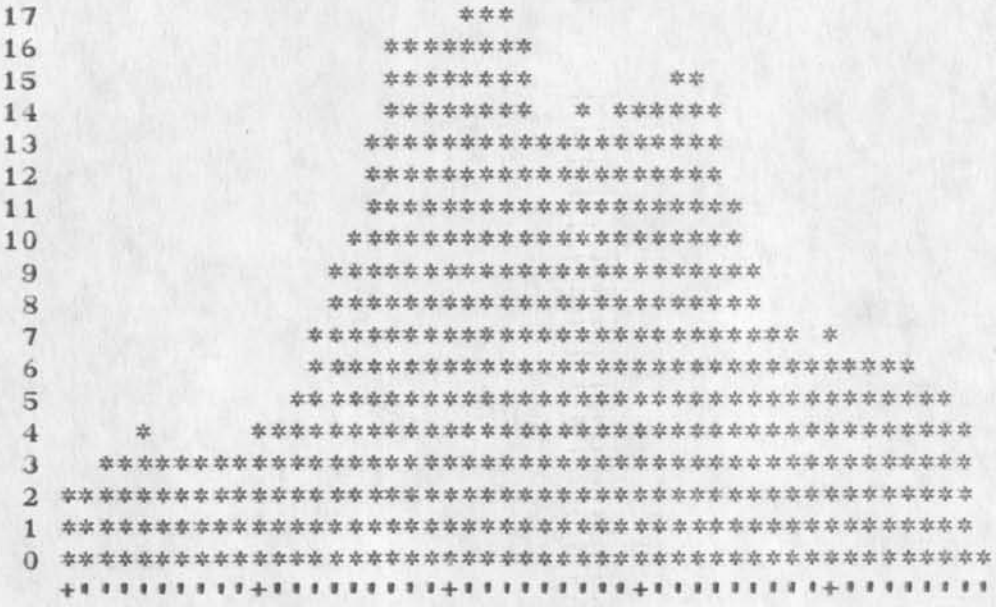
Superwatch Average Graphs for Week of 2/3/74

TIME PLOT OF AVERAGE NUMBER OF NETWORK USERS FOR WEEK OF 2/3/74
x axis labeled in units of hr:min, xunit = 30 minutes 5



5a

TIME PLOT OF AVERAGE NUMBER OF USERS FOR WEEK OF 2/3/74
x axis labeled in units of hr:min, xunit = 30 minutes 6



6a

SRL 12-FEB-74 16:18 21875

Superwatch Average Graphs for Week of 2/3/74

(J21875) 12-FEB-74 16:18; Title: Author(s): Susan R. Lee/SRL;
Distribution: /JCN RWW DCE PR JCP DVN JAKE DLS BAH; Sub-Collections:
SRI-ARC; Clerk: SRL;
Origin: <LEE>WEEK2/3GRAPHS.NLS;2, 12-FEB-74 13:37 SRL ;

This is a private document, submitted as a message via RNLS. 1

(J21876) 12-FEB-74 17:21; Title: Author(s): James E. (Jim) White/JEW; Distribution: /JEW; Sub-Collections: SRI-ARC; AccessList: JEW; Clerk: JEW;

DVN 12-FEB-74 17:27 21877

Problems with Mail to Office 1

Last night I sent an item, (hjournal,21864,) to serveral people at arc and others at office one (including pgk ecw ras oww and rj). As of this afternoon it still had not been delivered at ofice 1. Some people (ecw) have been asked for their ident when they enter nls even though they now have their own direcotry. 1

DVN 12-FEB-74 17:27 21877

Problems with Mail to Office 1

(J21877) 12-FEB-74 17:27; Title: Author(s): Dirk H. Van Nouhuys/DVN; Distribution: /JDH WRF JCN NDM; Sub-Collections: SRI-ARC; Clerk: DVN;

KIRK 12-FEB-74 18:12 21878

One function desired when Sandy Johnson arrives.

In response for your requests for potential functions that might be established when Sandy Johnson arrives, please consider the need for someone to help with the feedback process. Sandy may free Jeanne Leavitt or someone else to devote some time, or she could be assigned to do it herself. Whatever's right. Please read (analysis, nnls, development) for a description of the kind of support involved. 1

KIRK 12-FEB-74 18:12 21878

One function desired when Sandy Johnson arrives.

(J21878) 12-FEB-74 18:12; Title: Author(s): Kirk E. Kelley/KIRK;
Distribution: /DVN; Sub-Collections: SRI-ARC; Clerk: KIRK;

SRI Proposal ISU 74-52 - Knowledge Workshop Support for the ARPA Seismic Data Management System

I INTRODUCTION:

The Augmentation Research Center (ARC) of Stanford Research Institute (SRI) proposes to provide initial computer support and technical assistance in the establishment of an NLS-supported Development Center to be coordinated by the Seismic Discrimination Group (SDG) at MIT in Cambridge, Massachusetts, as part of the ARPA Nuclear Monitoring Research Office (NRMO) Seismic Data Management System (SDMS).

This proposal results from several discussions of the activities described below, commencing with an initial planning meeting held between ARC, NMRO, and SDG staff at ARPA on January 3, 1974. For further discussion of that meeting, see (21372,1)

II OBJECTIVES:

The SDMS Development Center is being created by NMRO to facilitate:

- development and control of SDMS documentation
- working dialogue between SDMS-developing organizations
- management of and access to system-development data

The main objectives of ARC support of this activity are:

- to provide useful technical and computer support to the SDG staff as they establish the Center
- to initiate work toward developing methods and procedures that will permit an augmented, evolutionary growth of coordinated SDMS information services
- to apply ARPA-sponsored "augmentation technology" to real-world tasks in the SDM system

III BACKGROUND AND TECHNICAL NEED:

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

For further background discussion, see (12445,1) and (14724,1).

A well set up Development Center, as contemplated by the ARPA-NMRO staff could provide significant value to the SDMS development project. It is close to an ideal form of initial application for our ARPA-sponsored Augmented Knowledge Workshop technology and has the potential of affording real service to the SDMS system developers, while offering them excellent experience with the Knowledge Workshop possibilities that they could consider including in the subsequent, operational SDM System.

IV PROPOSED EFFORT:

A. SUPPORT TO SDMS Community Development Center

ARC proposes to provide initial personnel support to NMRO and SDG in the planning and setting-up of the SDMS Development Center and assistance in terminal and other equipment acquisition and installation at the Center. We intend to propose additional assistance following this first phase of support.

We are considering launching our first two months support for the Center in a manner similar to the approach used with the ARPA-sponsored SRI DEIS Project Centers -- having an ARC "start-up crew" work with the Center staff assisting them until they can use the system workshop facilities with a minimum of direct assistance. For further discussion of this activity, see (21447,1)

We anticipate that NMRO will select a "Development Center Workshop Architect" from among the SDMS-developing organizations to coordinate the introduction of workshop technology to the Center. The role of "Architect," in the sense used here, is described in (14946,3c2b2). Primary ARC support would be provided through assistance to the Architect and through initial training of key personnel in workshop system operation.

Initial NLS Workshop Support Areas:

COLLABORATIVE DIALOGUE:

The Workshop offers computer aids for the composition of messages and documents and for their subsequent reviewing, cross-referencing, modification, transmission, storage, indexing, and full-text retrieving. A "message" may be one word in length, or two hundred or more printed pages. In any message there may be formalized citations pointing to

specific passages in prior messages, so that a group of related messages becomes a network of recorded-dialogue contributions.

NLS offers automatic delivery of messages; full cataloging and indexing; online accessibility both to message notification and to the full text of all messages; and open-ended storage of the dialogue records. These services enable a community of people who are distributed in space and time to maintain recorded, collaborative dialogue at a new degree of effectiveness.

To support "real-time" remote dialogue (teleconferencing), we can provide the following features:

Two or more NLS users can "link up" at any time, so that each party sees a common displayed or printed view; either party is able to control terminal operations, and both mutually have access to the full range of Workshop functions over any of the online information.

DOCUMENT DEVELOPMENT, PRODUCTION, AND CONTROL:

The Workshop offers a rich set of computer aids for the composition, study, and modification of document drafts, and for automatically generating high-quality photocomposition output with flexible controls for font-designation and formatting, to enable the production of publication-grade hardcopy (printing masters, or microform masters).

There are processes for collaboration among several writers, and with an editor, in the process of evolving a final draft. Included among such helpers can be experienced production people to help in laying out a finished document, in inserting proper designations for specifying font, size, and density of different character strings, and for managing footnotes, cross-references, tables of contents, indices, etc.

There are also aids for the people who must keep control of changes, new-version distributions, etc., and provide the indexing to complex documents or sets of documents. Planned improvements include facility for handling complex graphic portrayals and extensive special symbols.

MEETINGS AND CONFERENCES:

Teams of collaborating people can use our regular workshop techniques in meetings to present and explain material from their online data base, reviewing and changing the agenda and the meeting notes; some meetings operate very profitably in a mode of "collaborative position-statement development," with a facility that for many purposes can be superior to using a chalkboard.

Two possible specific applications of NLS to this program have been suggested by NMRO staff:

The first application would support the system planning process that is currently just beginning.

For this task on-line files could be established addressing the various elements of the program. Examples of possible elements of these files are:

Seismic array/station characteristics
Data format standards
SDAC organization and data processing system
Seismic data storage file organization and data language procedures
Signal processing research
ASC, SRO, and HGLP data processing procedures

Communications groups involved in appropriate elements of the program would be responsible for preparing the data required to complete each section. To enter the information into NLS, it is proposed that one slot on the NLS utility be used.

An initial Development center would be established at the SDG, in Cambridge, Massachusetts, where Dr. Richard Lacoss is responsible for the overall seismic data network planning.

The second application would begin when the SDM system begins operation. This phase would maintain the on-line files outlined above, as well as add periodic summaries of operational information of interest to the program. ARC support in this area would be the subject of a separate proposal.

B. ACCESS TO COMPUTER FACILITIES: OFFICE-1

We are assuming the SDMS support effort would use one Utility slot, allocated from IPTO's subscription.

The OFFICE-1 Workshop Utility Service is described in the SRI-ARC proposal to provide Workshop Utility service to ARPA (14946,1), and in a recent announcement of the service (21645,1).

The availability of OFFICE-1 computer resources should be coordinated by NMRO with IPTO through Col. John S. Perry.

Computer access will be provided for one simultaneous guaranteed-access user job, 16 hours a day, Monday through Saturday, to be supplied from the OFFICE-1 PDP-10 TENEX system (Host 43 octal) operated by TYMSHARE, INC. The primary user program is NLS, the SRI-ARC "on-line system".

C. EQUIPMENT TO BE PROVIDED

We will provide appropriate terminal equipment for effective use and demonstration of NLS technology.

This will include a Delta Data display, with line processor, mouse, keyset and two T-I typewriter terminals with Termicette Magnetic tape recording features (permitting off-line text preparation for more effective use of the Utility job slot).

V DISCUSSION OF FUTURE POTENTIAL SUPPORT AREAS:

NLS Workshop features that should be considered as potential future additional support areas for the SDMS community are:

COMMUNITY MANAGEMENT AND ORGANIZATION:

Where the SDMS community organizations have conventional project-management operations, their Workshop can include computer aids for the enriching services of dialogue support, document development, and a "Handbook" system. An extension of the Handbook mentioned below could contain plans, commitments, schedules, specifications, and current-state records of work in progress, with special Workshop tools to support management analysis and control.

With the probable increase in the amount and intensity of distributed collaboration within the community, "committee work" would become more widespread, dynamic, and important. Thus there would be greater dependence upon better techniques for inter-communication and management within the

committee-like structures by which a Community goes about its composite business. Harnessing these new techniques will lead to very different ways in which distributed communities can be organized and in which they can go about their business. The possibility of considerable improvement here, stemming from relatively modest innovative investments, is an important part of our motivation toward facilitating the development of the SDMS.

RESEARCH INTELLIGENCE:

The provisions within the Dialogue Support System for cataloging and indexing internally generated items also support the management of externally generated items -- bibliography, contact reports, clippings, notes, etc.

With these centrally supplied (and therefore uniformly available) services, a community can maintain a dynamic and highly useful "intelligence" data base to help it keep up to date on external happenings that particularly affect it.

Citations of external items from within the internally-generated dialogue base -- in the form of annotations, miscellaneous commentary, or supportive references -- offer computer-sensible interlinking of the external information with the internal, and considerably facilitate browsing, retrieval, back-citation searching, etc.

COMMUNITY HANDBOOK DEVELOPMENT:

ARC intends to work toward extending the above services by developing new techniques for the coordinated handling of a very large and complex body of documentation and its associated external references. We use the term "superdocument" to refer to such material when integrated into a monolithic whole. There are a number of important applications for a system that facilitates the responsive development and evolution of a superdocument by many (distributed) individuals.

In particular, for either a discipline- or project-oriented community, one very important application of a centrally available "superdocumentation" service would be to maintain "The Community Handbook" -- i.e., a uniform, complete, consistent, up-to-date integration of the special knowledge representing the current status of the community.

Such a Handbook would include: principles, working hypotheses,

practices, special-term glossaries, standards, goals, goal status, supportive arguments, techniques, observations, how-to-do-it items, etc. An active community would be constantly involved in dialogue bearing upon the contents of the last formal version of its Handbook -- comments, errata, suggestions, challenges, counter examples, altered designs, improved arguments, new experimental techniques and data, etc. Constant updating would provide a "certified, community position structure" about which the real evolutionary work would swarm; flexible aids for online "navigation and view generation" would be very important, as would the facility for automatic publication.

VII REFERENCES:

1 ARC 12445, D. C. Engelbart, "Coordinated Information Services for Discipline- and Mission-Oriented Communities," Stanford Research Institute, Augmentation Research Center, 12 December 1972.

2 ARC 14724, D. C. Engelbart, R. W. Watson, J. C. Norton, "The Augmented Knowledge Workshop," AFIPS Proceedings National Computer Conference, June 1973.

3 ARC 14946, R. W. Watson and J. C. Norton, "Proposal for Research No. ISU-73-5 -- WORKSHOP UTILITY SERVICE FOR ARPA AND IPT," Stanford Research Institute, Augmentation Research Center, 29 March 1973.

4 ARC 21372, D. C. Engelbart, "NMRO IPTO ARC Meeting, 3 Jan 74: Seismic Data Management System," Stanford Research Institute, Augmentation Research Center, 12 January 1974.

5 ARC 21447, R. W. Watson and J. C. Norton, "AUGMENTED KNOWLEDGE WORKSHOP SUPPORT FOR THE ARPA/SRI DEIS," Stanford Research Institute, Augmentation Research Center, 31 January 1974.

6 ARC 21645, J. C. Norton, "A New ARPANET Subscription Service: The Workshop Utility at OFFICE-1," Stanford Research Institute, Augmentation Research Center, 28 January 1974.

I ESTIMATED TIME AND CHARGES

It is proposed that the initial effort in the areas outlined above be performed during a period of 2 months, between 1 May and 30 June 1974. We anticipate submitting a separate proposal for extended effort to be provided after June 30.

Pursuant to the provisions of ASPR 16-206.2, a Cost Estimate and Support Schedules are attached in lieu of the DD Form 633-4.

II CONTRACT FORM

Because of the nature of the work proposed, we request that any contract resulting from this proposal be awarded on a cost-plus-fixed-fee basis.

III ACCEPTANCE PERIOD

This proposal will remain in effect until 1 May 1974. If consideration of the proposal requires a longer period, the Institute will be glad to consider a request for an extension of time.

COST ESTIMATE

Personnel Costs			
Prof	223 hrs.		
Clerical	25 hrs.		
Total Direct Labor		1,799	
Payroll Burden @ 28% *		504	
Total Labor and Burden		2,303	
Overhead @ 107% *		2,464	
Total Personnel Costs			$ 4,767
Direct Costs			
Travel		$ 1,624	
1 trip Wash DC @ 335 =	335		
4 Days Subsistence @ 31=	124		
2 trips Boston @ 367 =	734		
10 Days Subsistence @ 28=	280		
Auto Rental 10 days @ 15	150		
Communications		200	
Equipment		4,040	
Total Direct Cost			$ 5,834
Total Estimated Cost			10,630
Fixed Fee			744
TOTAL ESTIMATED COST PLUS FIXED FEE			$ 11,374

* see following Schedules

Cost Schedules:

SCHEDULE A
DIRECT LABOR

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

SCHEDULE B
OVERHEAD AND PAYROLL BURDEN

These rates have been found acceptable by the Department of Defense for billing and bidding purposes for the calendar year of 1974. We request that these rates not be specifically included in the contract, but rather that the contract provide for reimbursement at billing rates acceptable to the Contracting Officer, subject to retroactive adjustment to fixed rates negotiated on the basis of historical cost data. Included in payroll burden are such costs as vacation, holiday and sick leave pay, social security taxes, and contributions to employee benefit plans.

SCHEDULE C
TRAVEL COSTS

Air fare is based on prices for travel to Washington D.C. at $335 and to Boston at $367 round trip tourist established in the Official Airline Guide dated January 1, 1974.
Domestic subsistence rates and travel by private auto are established standards based on cost data submitted to and approved by DCAA.

SCHEDULE D

EQUIPMENT COSTS

DISPLAY TERMINAL AND MONITOR

1 Delta Data terminals @ 220/mo =	2 mo @ 220/mo	= $ 440
1 Line Processor + Mouse, Keyset @ 2500		= 2,500

TYPEWRITER TERMINALS

2 T-I's Portable @ 150 =	2 mo @ 300/mo	= 600

MAG TAPE RECORDER TERMINALS

2 Termicettes (IPC) @ 100 =	2 mo @ 200/mo	= 400
One time installation charges and maintenance		= 100
TOTAL EQUIPMENT		= $ 4,040

9 MAR 74
SRI-ARC 21883

Proposal For Research
SRI No. ISU 74-52

KNOWLEDGE WORKSHOP SUPPORT FOR THE ARPA SEISMIC DATA MANAGEMENT SYSTEM

Part One---Technical Proposal

Prepared for:

Defense Advanced Research Projects Agency
1400 Wilson Boulevard
Arlington, Virginia 22209

Attn: Col. David C. Russell

Prepared by:

James C. Norton, Assistant Director
Augmentation Research Center

Approved:

Douglas C. Engelbart, Director
Augmentation Research Center

Bonnar Cox, Executive Director
Information Science and Engineering Division
Stanford Research Institute

9 MAR 74
SRI-ARC 21883

Proposal For Research
SRI No. ISU 74-52

KNOWLEDGE WORKSHOP SUPPORT FOR THE ARPA SEISMIC DATA MANAGEMENT SYSTEM

Part Two: Contractual Provisions

Prepared for:

Defense Advanced Research Projects Agency
1400 Wilson Boulevard
Arlington, Virginia 22209

Attn: Col. David C. Russell

SRI Proposal ISU 74-52 - Knowledge Workshop Support for the ARPA Seismic Data Management System

(J21883) 8-MAR-74 19:02; Title: Author(s): James C. Norton/JCN ;
Distribution: /dce rww pr dcr2 jsp ckm ; Sub-Collections: SRI-ARC;
Clerk: JCN ;
Origin: <NORTON>SEISMIC.NLS;5, 1-MAR-74 19:08 JCN ;

Bugs at Office-1

Nancy ... Thanks for pointing out two problems for us. 1

Substitute Command. 2

We tried to bring up exactly the same system that Net users had been using at ARC.. But we inadvertently forgot that there were two versions of the substitute command in the system, one for Network users, one for ARC users. The distinction was made on the basis of line no. at ARC, which isn't a valid distinction at OFFICE1. So you got the new substitute command. It's better than the old one. Having goofed we've decided to just leave it the new way with a log-in message to explain the use of the new command. 2a

I too had hoped we had learned not to change things without ample warning; but this was simply an oversight in the general crunch to get transitioned to office1. 2b

On-Line Files 3

The two journal systems are supposed to work as follows, with respect to files created at either OFFICE1 or SRI-ARC: 3a

Any journal item submitted through one journal system is supposed to be sent automatically to the other system for simultaneous on-line storage at both systems. There currently is a bug in this automatic procedure, as you discovered when looking for <GJOURNAL>21624. We're working on that. Nevertheless, there inevitably wiil be a time delay, hopefully small, even when the automatic file transfer works wholly correctly. 3b

Another bug recognized by Jim White upon receipt of your message, is that Journal items that originate at office-1 nevertheless have Hostname SRI-ARC in the pathname. Jim will correct that so that the pathname states the Host-of-Origin. This will make retrieval independent of the time-lag associated with transferring a copy to the non-originating Journal system. 3c

Incidentally, archived files can be recovered at either office-1 or sri-arc via the interrogate command, regardless of where the archived file physically resides. 3d

Hope that helps, Nancy. Please bear with us, and let us know what else you find. These transitions no matter how well planned inevitably contain bugs. ... Mike 4

Bugs at Office-1

(J21884) 13-FEB-74 15:32; Title: Author(s): Michael D. Kudlick/MDK;
Distribution: /NJN JEW JAKE; Sub-Collections: SRI-ARC; Clerk: MDK;
Origin: <KUDLICK>NEIGUS.NLS;2, 13-FEB-74 15:30 MDK ;

orgzn types

two questions about the "Organization Type" field in the Identfile

orgzn types

Harvey ... I got your journal note a few weeks ago that you were changing the identfile to include a "TYPE" field within "organizations" , contents to be SERVER USER, TIP, ASSOCIATE, INDEPENDENT. A belated but sincere thanks! Two questions: 1

1) Is there a corresponding command in the identsystem to allow input and change and deletion of the TYPE data 1a

2) Does the identsystem automatically update the respective "groups" TIPG, SERVERG, USERG, ASSOCG so that these groups are up-to-date ? 1b

orgzn types

(J21885) 13-FEB-74 15:45; Title: Author(s): Michael D. Kudlick/MDK;
Distribution: /HGL; Sub-Collections: SRI-ARC; Clerk: MDK;

Visit Log: 13 Feb 74, Henry Moll, Lawrence Livermore Labs

Henry Moll, Lawrence Livermore Labs, visited CHI for a brief time, and DCE for an hour. He has writtten an editor for LLL's CDC 6600/7600 systems. Been in use for several years; now weighing its experience, looking around for other ideas, and considering upgrading that editor. 1

Gave him some DNLS demo, and described the AKW notions, the Utility servie, our Bootstrap Community hopes, etc. H'd be the kind that could be a good architect. Unfortunately, LLL's security provisions preclude running lines in from outside sytems, otherwise they would probably be a promising Utility prospect. When our system is mobile (can be put into one of their operating systems), or when they have enough spare TENEX power, or change their policy about outside lines, we should get in touch. 2

Gave him literature: 3

D. C. Engelbart, COORDINATED INFORMATION SERVICES for a DISCIPLINE- OR MISSION-ORIENTED COMMUNITY, paper presented at the Second Annual Computer Communications Conference, San Jose, California, 24 January 1973. (Journal, dated 12 Dec 72 -- 12445.) 3a

Augmentation Research Center, "Output Processor Users' Guide," 23 Aug 73, (Journal -- 12209,) 3b

D. C. Engelbart, R. W. Watson, J. C. Norton, THE AUGMENTED KNOWLEDGE WORKSHOP, paper presented at the National Computer Conference, New York City, June 1973. (Journal -- 14724.) 3c

Visit Log: 13 Feb 74, Henry Moll, Lawrence Livermore Labs

(J21886) 13-FEB-74 16:10; Title: Author(s): Douglas C. Engelbart/DCE ; Sub-Collections: SRI-ARC; Clerk: DCE ;

JHB 13-FEB-74 16:58 21887

Draft of Announcement of the Utility Feedback Mechanism

This is designed to further reinforce the use of th Feedback dir at Office-1. Its rough and I really want you all to review and comment before I send it out. Thanks, Jim

Draft of Announcement of the Utility Feedback Mechanism

THE UTILITY FEEDBACK MECHANISM: DRAFT proposed!! 1

User Development has as part of its function insuring that the Utility Subscribing community has a mechanism whereby it can voice complaints, comments, problems, suggestions, etc. To that end we are coordinating efforts with Analysis for special idents, files, responsibilities, and responses to users. 2

The Directory FEEDBACK and the ident FEED are set up at the Utility to provide a commomn repository for the user feedback that is not handled by Tymshare operations. (see"Announcement of the Move to the Utiltiy", -- GJOURNAL, 21585, 1h:w) and "Office-1 Phone Number for Operations Problems" -- HJOURNAL, 21847, 1:w) 2a

All subscribing users (hereafter refered to as just users) will be asked to send their comments to the ident FEED, or for more urgent items to sendmsg FEEDBACK, unless it is a problem that can be solved by the computer operator at Tymshare. 2a1

User Development 2a2

User Development will read the Journal Branch in the ident file (FEED) and a daily basis (if possible) and move those items that require explanation (user edification) or problem solution by the Utility Staff to a branch named "UTILITY". 2a2a

The messages will also be moved from Tenex to a branch named MESSAGES. Those that fall into the category described above will be moved to "UTILITY". This reordering is important because it will be used to indicate that action has been taken. 2a2a1

User development will be responsible to see that each communication received is answered. 2a2a2

Analysis 2a3

Analysis will be responsible for responding to all the those communicaions not intended for Utility Operations. As the items are responded to, they should be moved to a branch called ANALYSIS thus indicating that they have been acknowledged. This includes comments, suggestions, long range complaints, praise, uses of the system, and the like. An announcement asking for this kind of feedback has been sent out (see "Proposed Methodology for Data Collection or Feedback from Workshop Utility Users" (HJOURNAL, 21844, 1:w) 2a3a

Proposed 2a3b

Analysis could peruse the entire file to determine the relevance of any of the items to their study. Those that provide some information (most will) will become part of the data base that is to be structured, synthesized, and reported upon, primarily for the purpose of providing guidance to Development. 2a3b1

The Architects (If your cite does not have an architect, disregard this section) 2a4

The Architects will receive a great deal of feedback that will not be sent through this feedback mechanism. In these cases, it should be the Architect's responsibility to provide a response, either answering the question or solving the problem and to send both the initial communication and the disposition response to FEED. In the case of oral inquiries, the Architects should record the item and send it to FEED, along with the disposition. It would then become part of the data base for Analysis. 2a4a

The Architect may have the option of responding for U.D. or may make a note that U.D. should respond directly to the user. Those items that are sent to the Architect directly become his responsibility. Those that are sent to both the Architect and FEED will require special coordination. 2a4b

KWAC: Knowledge Worker Architect Community. 2a5

The ident KWAC will permit any item describing an experience or problem to be shared by an Architect with all the Architects and the coordinators on the ARC staff. At present, it is not quite clear what exactly should be shared with all the members of the community, but the only way to find out is to share it. 2a5a

For non-Architects, items to be shared must be sent to your local Architect first, where it should be handled if it can. 2a5b

All users ae invited to read the Feedback file to ascertain the current status of their Feedback item and to get some indication of the experiences of other users, see (feedback,feed,1:m) at Office-1. 3

Draft of Announcement of the Utility Feedback Mechanism

(J21887) 13-FEB-74 16:58; Title: Author(s): James H. Bair/JHB;
Distribution: /JCN SRL PR WRF MDK RWW(); Sub-Collections: SRI-ARC;
Clerk: JHB;
Origin: <BAIR>FEED.NLS;3, 13-FEB-74 16:49 JHB ;

Visit Log: 13 Feb 74, Nat Rochester, IBM

Nat is experimenting with extensions of one-hand, chorded keyset input. Brought with him a Stenograph machine, which is a standard Stenotype, machine-shorthand, hard-copy printing device used by court reporters for very-high speed transcription. 1

A number of people over the past decade have turned such devices into online input terminals; with some modification of the Stenotype encoding they can do computer translation. This provides very fast input keyboarding. A local outfit has a system, with proprietary translation software, and runs a transcription support service. 1a

On his machine, NAT has isolated 14 keys that can be operated with the right hand, and has a grouping arrangement that gives him some 8 cases times 975 chords, or a total of 7800 distinct chord combinations (effectively, 13 bits, from the 14 keys). 2

He has a tentative encoding scheme, and is fixing a special lab setup to study the use. (Online computer, display). Has a nice design and plan paper that he left with me -- see XDOC (nnn,) 2a

He plans to expriment with different coding; training some subjects, measuring learning rates and performance. Expects to do some of that experimenting with our keyset and code, also. Will experiment with shape, travel, tension, etc. of keys, too. 2b

Miscellaneous Note: He says that IBM has developed a line of totally silent keys; the keyboard designes are installin a small speaker that emits an artificia click just to keep the operators happy. The only product so far on the market with these keys is the 3604 bank teller's terminal, which isn't standard typewriter configuration. 3

I asked if he could provide us with some -- I would really like to have either or both a silent keyset and a silent keyboard. I'd like to be able to enter notes while other people are talking (in my office or in a meeting. He will see what he can do, 3a

He is making some small displays using LED's. Says that Monsanto, on some military contract, has produced some very small chips, including an array of LEDs small enough to display cap characters at typewriter-character size (lower case planned). He hopes to make a very small (limied capacity) character display that could fit on his spectacles, to give him some minimal feedback and display capacity when working in an enironment without a full-size display. He feels that the technology will be able to make smaller and higher-resoluton LED displays than this. 3b

I and/or other ARC guys should stop by to visit him in Cambridge

some time. By May, he should have something running in his "keyboard lab".

4

DCE 13-FEB-74 17:04 21888

Visit Log: 13 Feb 74, Nat Rochester, IBM

(J21888) 13-FEB-74 17:04; Title: Author(s): Douglas C. Engelbart/DCE ; Distribution: /rww jcn chi meh ; Sub-Collections: SRI-ARC; Clerk: DCE ;

Application possibility in Navy logistics, and Utility cost analysis need

Notes from visit with Robert Lierberman, Sat 5 Jan 74: 1

Logistics program at NSRDC seems a good prospect, if developed. A natural application area (for what is desied of their project); they have an established project, already funded. 2

Note regarding attitudes on cost that prevail at NSRDC: Bob said that there are a number of people who are supporters of NLS, but who think tat the $40 K/yr cost of a slot is too night, and feel that their management is right innot buying if for them, even though the may be petitioning for it. 3

Needed -- an analysis of the exploratory venture, frompoint of view of a large organization, that puts this cost into perspective (either for us, or for them, to change....) 3a

DCE 13-FEB-74 17:13 21889
Application possibility in Navy logistics, and Utility cost analysis need

(J21889) 13-FEB-74 17:13; Title: Author(s): Douglas C. Engelbart/DCE ; Distribution: /jcn rww ; Sub-Collections: SRI-ARC; Clerk: DCE ;

Planned Agenda and Reference Files for ARC/IPT Review Meeting
2/11-12/74

The following information is collected here for filing for future reference. It is from several files used in the ARC/IPT meetings that were held at SRI February 11-12, 1974. These are NOT notes from the meeting. 1

SUGGESTED AGENDA FOR IPTO REVIEW OF ARC PROGRAM, 11-12 Feb 74

Participants: For ARPA -- Licklider, Fields, and Perry of IPTO, and Clements of BBN; For ARC -- Engelbart, Watson, Norton, Kudlick, Irby, Rech.
Host, and general chairman of meeting: Engelbart. The agenda to be open for change as required to meet ARPA needs for information. 2

Note: The agenda was changed to the following schedule, although at some points actual time periods were moved a bit. jcn 2a

Mon. Feb 11 3

9:00 to 9:30 Introduction 3a

ARPA's Objectives for the Meeting 3a1

ARC's Objectives for Meeting 3a2

Distinction between ARC and NIC 3a3

Applications, Analysis, Development, Operations 3a4

Review of Agenda and adjustment if desired 3a5

9:30 to 12:00 Watson/Norton: Review of Major NLS Features 3b

An overview of NLS will be presented and detailed discussion can be driven by MST documents of Perry/Fields (mmmm,), and ARC menu of topics (mmmm,). 3b1

12:00 to 12:30 Watson/Irby: Control Meta Language, Frontend Plans 3c

Emphasis here on ease with which we can put different frontends on basic NLS functions and ease of movement to PDP 11. 3c1

Remote Machine Access for ARC: Problems and time frame in which ARC might obtain its Tenex computer support from a Network Service site. 3c2

12:30 to 1:30 Lunch (I-Bldg buffet) 3d

1:30 to 2:00 Irby: NLS/Tenex interaction 3e

Topics to be discussed here to be indicated by ARPA 3e1

possibilities might be: 3e1a

Software connection between NLS and Tenex 3e1b

NLS on other Tenex systems, technical, documentation, training issues, experience with NLS on PARC and BBN. 3e1c

Multi-site Journal Plans as example of issues for MST 3e1d

After general discussion CHI, DCW and BBN representative can step out for more detailed discussions if desired. 3e2

2:00 to 2:40 Engelbart: Review of ARC long-term planning framework -- application communities, core knowledge workshop evolution, bootstrapping approach, workshop architects, etc. etc. 3f

2:40 to 3:40 Norton: Applications Department 3g

Status of Utility, Present plans for Support of Bell, RADC, Seismic, DEIS etc. 3g1

Experience with Outside Usage 3g2

Experience at RADC 3g2a

Experience with other Network Users 3g2b

3:40 to 3:50 Break 3h

3:50 to 4:50 Rech: Analysis Department 3i

Review of Analysis Studies to date 3i1

Perspective on Analysis in ARC 3i1a

System Evaluation and Control 3i1b

Analysis of Applications 3i1c

User Needs 3i1d

Economic Analysis: Usage and Costs 3i1e

Plans 3i2

Analysis of User Needs 3i2a

Analysis of Application System 3i2b

Analysis of Behavioral Aspects of User Interface 3i2c

System Evaluation and Control 3i2d

Organizational Research 3i2e

4:50 to 5:30 Summation and discussion 3j

Any topics to be returned to, adjustments in next days agenda etc. 3j1

Tues. Feb 12 4

9:00 to 11:00 Kudlick: Discussion of the NIC 4a

Current Status of the NIC (1 hour) 4a1

Background 4a1a

Funding 4a1b

Resources Used 4a1c

Services Provided 4a1d

Discussion of the NIC's Future (1 hour) 4a2

Funding Picture 4a2a

Analysis of Information Service Needs in the Network Community 4a2b

Development of Distributed, Modularized NIC Staff and Services 4a2c

Short Range, On-going Services 4a2d

11:00 to 12:30 Review: IPTO plans for KW support systems; where ARC likely to participate; action plan for fixing IPTO planning and ARC's role. 4b

12:30 to 1:30 Lunch 4c

1:30 to 2:30 NIC, continued 4d

2:30 to 3:30 Plans for Remainder of this Fiscal Year 4e

Budgets, Tasks and Plans 4e1

Task-oriented rundown for current ARC budget 4e2

Plans, schedule and projected costs for the rest of this fiscal year 4e3

Specific list with costs of the tasks proposed for the coming fiscal year. 4e4

3:30 to 5:00 Concluding Discussion 4f

Includes feedback from ARPA on two days impressions, future meetings needed to clarify any issues left outstanding etc. 4f1

Need detailed interaction on proposed time table and form for next proposal. 4f2

Discusion aids: 5

NLS Watson 5a

Application Notes: 5b

(utility) 5b1

(transfers) 5b1a

All NIC, RADC users hve been moved to the OFFICE-1 facility as of Saturday Feb 9th. This first week will give Utility staff a first look at the system under a heavy userload. 5b1a1

JHB 23-JAN-74 16:56 21585
Announcemnt of Transfer to the Utility for RADC
Location: (GJOURNAL, 21585, 1:w) 5b1a1a

(load) 5b1b

Hope to serve 20 users at once.. very hard to tell how it will work without experience. 5b1b1

(architects) 5b1c

Architects Meeting has been held online conferences also 5b1c1

JHB 8-JAN-74 15:58 21331

AGENDA For the Architect's Seminar, Jan 10 - 15
Location: (GJOURNAL, 21331, 1:w) 5b1c1a

(announcement) 5b1d

A New ARPANET Subscription Service: The Workshop Utility at OFFICE-1 28-JAN-74 (21645, 1:xbnhz)
Also in February Issue of the ARPANET News 5b1d1

(plans) plans for Support of Bell, RADC, Seismic, DEIS 5b1e

(bell) concentrating on documentation production, dialog 5b1e1

7 people heavy writing, publishing 5b1e1a

(radc) dialog, office-work, management, forms/database interface 5b1e2

20 people growing use plans to double 5b1e2a

(seismic) Dave Russell, Dick LaCoss LL planning now 5b1e3

may start information center, dialog, management of tasks system 5b1e3a

(deis) Now serving DEIS staff 2 centers NDM DEO 5b1e4

SRI DEIS staff: maybe 8 people growing NMRO interface DEO 5b1e4a

(arpa) NMRO to use CKM starting IPTO? CBI? MST? NSW? +? 5b1e5

(expansion) 5b1f

As more subscribers appear, we will add memory, drum, CPU, perhaps go to KI TENEX, etc as appears appropriate. We need to learn much more than we now know about the order and increments of such changes. 5b1f1

(usage) 5b2

Experience at RADC 5b2a

Evaluation and Analysis of an Augmented

Planned Agenda and Reference Files for ARC/IPT Review Meeting
2/11-12/74

Knowledge Workshop, Final Report 8-FEB-74 (21849, 1:xbnhz) 5b2a1

Experience with other Network Users 5b2b

MITRE-TIP Iseli On-Line, ARPANET News Collaboration 5b2b1

SDAC-TIP Owen, Hill IMLAC DNLS Proficient 5b2b2

NSRDC Lieberman survey papers 5b2b3

UCLA-NMC Crocker and staff 5b2b4

CASE-10 Calvin Teleconferencing, collaboration 5b2b5

BBN MacKenzie Journal 5b2b6

NBS Cotton heavy writing 5b2b7

other use summarized: (21624,) 5b2b8

In the last year, 5439 Journal items were distributed through the Journal; of these approximately 4800 were also sent hardcopy 5b2b8a

(budgets) 5b3

Budgets, Tasks and Plans 5b3a

Task-oriented rundown for current ARC budget (21792,1:xb) 5b3a1

PRESENT AND NEW STAFF PRIME ASSIGNMENTS 5b3a1a

DIRECTOR - 1 5b3a1a1

Engelbart 5b3a1a1a

ANALYSIS - 3 5b3a1a2

Lee 5b3a1a2a

New man 5b3a1a2b

Rech 5b3a1a2c

DEVELOPMENT - 9 5b3a1a3

Andrews		5b3a1a3a
Dornbush (replacement)		5b3a1a3b
Irby		5b3a1a3c
Kaye (replacement)		5b3a1a3d
Lehtman		5b3a1a3e
Michael		5b3a1a3f
Wallace		5b3a1a3g
Watson		5b3a1a3h
White		5b3a1a3i
NIC -	7	5b3a1a4
Cooke		5b3a1a4a
Feinler		5b3a1a4b
Guilbault		5b3a1a4c
Keeney		5b3a1a4d
Kudlick		5b3a1a4e
Leavitt		5b3a1a4f
North		5b3a1a4g
OPERATIONS -	14	5b3a1a5
Beach		5b3a1a5a
Bondurant		5b3a1a5b
Ferguson		5b3a1a5c
Hardeman		5b3a1a5d
Hardy		5b3a1a5e
Jernigan		5b3a1a5f

Kelley		5b3a1a5g
Meyer		5b3a1a5h
Peters		5b3a1a5i
Ratliff		5b3a1a5j
Johnson		5b3a1a5k
Van de Riet		5b3a1a5l
Victor		5b3a1a5m
van Nouhuys		5b3a1a5n
UTILITY -	5	5b3a1a6
Bair		5b3a1a6a
Hopper		5b3a1a6b
New Documentation		5b3a1a6c
New Manager		5b3a1a6d
Norton		5b3a1a6e
Total -	39	5b3a1a7

Plans, schedule and projected costs for the rest of this fiscal year 5b3a2

Cost Estimate: from the current extension proposal 5b3a2a

(for the period from 2/8/74 to 6/30/74) 5b3a2a1

Personnel Costs 5b3a2a2

5b3a2a2a

Proj Supv	435 hrs.	5b3a2a2a1
Senior Prof	840 hrs.	5b3a2a2a2
Prof	12,330 hrs.	5b3a2a2a3

Technical	1,260 hrs.			5b3a2a2a4
Clerical	1,680 hrs.			5b3a2a2a5
Total Direct Labor			112,600	5b3a2a2b
Payroll Burden @ 28.0% *			31,528	5b3a2a2c
Total Labor and Burden			144,128	5b3a2a2d
Overhead @ 105% *			151,334	5b3a2a2e
Total Personnel Costs		$	295,462	5b3a2a2f
				5b3a2a2g
Direct Costs				5b3a2a3
Travel		$	4,590	5b3a2a3a
10 trips East @ 336 =	3,360			5b3a2a3a1
30 Days Subsistence @ 31=	930			5b3a2a3a2
20 Days Car Rental @ 15=	300			5b3a2a3a3
Facility *			157,915	5b3a2a3b
Report Costs			2,133	5b3a2a3c
Total Direct Costs		$	164,638	5b3a2a4
Total Estimated Cost		$	460,100	5b3a2a5
Fixed Fee			27,606	5b3a2a6
TOTAL ESTIMATED COST PLUS FIXED FEE		$	487,706	

5b3a2a7

FACILITY COSTS 5b3a2b

SUMMARY: 5b3a2c

$ 145,246	Equipment Cost	5b3a2d

12,699	Maintenance and Operation	5b3a2e
-------		5b3a2f
$ 157,915	Total Facility Costs	5b3a2g
DETAILS:		5b3a2h
Base Facility Support Details		5b3a2i
Total Equipment Costs 145,246	$	5b3a2il
Computer Facility 129,010	$	5b3a2ila
PDP-10 lease costs:		5b3a2ilal

Monthly: 4.75 Mo. @ $ 27,160 (P.O. B13477) consisting of:		
Basic Facility (*)	$ 13,986	
DEC Disk Pack Equipment (**)	6,514	
DEC ME10 Memory (16k) Addition	1,250	
DEC Maintenance	5,410	
TOTAL	$ 27,160	5b3a2ilala
		5b3a2ilalb

(*) Includes leased from DEC: 5b3a2ilalc

KA10 Arithmetic Processor	5b3a2ilalc1
KM10 Fast Register	5b3a2ilalc2
KT10A Dual Mem Protect Relocate	5b3a2ilalc3
TM10A Mag Tape Control	5b3a2ilalc4
TD10 DECTape Control	5b3a2ilalc5
DC10A Data Line Scanner Control	5b3a2ilalc6
TU30-B 7-Channel Mag Tape (two)	5b3a2ilalc7
TU55 DECTape Transport (two)	5b3a2ilalc8
DC10B 8-Line Group Unit	5b3a2ilalc9
MA10 Core Memory (eight)	5b3a2ilalc10
MC10 Memory Ports (24)	5b3a2ilalc11

(**) Includes: 5b3a2ilald

DF10 Data Channel (two)

RP02 Disk Controller (two)
RP02 Disk (six) 5b3a2ila1d1

Other leased equipment 4.75 months $ 9,514 5b3a2i1b

Dataphones (7)	$ 257	(329-8220-6)
Couplers (8)	120	(B94707)
Cassette Recorders (6)	687	(B55739)
T-I Terminals (9)	939	(B94691)
Total monthly rate	$ 2,003	5b3a2i1b1

Telephone expenses $ 6,722 5b3a2i1c

Lines to remote sites $ 2,532 5b3a2i1c1

Voiceline 4.75 months @ 365 /mo = 1,734 5b3a2i1c1a

(PR 1KP1179) 5b3a2i1c1a1

Voiceline 4.75 months @ 168 /mo = 798 5b3a2i1c1b

(PR 1KP1861) 5b3a2i1c1b1

NIC service $ 4,190 5b3a2i1c2

Fixed cost 4.75 months @ 132 /mo = 627 5b3a2i1c2a

including 5b3a2i1c2a1

PA Answering Service @ $40 /mo 5b3a2i1c2a2

(B77425) 5b3a2i1c2a2a

Enterprise Service @ $92 /mo 5b3a2i1c2a3

(SRI 23-70) 5b3a2i1c2a3a

Toll calls 4.75 months at 750 /mo = 3,563 5b3a2i1c2b

(based on operating experience with NIC costs) 5b3a2i1c2b1

5b3a2i1d

Maintenance and Operation $ 12,669 5b3a2i2

Maintenance Materials $ 3,350 5b3a2i2a

5b3a2i2a1

Such as: 5b3a2i2a1a

Picture tubes	6 @	75=	450
(P.O.64901)			
Vidicons	6 @	150=	900
(P.O.66508)			
Other			2,000

5b3a2i2a1b
5b3a2i2a1b1
5b3a2i2a1c
5b3a2i2a1c1
5b3a2i2a1d

(Actual components and costs will depend upon the results of further design work. This estimate is based upon previous experience in the field.) 5b3a2i2a1e

5b3a2i2a1f

Other Operating Costs $ 9,319 5b3a2i2b

5b3a2i2b1

Mag tape	40 @ $15 =	600	5b3a2i2b1a
(SRI Comp Center)			5b3a2i2b1a1
NIC mailing costs =		2,969	5b3a2i2b1b
Paper tape, printer			5b3a2i2b1c
paper,etc.=		1,000	5b3a2i2b1d
Xerox for NIC dist		4,750	5b3a2i2b1e
(These estimates are based upon initial and anticipated experience in NIC.)			5b3a2i2b1e1

5b3a2i2b2

Specific list with costs of the tasks proposed for the coming fiscal year. 5b3a3

Personnel List: (with part time % shown) 5b3a3a

Andrews		5b3a3a1
Bair		5b3a3a2
Beach		5b3a3a3
Bondurant		5b3a3a4
Cooke	80	5b3a3a5
Dornbush (replacement)		5b3a3a6
Engelbart		5b3a3a7
Feinler		5b3a3a8
Ferguson		5b3a3a9
Guilbault	37	5b3a3a10
Hardeman		5b3a3a11
Hardy		5b3a3a12
Hopper		5b3a3a13
Irby		5b3a3a14
Jernigan		5b3a3a15
Johnson (new)		5b3a3a16
Kaye (replacement)		5b3a3a17
Keeney		5b3a3a18
Kelley		5b3a3a19
Kudlick		5b3a3a20
Leavitt		5b3a3a21

Lee		5b3a3a22
Lehtman		5b3a3a23
Lieberman (new) 4/74 on		5b3a3a24
Meyer	(50 after 9/74)	5b3a3a25
Michael		5b3a3a26
North		5b3a3a27
Norton		5b3a3a28
Peters		5b3a3a29
Ratliff		5b3a3a30
Rech		5b3a3a31
Van de Riet	60 leaves 6/15/74	5b3a3a32
Victor	75	5b3a3a33
Wallace		5b3a3a34
Watson		5b3a3a35
White		5b3a3a36
van Nouhuys		5b3a3a37

(facility) (hardy,fac-c,1:xbn) 5b4

Documents for online and hard-copy, hands-on access 5c

Proposals, 5c1

1971 IPTO: General
(7404,1:xh) (7405,1:xh) (7406,1:xh) (7407,1:xh) (7408,1:xh)
(7409,1:xh) (7410,1:xh) (7411,1:xh) 5c1a

1974 IPTO: Utility
(14946,1:xh) 5c1b

1973 IPTO: General
(18368,1:xh); 5c1c

1974 IPTO: General, modified extension
(21708,1:xh); 5c1d

1974 NMRO: DEIS basic applic support
(21447,1:xh) 5c1e

1974 NMRO: DEIS, special DEO support, Draft
(Norton, DEISPROP,1:xh) 5c1f

HELP data base
(Documentation, Help,1:xhz)
(Documentation, Help, plex:geb) 5c2

HELP-project dialogue
(Kelley, DIRT, 1:xhz) 5c3

Journal Indices 5c4

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(CATALOG, NARCJAINCNL, Engelbart:zxrnhi;/"Meyer"/;) 5c4a1

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NUMBER INDEX
(kjournal, 11162, 1:zxnh)
(kjournal, 11162, N12568:zxnh) 5c4c2

A-L TITLEWORD INDEX
(kjournal, 11164, 1:zxnh)
(kjournal, 11164, keyword:zxnh) 5c4c3

M-Z TITLEWORD INDEX
(kjournal, 11165, 1:zxnh)
(kjournal, 11165, keyword:zxnh) 5c4c4

NEWEST.... (Journal, TJCAT, 1:mywhi) 5c4d

Any Header text: $NP '(["(s)"] ["/"] "JCP"; 5c4d1

Author IDENT: $NP '(["(s)"] ["/"] "JCP"; 5c4d2

NIC Locator
(NIC, Locator, 2:xhbz) 5c5

ARC Locator
(userguides,arclocator,0:xnz) 5c6

From the menu file: 6

ARC: 6a

Philosophy, goals 6a1

Philosphy: Centered about the Augmented Knowledge Workshop (AKW), aimed at maximizing the effectiveness of human organizations in dealing with complex problems. Strong belief that there are potentially very dramatic gains to be made in this effectiveness. 6a1a

and that exploration and pursuit of these limits are ... 6a1a1

Approach is to augment the basic information-handling capabilities, and to re-design appropriately the concepts, processes, conventions, methods, organizational structures, etc. used to do their knowledge work. 6a1a2

Take seriously a whole-system view of AKW. Believe that the end Workshop systems will be very large: huge selection of service functions; very large working vocabularies in constant use by many knowledge workers to evoke the service transactions in support of their everyday work; very significant changes in the concepts and methods associated with their work, and in the organizational structures and working relationships among co-workers. 6a1a3

Prime Goal: Maximally contributing to growth and utilization of Augmented Knowledge Workshop 6a1b

Top-level explicit objective: Building, supporting Bootstrap Community 6a1c

Current principle objective: Get the system-evolution process to the takeoff point -- establish large, healthy Application community, and full-strength Analysis activity, to balance the experienced Development activity. 6a1d

Subordinate objectives: 6a1d1

Develop effective service-delivery capability -- computer services, instruction, application guidance; target toward steady reduction in service costs (cut by 50%/yr); 6a1d2

Develop effective service-marketing capability -- promote exploratory-application activity, structuring

service packages to fit evaluation and evolution needs of client in mutually beneficial way; 6a1d3

Build an active, knowledgeable, professionally oriented group of "Knowledge-Workshop Architects," distributed among the application clientele. These are user-representive specialists, who become as knowledgeable as possible within the "architectural" (higher-level) aspects of their knowledge workshops, and guide the evolution of their workshops' augmentation. 6a1d4

Strong emphasis on collaborative support for distributed community 6a1e

Three-part, formally organized, system-evolution approach: 6a2

Development 6a2a

Application 6a2b

Within ARC, for NIC, at RADC, extended clientele via Workshop Utility 6a2b1

Analysis 6a2c

Analyses of NLS use, utility of NLS to user groups encountered so far. 6a2c1

Budgets, Tasks and Plans 6a3

Task-oriented rundown for current ARC budget 6a3a

Plans, schedule and projected costs for the rest of this fiscal year 6a3b

Specific list with costs of the tasks proposed for the coming fiscal year. 6a3c

Analysis: 6b

(rech,agenda,) 6b1

NLS: 6c

Old and New versions of NLS 6c1

General 6c2

Virtual, coherent tool system 6c2a

Range of work-mode interfaces: DNLS, TNLS, Query, DEX, ..., NLSa, NLSb, etc. 6c2b

DNLS -- unique two-dimensional work mode 6c2b1

Configuration/software/implementation of NLS, 6c3

Current: 6c3a

File system: 6c3a1

Strutured form, hierarchical with cross linkage -- conceived as domain suitable to map concept strutures onto 6c3a1a

Altering/updating of files 6c3a1b

On-line, Archive, BSYS, 6c3a1c

Implementation framework: TM, L10, CML, interpreter, Core NLS, File structure, 6c3a2

NLS-TENEX interaction 6c3a3

Future: 6c3b

General availability of other Net services on a "reach-through" basis while working within a cohernet NLS environment. 6c3b1

Extensive HELP system 6c3b2

Working-mode profile, privately tailored for individual users 6c3b3

File system: remote store tertiary 6c3b4

Front end, distr NLS, other op systems, MPS 6c3b5

Remote machine access for ARC people and the need or terminals (.5 hours) 6c3b6

NLS functions could be moved to mini's (.5 hours) 6c3b7

NLS User Features 6c4

Planned Agenda and Reference Files for ARC/IPT Review Meeting
2/11-12/74

JHB 8-JAN-74 15:58 21331
AGENDA For the Architect's Seminar, Jan 10 - 15
(GJOURNAL, 21331, 1:xbb) 6e1b1

JCN 8-JAN-74 07:53 21319
ARCHITECTS' INTENSIVE SEMINAR AT ARC JANUARY 10 THROUGH JAN 15
(GJOURNAL, 21319, 1:xbbb) 6e1b2

Training 6e1c

NIC: 6e2

Background, funding, resources used/services provided, plans for provision of services at lower cost, analysis of needs for/use of NIC services, recommendations for NIC future activities. 6e2a

See: 6e2a1

MDK 21-Nov 73 (or has it been updated? jcn)
Network Information Center: Goals, Problems, Requirements
(20439, 1:w) 6e2a1a

Support to various groups -- present and future -- including DEIS, seismic, Bell, RADC, etc. 6e3

For instance, see Proposals 6e3a

DEIS: (norton=@deisproposal,3:xbbbbnz) to be 21447 6e3a1

RADC: (15263,2:wgny) 6e3a2

ARPA: (14946,2:wgny) 6e3a3

Bell: (19250,2:wgny) now offline--jcn 6e3a4

note: The old VELA Proposal was: (19251,2:wgny) 6e3a5

Improvements on the way 6f

New user interface -- same vocabulary and basic control principles; made more self consistent; extensive user-help facilities; more readily extensible; 6f1

"Reach-through" support, of other-system services, e.g.: DataComputer, Data Analysis, decison analysis, graphic generation and manipulation, AI processes, simulation and modelling, etc. 6f2

Cheap DNLS 6f3

Mini front end (cheaper, better response) 6f4

NLS modularized, with standardized interfaces, enabling other people's computer systems to harness any of the modules. 6f5

Improvements awaiting launching 6g

Special versions of NLS, for special applications 6g1

NLS mapped into other operating systems (using mini front end, many other TTS's besides TENEX could adequately support NLS). 6g2

Graphics 6g3

Micro-form subsytem 6g4

Speech-string entities 6g5

6g6

DCE RWW JCN 13-FEB-74 18:39 21890

Planned Agenda and Reference Files for ARC/IPT Review Meeting
2/11-12/74

(J21890) 13-FEB-74 18:39; Title: Author(s): Douglas C. Engelbart, Richard W. Watson, James C. Norton/DCE RWW JCN; Distribution: /DCE RWW JCN PR CHI MDK; Sub-Collections: SRI-ARC; Clerk: JCN;
Origin: <NORTON>NOTES.NLS;1, 13-FEB-74 18:36 JCN ;

Date: 14-FEB-74 0924-EDT

From: VICTOR at BBN-TENEX

Re: SNDMSG TO JBN AND ISC WITH A FILE

- - - -

THIS MESSAGE TESTS TRANSMISSIION OF A MESSAGE BY SNDMSG WITH NO CARRIAGE RETURNS AND INCLUDING A FILE.THIS IS ANOTHER TEST TO SEE WHETHER

THE MESSAGE IS A MESSAGE OR A FILE

IT IS FOUR LINES LONG LIKE THE SAME FROM ISI

. I HAVE ADDED THIS LAST PARAGRATH.

(J21891) 14-FEB-74 06:22; Title: Author(s): Jeanne B. North/JBN ;
Distribution: /JBN ISC ; Sub-Collections: SRI-ARC ISC; Clerk: JBN;

MDK 14-FEB-74 08:16 21899

Costs Associated With NIC Mail Activity, 1973

As a supplement to (GJOURNAL, 21624,1:wy) on the NIC's 1973 Mail Distribution Activity, Marcia Keeney has put together the following data on the cost of doing that work. 1

NOTE THIS DOES NOT INCLUDE NEW ARPANET DIRECTORY. 1a

Total cost 2

$ 41 K non-labor
$ 15 K labor

$ 56 K total cost of 1973 mail activity 2a

Non-Labor breakdown 3

$ 9,571/yr ... SRI report services *
14,123/yr ... xerox costs (approx 3.5 cents per page)
16,978/yr ... postage costs

$40.672/yr or $3389/month 3a

3a1

* Report services breakdown: 3a1a

$ 1217	Arpanet News
1432	Resource Notebook
2134	Old Directory
995	Catalog
228	Bulletins
158	Indexes
1583	Protocol Updates
731	Old User Guides
611	New User Guides
205	L10 User Guide
287	AKW Papers
$ 9571	

3a1b

Labor breakdown 4

$ 15,000/yr ... approx 1 man-year 4a

This table gives data in units of man-hours per month.
Note that 173 man-hours per month = one man-month.
The totals below add up to 168 man-hours per month.
That's where the one-many-year figure comes from. 4b

computer xeroxing mailing 4c

Costs Associated With NIC Mail Activity, 1973

RFC'S	1	9	17	
Group Notes	-	11	11	
Other Journal Items	-	-	8.5	
Identfile Maintenance	55	-	-	
				4d
Functional Document Front pgs	3	3	6	
Status of Revision Notices	0.5	1	2	
Arpanet News	-	-	4	
NIC Bulletin	-	-	4	
				4e
Misc Document Requests	15	2.5	2	
Misc Other Requests	-	2	-	
Network Mail Correspondence	10.5	-	-	
	-----	-- --	---	4f
Total person-hours per month =	85	28.5	54.5	4g

MDK 14-FEB-74 08:16 21899

Costs Associated With NIC Mail Activity, 1973

(J21899) 14-FEB-74 08:16; Title: Author(s): Michael D. Kudlick/MDK;
Distribution: /SRI-ARC; Sub-Collections: SRI-ARC; Clerk: MDK;
Origin: <KUDLICK>MAILCOSTS.NLS;2, 11-FEB-74 19:24 MDK ;

ARPANET Directory: Cost of First Issue

ARPANET DIRECTORY COSTS (for the first issue) 1

Non Labor $2000. 2

Art Work	$ 123	
Photo	9	
Press	1,384	
Labels	91	
Mail	342	
	$ 1,949	< $1.75 per copy 2a

Labor $ 20,000 (0.5 my) 3

non-recurring costs	.4 my
recurring costs	.1 my 3a

Computer Time not measured 4

ARPANET Directory: Cost of First Issue

(J21900) 14-FEB-74 08:21; Title: Author(s): Marcia Lynn Keeney, Michael D. Kudlick/MLK MDK; Distribution: /SRI-ARC; Sub-Collections: SRI-ARC; Clerk: MDK;
Origin: <KUDLICK>DIRCOSTS.NLS;2, 11-FEB-74 19:33 MDK ;