APOLLO 11 LM-5 COMPUTER WORDS

	NOUN DISPLAYED ELEM 4 159	VERB DISPLAYED ELEM 5 160	REGISTER R1 ELEM 6 161	REGISTER R2 ELEM 7 162	REGISTER R3 ELEM 8 163		
	DATA	DATA	DATA	DATA	DATA	DATA	DATA
	63.	62.	6.	+55609	-01 43		77773
	63.	62.	6.	+55609	-01 37	-00000	77773
		62.	6.	+55609	-01 35	-00000	77773
	63.	62.	6.	+55609	-01 33	-00000	77773
	63.	62.	6.	+55609	-01 31	-00000	77773
	63.	62.	6.	+55609	-01 29	-00000	77773
	63.	62.	6.	+55609	-01 27	+00000	77773
	63.	62.	6.	+55609	-01 23	+00000	77773
	63.	62.	6.	+55609	-01 21	+00000	77773
	63.	62.	6.	+55609	-01 19	+00000	77773
	63.	62.	6.	+55609	-01 17	+00000	77773
	63.	62.	6.	+55609	-01 15	+00000	77773
	63.	62.	6.	+55609	-01 13	+00000	77773
	63.	62.	6.	+55609	-01 11	+00000	77773
	63.	62.	6.	+55609	-01 09	+00000	77773
	63.	62.	6.	+55609	-01 07	+00000	77773
	63.	62.	6.	+55609	-01 05	+00000	77773
	63.	62.	6.	+55609	-01 03	+00000	77773
	63.	62.		+55609	-01 01	+00000	77773
	63.	62.	6.	+55609	-00 59	+00000	77773
		62.	6.	+55609	-00 57	+00000	77773
			6.	+55609	-00 55	+00000	77773
	63.		6.	+55609	-00 53	+00000	77773
	63.		6.	+55609	-00 51	+00000	77773
	63.		6.	+55609	-00 49	+00000	77773
	63.	62.	6.	+55609	-00 47	+00000	77773
	63.	62.	6.	+55609	-00 45	+00000	77773
	63.	62.	6.	+55609	-00 43	+00000	77773
	63.	62.	6.	+55609	-00 41	+00000	77773
	63.	62.	6.	+55609	-00 39	+00000	77773
	63.	62.	6.	+55609	-00 37	+00000	77773
	63.	62.	6.	+55609	-00 35	+00000	77773
	63.	0.	0.	BLANK	BLANK	BLANK	77773
	63.	62.	6.	+55609	-00 29	+00000	77773
	63.	62.	6.	+55609	-00 27	+00000	77773
	63.	62.	6.	+55609	-00 25	+00000	77773
	63.	62.	6.	+55609	-00 23	+00000	77773
	63.	62.	6.	+55609	-00 25	+00000	77773
	63.	62.	6.	+55609	-00 19	+00001	77773
	63.	62.	6.	+55610	-00 17	+00001	77773
	63.	62.	6.	+55610	-00 15	+00002	77773
	63.	62.	6.	+55610	-00 09	+00002	77773
	63.	62.	6.	+55610			77773
	63.	62.	99.	+55607	-00 05	+00003	77773
	63.	0.	0.	BLANK	BLANK	BLANK	77773
		62.	6.	+55600	-00 01	+00012	77773

MAJOR MODE	NOUN DISPLAYED	VERB DISPLAYED	REGISTER R1	REGISTER R2	REGISTER R3	LIST ID (OCTAL)	REDOCTR NUMBER OF COMPUTER RESTARTS
ELEM 3	ELEM 4	ELEM 5	ELEM 6	ELEM 7	ELEM 8	ELEM 2	ELEM 40
158	159	160	161	162	163		

TIME HR	MIN	SECS	DATA	DATA	DATA	DATA	DATA	DATA	DATA	DATA
ON → 102	33	5.000	63.	63.	6.	+55597	-00022	+49971	77773	
102	33	7.000	63.	63.	6.	+55590	-00018	+49967	77773	
102	33	9.000	63.	63.	6.	+55567	-00018	+49963	77773	
102	33	11.000	63.	63.	6.	+55543	-00017	+49960	77773	
102	34	3.000	63.	63.	6.	+52256	-00123	+49691	77773	
102	34	5.000	63.	63.	6.	+52059	-00130	+49665	77773	
102	34	7.000	63.	63.	6.	+51862	-00137	+49639	77773	
102	34	9.000	63.	63.	6.	+51664	-00143	+49611	77773	
102	34	11.000	63.	63.	6.	+51467	-00149	+49582	77773	
102	34	13.000	63.	63.	6.	+51269	-00154	+49551	77773	
102	34	15.000	63.	63.	6.	+51070	-00159	+49520	77773	
102	34	17.000	63.	63.	6.	+51070	-00159	+49520	77773	
102	34	19.000	63.	63.	6.	+51070	-00159	+49520	77773	
102	34	21.000	63.	63.	6.	+51070	-00159	+49520	77773	
102	34	23.000	63.	63.	6.	+51070	-00159	+49520	77773	
102	34	25.000	63.	63.	6.	+50071	-00185	+49168	77773	
102	34	27.000	63.	63.	6.	+49669	-00194	+49271	77773	
102	34	29.000	63.	63.	6.	+49464	-00199	+49233	77773	
102	34	31.000	63.	63.	6.	+49266	-00204	+49193	77773	
102	34	33.000	63.	63.	6.	+49266	-00204	+49193	77773	
102	34	35.000	63.	63.	6.	+49266	-00204	+49193	77773	
102	34	37.000	63.	63.	6.	+49266	-00204	+49193	77773	
102	34	39.000	63.	63.	6.	+49266	-00204	+49193	77773	
102	34	41.000	63.	63.	6.	+49266	-00204	+49193	77773	
102	34	43.000	63.	63.	6.	+49266	-00204	+49193	77773	
102	34	45.000	63.	63.	6.	+49266	-00204	+49193	77773	
102	34	47.000	63.	63.	6.	+49266	-00204	+49193	77773	
102	34	49.000	63.	63.	6.	+49266	-00204	+49193	77773	
102	34	51.000	63.	63.	6.	+49266	-00204	+49193	77773	
102	34	53.000	63.	63.	6.	+49266	-00204	+49193	77773	
102	34	55.000	63.	63.	6.	+47018	-00269	+48678	77773	
102	34	57.000	63.	63.	6.	+46811	-00276	+48623	77773	
102	34	59.000	63.	63.	6.	+46604	-00284	+48569	77773	
102	35	1.000	63.	63.	6.	+46397	-00292	+48510	77773	
102	35	3.000	63.	63.	6.	+46189	-00299	+48451	77773	
102	35	5.000	63.	63.	6.	+46189	-00299	+48451	77773	
102	35	7.000	63.	63.	6.	+46189	-00299	+48451	77773	
102	35	9.000	63.	63.	6.	+46189	-00299	+48451	77773	
102	35	11.000	63.	63.	6.	+46189	-00299	+48451	77773	
102	35	13.000	63.	63.	6.	+46189	-00299	+48451	77773	
102	35	15.000	63.	63.	6.	+46189	-00299	+48451	77773	
102	35	17.000	63.	63.	6.	+44723	-00352	+48066	77773	
102	35	19.000	63.	63.	6.	+44511	-00361	+47925	77773	
102	35	21.000	63.	63.	6.	+44300	-00368	+47852	77773	
102	35	23.000	63.	63.	6.	+44088	-00375	+47778	77773	
102	35	25.000	63.	63.	6.	+43876	-00382	+47702	77773	
102	35	27.000	63.	63.	6.	+43664	-00389	+47625	77773	

DOC GROUP NO. - 0

APOLLO 11 LM-5 COMPUTER WORDS

MAJOR MODE ELEM 3 158	NOUN* DISPLAYED ELEM 4 159	VERB DISPLAYED ELEM 5 160	REGISTER R1 ELEM 6 161	REGISTER R2 ELEM 7 162	REGISTER R3 ELEM 8 163	LIST ID OCTAL ELEM 2	REDOCTR NUMBER OF COMPUTER RESTARTS ELEM 40

TIME HR	MIN	SECS	DATA	DATA	DATA	DATA	DATA	DATA	DATA	DATA
102	35	29.000	63.	63.	6.	+43451	-00396	+47546	77773	
102	35	31.000	63.	63.	6.	+43238	-00402	+47467	77773	
102	35	33.000	63.	63.	6.	+42811	-00414	+47304	77773	
102	35	37.000	63.	63.	6.	+42596	-00422	+47220	77773	
102	35	39.000	63.	63.	6.	+42381	-00431	+47135	77773	
102	35	41.000	63.	63.	6.	+42165	-00440	+47048	77773	
102	35	43.000	63.	63.	6.	+41949	-00448	+46959	77773	
102	35	45.000	63.	63.	6.	+41733	-00457	+46868	77773	
102	35	47.000	63.	63.	6.	+41517	-00466	+46776	77773	
102	35	53.000	63.	63.	6.	+41300	-00473	+46682	77773	
102	35	57.000	63.	63.	6.	+40865	-00489	+46490	77773	
102	36	1.000	63.	63.	6.	+39989	-00522	+46086	77773	
102	36	3.000	63.	63.	6.	+39769	-00531	+45981	77773	
102	36	5.000	63.	63.	6.	+39769	-00531	+45981	77773	
102	36	7.000	63.	63.	6.	+39769	-00531	+45981	77773	
102	36	9.000	63.	63.	6.	+39769	-00531	+45981	77773	
102	36	11.000	63.	63.	6.	+39769	-00531	+45981	77773	
102	36	57.000	63.	63.	6.	+33664	-00787	+42828	77773	
102	36	59.000	63.	63.	6.	+33432	-00797	+42268	77773	
102	37	1.000	63.	63.	6.	+33432	-00797	+42268	77773	
102	37	2.000	63.	63.	6.	+33432	-00797	+42268	77773	
102	37	5.000	63.	63.	6.	+32732	-00821	+41783	77773	
102	37	15.000	63.	63.	6.	+31554	-00873	+40938	77773	
102	37	17.000	63.	63.	6.	+31316	-00885	+40762	77773	
102	37	19.000	63.	63	6.	+31079	-00895	+40586	77773	
102	37	23.000	63.	63.	6.	+30363	-00927	+40037	77773	
102	37	27.000	63.	63.	6.	+30363	-00927	+40037	77773	
102	37	27.000	63.	63.	6.	+30123	-00939	+39850	77773	
102	37	31.000	63.	63.	6.	+30123	-00939	+39850	77773	
102	37	47.000	63.	63.	6.	+28917	-00990	+38887	77773	
102	37	49.000	63.	63.	6.	+27454	-01043	+37672	77773	
102	37	51.000	63.	63.	6.	+27207	-01055	+37462	77773	
102	37	53.000	63.	63.	6.	+26967	-01065	+37250	77773	
102	37	55.000	63.	63.	6.	+26710	-01077	+37035	77773	
102	37	57.000	63.	63.	6.	+26712	-01079	+37035	77773	
102	37	59.000	63.	63.	6.	+26216	-01099	+36599	77773	
102	38	1.000	63.	63.	6.	+25967	-01107	+36379	77773	
102	38	3.000	63.	63.	6.	+25718	-01116	+36156	77773	
102	38	5.000	63.	63.	6.	+25468	-01125	+35932	77773	
102	38	7.000	63.	63.	6.	+25217	-01136	+35706	77773	
102	38	9.000	63.	0.	16.	+25217	-01136	+35706	77773	
102	38	11.000	63	68	16	+00498	-04 13	-02771	77773	
102	38	13.000	63.	68.	16.	+00490	-04 11	-02929	77773	
102	38	15.000	63.	68.	16	+00482	-04 09	-02917	77773	
102	38	17.000	63.	68.	16.	+00474	-04 07	-02885	77773	
102	38	19.000	63.	68.	16.	+00466	-04 05	-02823	77773	

1202 →

367200
2280
369480

3680
2280

FILE ORDER NO. - 0

APOLLO 11 LM-5 COMPUTER WORDS

MAJOR MODE ELEM 1 158	NOUN DISPLAYED ELEM 4 159	VERB DISPLAYED ELEM 5 160	REGISTER R1 ELEM 6 161	REGISTER R2 ELEM 7 162	REGISTER R3 ELEM 8 163	LIST ID OCTAL ELEM 2	REDUCTN NUMBER OF COMPUTER RESTARTS ELEM 40

	TIME HR MIN SECS	DATA	DATA	DATA	DATA	DATA	DATA	DATA	DATA
1202 →	102 38 21.000	63.	68	16.	+00458	-04 03	-02570	77773	
	102 38 23.000	63.	63.	6.	+23444	-01205	+34069	77773	
	102 38 25.000	63.	63	50	+23444	-01205	+34069	77773	
	102 38 27.000	63.	90.	50.	01202	00000	00000	77773	
	102 38 29.000	63.	90.	50.	01202	00000	00000	77773	
	102 38 31.000	63.	90.	50.	01202	00000	00000	77773	
	102 38 33.000	63.	90.	50.	01202	00000	00000	77773	
	102 38 35.000	63.	90.	50.	01202	00000	00000	77773	
	102 38 37.000	63.	90.	50	01202	00000	00000	77773	
	102 38 39.000	63.	63.	6	+21122	-01286	+31823	77773	
	102 38 41.000	63.	63.	6.	+20861	-01288	+31566	77773	
	102 38 43.000	63.	63.	57	+20861	-01288	+31566	77773	
	102 38 45.000	63	63.	6.	+20341	-01298	+31307	77773	
	102 38 47.000	63.	63.	0.	+20341	-01298	+30722	77773	
	102 38 49.000	63.	0.	16.	+20341	-01298	+30722	77773	
	102 38 51.000	63.	68.	16.	+00352	-03 33	-01772	77773	
	102 38 53.000	63	68.	16.	+00345	-03 32	-01629	77773	
	102 38 55.000	63.	68.	16.	+00345	-03 32	-01348	77773	
	102 38 57.000	63.	68.	16.	+00333	-03 28	-00907	77773	
	102 38 59.000	63	68.	16.	+00326	-03 26	-00933	77773	
1202 →	102 39 1.000	63.	0.	0.	BLANK	BLANK	BLANK	77773	
	102 39 3.000	63.	63.	6.	+18244	-01256	+26977	77773	
	102 39 5.000	63.	63.	6.	+18244	-01256	+26977	77773	
	102 39 7.000	63.	90.	50.	+18244	-01256	+26977	77773	
	102 39 9.000	63.	90.	50.	01202	00000	00000	77773	
	102 39 11.000	63.	63.	6.	+16926	-01176	+25186	77773	
	102 39 13.000	63.	63.	6.	+16667	-01157	+24912	77773	
	102 39 15.000	63.	63.	6.	+16402	-01133	+24703	77773	
	102 39 17.000	63.	63	0.	+16402	-01133	+24703	77773	
	102 39 19.000	63.	63.	16.	+16402	-01133	+24703	77773	
	102 39 21.000	63.	68.	16.	+00264	-03 07	-00060	77773	
	102 39 23.000	63	68.	16.	+00259	-03 06	+00119	77773	
throttle down	102 39 25.000	63.	68.	16.	+00254	-03 04	-00098	77773	
	102 39 29.000	63.	63.	6.	+14511	-00967	+23393	77773	
	102 39 31.000	63.	63.	6.	+14287	-00922	+22984	77773	
	102 39 33.000	63.	63.	6.	+14127	-00942	+22791	77773	
	102 39 35.000	63.	63.	6.	+13971	-00988	+22622	77773	
	102 39 37.000	63.	63.	6.	+13823	-00996	+22433	77773	
	102 39 39.000	63.	63.	6.	+13670	-01021	+22233	77773	
	102 39 41.000	63.	63.	6.	+13670	-01021	+22233	77773	
	102 39 43.000	63.	63.	6.	+13670	-01021	+22233	77773	
	102 39 45.000	63.	63.	6.	+13670	-01021	+222[illegible]	77773	
	102 39 47.000	63.	63.	6.	+13063	-01115	+213[illegible]	77773	
	102 39 49.000	63.	63.	6.	+12917	-01136	+2109[illegible]	77773	
	102 39 51.000	63.	63.	6.	+12768	-01153	+20908	77773	
	102 39 53.000	63.	63.	6.	+12612	-01175	+20841	77773	

	MAJOR MODE ELEM 3 158	NOUN DISPLAYED ELEM 4 159	VERB DISPLAYED ELEM 5 160	REGISTER R1 ELEM 6 161	REGISTER R2 ELEM 7 162	REGISTER R3 ELEM 8 163	LIST ID OCTAL ELEM 2	REDOCTP NUMBER OF COMPUTER RESTARTS ELEM 40

TIME HR	MIN	SECS	DATA	DATA	DATA	DATA	DATA	DATA	DATA	DATA
102	39	55.000	63.	63.	6.	+12485	-01192	+20370	77773	
102	39	57.000	63.	63.	6.	+12316	-01205	+20096	77773	
36960 → 102	40	1.000	63.	63.	6.	+12159	-01224	+19860	77773	
102	40	3.000	63.	63.	6.	+12014	-01239	+19604	77773	
102	40	5.000	63.	63.	6.	+11864	-01249	+19364	77773	
102	40	7.000	63.	63.	6.	+11712	-01259	+19125	77773	
102	40	9.000	63.	63.	6.	+11567	-01274	+18884	77773	
102	40	11.000	63.	63.	6.	+11417	-01285	+18612	77773	
102	40	13.000	63.	63.	6.	+11259	-01301	+18349	77773	
102	40	15.000	63.	63.	6.	+11112	-01313	+18090	77773	
102	40	17.000	63.	63.	6.	+10962	-01319	+17804	77773	
102	40	19.000	63.	63.	6.	+10812	-01325	+17513	77773	
102	40	21.000	63.	63.	6.	+10665	-01337	+17235	77773	
102	40	23.000	63.	63.	6.	+10516	-01343	+16949	77773	
102	40	25.000	63.	63.	6.	+10365	-01349	+16674	77773	
102	40	27.000	63.	63.	6.	+10365	-01349	+16674	77773	
102	40	29.000	63.	63.	6.	+10365	-01349	+16674	77773	
102	40	31.000	63.	63.	6.	+09910	-01364	+15837	77773	
102	40	33.000	63.	63.	6.	+09761	-01371	+15556	77773	
102	40	35.000	63.	63.	6.	+09610	-01369	+15273	77773	
102	40	37.000	63.	63.	6.	+09610	-01369	+15273	77773	
102	40	39.000	63.	63.	6.	09610	-01369	+15273	77773	
102	40	41.000	63.	63.	6.	+09610	-01369	+15273	77773	
102	40	43.000	63.	63.	6.	+09019	-01368	+14105	77773	
102	40	45.000	63.	63.	6.	+08867	-01366	+13819	77773	
102	40	47.000	63.	63.	6.	+08713	-01364	+13526	77773	
102	40	49.000	63.	63.	6.	+08545	-01372	+13229	77773	
102	40	51.000	63.	63.	6.	+08396	-01375	+12925	77773	
102	40	53.000	63.	63.	6.	+08243	-01370	+12645	77773	
102	40	55.000	63.	63.	6.	+08084	-01367	+12335	77773	
102	40	57.000	63.	63.	6.	+07933	-01365	+12049	77773	
102	40	59.000	63.	63.	6.	+07778	-01361	+11755	77773	
102	41	1.000	63.	63.	6.	+07628	-01351	+11476	77773	
102	41	3.000	63.	63.	6.	+07473	-01348	+11190	77773	
102	41	5.000	63.	63.	6.	+07317	-01344	+10925	77773	
102	41	7.000	63.	63.	6.	+07317	-01344	+10925	77773	
102	41	9.000	63.	63.	6.	+07317	-01344	+10925	77773	
102	41	11.000	63.	63.	6.	+07317	-01344	+10925	77773	
102	41	13.000	63.	63.	6.	+07317	-01344	+10925	77773	
102	41	15.000	63.	63.	6.	+06513	-01317	+08549	77773	
102	41	17.000	63.	63.	6.	+06513	-01317	+08549	77773	
102	41	19.000	63.	63.	6.	+06377	-01310	+09269	77773	
102	41	21.000	63.	63.	6.	+06217	-01307	+08985	77773	
102	41	23.000	63.	63.	6.	+06059	-01300	+08721	77773	
102	41	25.000	63.	63.	6.	+05900	-01292	+08447	77773	
102	41	27.000	63.	63.	6.	+05738	-01287	+08181	77773	
			63.	63.	6.	+05578	-01277	+07900	77773	

GROUP NO - 0

APOLLO 11 LM-5 COMPUTER WORDS

	MAJOR MODE ELEM 3 158	NOUN DISPLAYED ELEM 4 159	VERB DISPLAYED ELEM 5 160	REGISTER R1 ELEM 6 161	REGISTER R2 ELEM 7 162	REGISTER R3 ELEM 8 163	LIST ID OCTAL ELEM 2	REDOCTR NUMBER OF COMPUTER RESTARTS ELEM 40

	TIME HR MIN SECS	DATA	DATA	DATA	DATA	DATA	DATA	DATA	DATA
	102 41 27.000	63.	63.	6.	+05420	-01268	+07641	77773	
	102 41 29.000	63.	63.	6.	+05262	-01257	+07380	77773	
	102 41 31.000	64.	64.	6.	+99 70	-01249	+07129	77773	
	102 41 33.000	64.	64.	6.	+99 71	-01235	+06881	77773	
	102 41 35.000	64.	64.	6.	+99 66	-01214	+06636	77773	
	102 41 37.000	64.	64.	6.	+99 63	-01185	+06396	77773	
	102 41 39.000	64.	64.	6.	+99 63	-01151	+06162	77773	
	102 41 41.000	64.	64.	6.	+99 62	-01124	+05917	77773	
	102 41 45.000	64.	64.	6.	+99 61	-01064	+05433	77773	
	102 41 47.000	64.	64.	6.	+99 60	-01037	+05204	77773	
	102 41 49.000	64.	64.	6.	+99 59	-01007	+04986	77773	
	102 41 51.000	64.	64.	6.	+99 59	-00982	+04772	77773	
	102 41 53.000	64.	64.	6.	+99 60	-00955	+04568	77773	
	102 41 55.000	64.	64.	6.	+99 58	-00929	+04386	77773	
	102 41 57.000	64.	64.	6.	+99 59	-00904	+04199	77773	
	102 41 59.000	64.	64.	6.	+99 59	-00904	+04199	77773	
	102 42 1.000	64.	64.	6.	+99 58	-00878	+04019	77773	
	102 42 3.000	64.	64.	6.	+99 55	-00852	+03848	77773	
	102 42 5.000	64.	64.	6.	+99 54	-00825	+03671	77773	
	102 42 7.000	64.	64.	6.	+99 54	-00825	+03671	77773	
	102 42 9.000	64.	64.	6.	+99 53	-00769	+03361	77773	
	102 42 11.000	64.	64.	6.	+99 53	-00769	+03361	77773	
	102 42 13.000	64.	64.	6.	+99 51	-00715	+03040	77773	
	102 42 15.000	64.	64.	6.	+99 51	-00715	+03040	77773	
1201 →	102 42 17.000	64.	0.	0.	BLANK	BLANK	BLANK	77773	
	102 42 19.000	64.	90.	50.	01201	00000	00000	77773	
	102 42 21.000	64.	90.	50.	01201	00000	00000	77773	
	102 42 23.000	64.	90.	50.	01201	00000	00000	77773	
	102 42 25.000	64.	64.	6.	+87 48	-00577	+02266	77773	
	102 42 27.000	64.	64.	6.	+87 48	-00577	+02266	77773	
	102 42 29.000	64.	64.	6.	+83 48	-00534	+02017	77773	
	102 42 31.000	64.	64.	6.	+81 47	-00518	+01927	77773	
	102 42 33.000	64.	0.	0.	BLANK	BLANK	BLANK	77773	
	102 42 35.000	64.	0.	0.	BLANK	BLANK	BLANK	77773	
	102 42 37.000	64.	0.	0.	BLANK	BLANK	BLANK	77773	
	102 42 39.000	64.	0.	0.	BLANK	BLANK	BLANK	77773	
1202 →	102 42 41.000	64	0.	0.	BLANK	BLANK	BLANK	77773	
	102 42 43.000	64.	64.	6.	+69 44	-00391	+01387	77773	
	102 42 45.000	64.	0.	50.	+69 44	-00391	+01387	77773	
	102 42 47.000	64	90.	50.	01202	00000	00000	77773	
	102 42 49.000	64.	90.	50.	01202	00000	00000	77773	
	102 42 51.000	64.	90.	50.	01202	00000	00000	77773	
	102 42 53.000	64.	90.	50.	01202	00000	00000	77773	
1202 →	102 42 55.000	64	64.	6.	BLANK	BLANK	BLANK	77773	
	102 42 57.000	64.	64.	6.	+54 35	-00267	+00768	77773	
	102 42 59.000	64.	64.	6.	+54 35	-00267	+00768	77773	

blanking due to PRO on V06N64.

MAJOR MODE ELEM 158	NOUN DISPLAYED ELEM 159	VERB DISPLAYED ELEM 160	REGISTER R1 ELEM 161	REGISTER R2 ELEM 162	REGISTER R3 ELEM 163	LIST ID OCTAL ELEM 2	REDOCTR NUMBER OF COMPUTER RESTARTS ELEM 40

TIME HR	MIN	SECS	DATA	DATA	DATA	DATA	DATA	DATA	DATA	DATA
102	43	1.000	64.	64.	6.	+52 35	-00251	+00746	77773	
102	43	3.000	64.	64.	6.	+ 34	-00234	+00718	77773	
102	43	5.000	64.	64.	6.	+48 33	-00219	+00684	77773	
102	43	7.000	64.	64.	6.	33	-00205	+00648	77773	
102	43	9.000	64.	64.	6.	+42	-00192	+00578	77773	
102	43	11.000	64.	64.	6.	32	-00179	+00578	77773	
102	43	13.000	64.	64.	6.	+42 31	-00167	+00546	77773	
102	43	15.000	64.	64.	6.	+40 31	-00154	+00513	77773	
102	43	17.000	64.	64.	6.	+38 30	-00146	+00483	77773	
102	43	19.000	64.	64.	6.	+33 19	-00118	+00430	77773	
102	43	21.000	66.	60	6.	+00603	-00100	+00410	77773	
102	43	23.000	66.	60.	6.	+00594	-00094	+00391	77773	
102	43	25.000	66.	60.	6.	+00584	-00083	+00373	77773	
102	43	27.000	66.	60.	6.	+00578	-00081	+00357	77773	
102	43	29.000	66.	60.	6.	+00563	-00041	+00347	77773	
102	43	31.000	66.	60.	6.	+00553	-00035	+00338	77773	
102	43	33.000	66.	60.	6.	+00544	-00034	+00327	77773	
102	43	35.000	66.	60.	6.	+00534	-00035	+00321	77773	
102	43	37.000	66.	60.	6.	+00522	-00034	+00314	77773	
102	43	39.000	66.	60.	6.	+00517	-00035	+00309	77773	
102	43	41.000	66.	60.	6.	+00508	-00034	+00304	77773	
102	43	43.000	66.	60.	6.	+00490	-00033	+00300	77773	
102	43	45.000	66.	60.	6.	+00475	-00036	+00295	77773	
102	43	47.000	66.	60.	6.	+00454	-00023	+00285	77773	
102	43	49.000	66.	60.	6.	+00416	-00015	+00286	77773	
102	43	51.000	66.	60.	6.	+00391	-00013	+00283	77773	
102	43	53.000	66.	60.	6	+00364	-00013	+00276	77773	
102	43	55.000	66.	60.	6.	+00337	-00014	+00271	77773	
102	43	57.000	66.	60.	6.	+00308	-00014	+00266	77773	
102	43	59.000	66.	60.	6.	+00281	-00013	+00260	77773	
102	44	1.000	66.	60.	6.	+00254	-00013	+00257	77773	
102	44	3.000	66.	60.	6.	+00226	-00018	+00254	77773	
102	44	5.000	66.	60.	6.	+00113	-00022	+0024	77773	
102	44	7.000	66.	60.	6.	+00194	-00029	+00244	77773	
102	44	9.000	66.	60.	6.	+00171	-00033	+00238	77773	
102	44	11.000	66.	60.	6.	+00155	-00035	+00232	77773	
102	44	13.000	66.	60.	6.	+00146	-00033	+00226	77773	
102	44	15.000	66.	60.	6.	+00138	-00030	+00219	77773	
102	44	17.000	66.	60.	6.	+00126	-00025	+00213	77773	
102	44	19.000	66.	60.	6.	+00118	-00036	+00208	77773	
102	44	21.000	66.	60.	6.	+00111	-00046	+00201	77773	
102	44	23.000	66.	60.	6.	+00104	-00060	+00191	77773	
102	44	25.000	66.	60.	6.	+00096	-00064	+00180	77773	
102	44	27.000	66.	60.	6.	+00092	-00064	+00166	77773	
102	44	29.000	66.	60.	6.	+00089	-00063	+00155	77773	
102	44	31.000	66.	60.	6.	+00090	-00048	+00155	77773	

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MAJOR MODE	NOUN DISPLAYED	VERB DISPLAYED	REGISTER R1	REGISTER R2	REGISTER R3	LIST ID OCTAL	REDOCTR NUMBER OF COMPUTER RESTARTS
ELEM 3 158	ELEM 4 159	ELEM 5 160	ELEM 6 161	ELEM 7 162	ELEM 8 163	ELEM 2	ELEM 40

TIME HR	MIN	SECS	DATA	DATA	DATA	DATA	DATA	DATA	DATA	DATA
102	44	33.000	66.	60.	6.	+00094	-00045	+00133	77773	
102	44	35.000	66.	60.	6.	+00096	-00046	+00123	77773	
102	44	37.000	66.	60.	6.	+00199	-00031	+00112	77773	
102	44	39.000	66.	60.	6.	+00102	-00035	+00105	77773	
102	44	41.000	66.	60.	6.	+00096	-00032	+00104	77773	
102	44	43.000	66.	60.	6.	+00097	-00033	+00100	77773	
102	44	45.000	66.	60.	6.	+00091	-00034	+00090	77773	
102	44	47.000	66.	60.	6.	+00086	-00023	+00084	77773	
102	44	49.000	66.	60.	6.	+00082	-00018	+00070	77773	
102	44	51.000	66.	60.	6.	+00073	-00007	+00076	77773	
102	44	53.000	66.	60.	6.	+00067	00004	+00075	77773	
102	44	55.000	66.	60.	6.	+00067	00004	+00075	77773	
102	44	57.000	66.	60.	6.	+00055	-00020	+00073	77773	
102	44	59.000	66.	60.	6.	+00052	-00024	+00070	77773	
102	45	1.000	66.	60.	6.	+00047	-00021	+00065	77773	
102	45	3.000	66.	60.	6.	+00038	-00024	+00060	77773	
102	45	5.000	66.	60.	6.	+00035	-00025	+00055	77773	
102	45	7.000	66.	60.	6.	+00029	-00024	+00051	77773	
102	45	9.000	66.	60.	6.	+00027	-00027	+00049	77773	
102	45	11.000	66.	60.	6.	+00025	-00021	+00047	77773	
102	45	13.000	66.	60.	6.	+00029	-00025	+00042	77773	
102	45	15.000	66.	60.	6.	+00031	-00025	+00038	77773	
102	45	17.000	66.	60.	6.	+00037	-00024	+00032	77773	
102	45	19.000	66.	60.	6.	+00040	-00025	+00029	77773	
102	45	21.000	66.	60.	6.	+00042	-00017	+00025	77773	
102	45	23.000	66.	60.	6.	+00041	-00014	+00023	77773	
102	45	25.000	66.	60.	6.	+00039	-00007	+00020	77773	
102	45	27.000	66.	60.	6.	+00038	+00002	+00019	77773	
102	45	29.000	66.	60.	6.	+00033	+00005	+00017	77773	
102	45	31.000	66.	60.	6.	+00039	-00003	+00019	77773	
102	45	33.000	66.	60.	6.	+00042	-00012	+00022	77773	
102	45	35.000	66.	60.	6.	+00041	-00013	+00020	77773	
102	45	37.000	66.	60.	6.	+00049	-00020	+00017	77773	
102	45	39.000	66.	60.	6.	+00049	-00012	+00013	77773	
TD → 102	45	41.000	66.	60.	6.	+00027	-00002	+00010	77773	
102	45	43.000	66.	60.	6.	+00029	-00000	+00010	77773	
102	45	45.000	66.	60.	6.	+00030	-00001	+00009	77773	
102	45	47.000	66.	60.	6.	+00030	-00001	+00009	77773	
102	45	49.000	66.	60.	6.	+00031	-00001	+00009	77773	
102	45	51.000	66.	60.	6.	+00031	-00001	+00009	77773	
102	45	53.000	66.	60.	6.	+00031	-00001	+00009	77773	
102	45	55.000	66.	60.	6.	+00032	-00001	+00008	77773	
102	45	57.000	66.	60.	6.	+00032	-00001	+00008	77773	
102	45	59.000	66.	60.	6.	+00033	-00001	+00008	77773	
102	46	1.000	66.	60.	6.	+00033	-00001	+00008	77773	
102	46	3.000	66.	60.	6.	+00034	-00001	+00008	77773	

TAPE GROUP NO. - 0

APOLLO 11 LM-5 COMPUTER WORDS

MAJOR MODE ELEM 158	NOUN DISPLAYED ELEM 159	VERB DISPLAYED ELEM 160	REGISTER R1 ELEM 161	REGISTER R2 ELEM 162	REGISTER R3 ELEM 163	USE ID OCTAL ELEM 2	REDOCTR NUMBER OF COMPUTER RESTARTS ELEM 40

TIME HR	MIN	SECS	DATA	DATA	DATA	DATA	DATA	DATA	DATA	DATA
102	46	5.000	66.	60.	6.	+00034	-00001	+00007	77773	
102	46	7.000	66.	60.	6.	+00035	-00001	+00007	77773	
102	46	9.000	66.	60.	6.	+00035	-00001	+00007	77773	
102	46	11.000	66.	60.	6.	+00035	-00001	+00007	77773	
102	46	13.000	66.	60.	6.	+00036	-00001	+00007	77773	
102	46	15.000	66.	60.	6.	+00036	-00001	+00006	77773	
102	46	17.000	66.	60.	6.	+00037	-00001	+00006	77773	
102	46	19.000	66.	60.	6.	+00037	-00001	+00006	77773	
102	46	21.000	66.	60.	6.	+00038	-00001	+00006	77773	
102	46	23.000	66.	60.	6.	+00038	-00001	+00005	77773	
102	46	25.000	66.	60.	6.	+00039	-00001	+00005	77773	
102	46	27.000	66.	60.	6.	+00039	-00001	+00005	77773	
102	46	29.000	66.	60.	6.	+00039	-00001	+00005	77773	
102	46	31.000	66.	60.	6.	+00040	-00001	+00004	77773	
102	46	33.000	66.	60.	6.	+00040	-00001	+00004	77773	
102	46	35.000	66.	60.	6.	+00041	-00002	+00004	77773	
102	46	37.000	66.	60.	6.	+00041	-00001	+00003	77773	
102	46	39.000	66.	60.	6.	+00042	-00001	+00003	77773	
102	46	41.000	66.	60.	6.	+00042	-00001	+00003	77773	
102	46	43.000	66.	60.	6.	+00042	-00001	+00003	77773	
102	46	45.000	66.	60.	6.	+00043	-00001	+00003	77773	
102	46	47.000	66.	60.	6.	+00043	-00002	+00002	77773	
102	46	49.000	66.	60.	6.	+00044	-00001	+00002	77773	
102	46	51.000	66.	60.	6.	+00044	-00001	+00002	77773	
102	46	53.000	66.	60.	6.	+00045	-00002	+00001	77773	
102	46	55.000	66.	60.	6.	+00045	-00002	+00001	77773	
102	46	57.000	66.	60.	6.	+00045	-00002	+00000	77773	
102	46	59.000	66.	60.	6.	+00046	-00002	-00000	77773	
102	47	1.000	66.	60.	6.	+00046	-00002	-00001	77773	
102	47	3.000	66.	60.	6.	+00047	-00001	-00001	77773	
102	47	5.000	66.	60.	6.	+00047	-00002	-00001	77773	
102	47	7.000	66.	60.	6.	+00048	-00002	-00002	77773	
102	47	9.000	66.	60.	6.	+00048	-00002	-00002	77773	
102	47	11.000	66.	60.	6.	+00049	-00002	-00003	77773	
102	47	13.000	66.	60.	6.	+00049	-00002	-00003	77773	
102	47	15.000	66.	60.	0.	+00049	-00002	-00003	77773	
102	47	17.000	66.	0.	37.	+00049	-00002	-00003	77773	
102	47	19.000	66.	0.	37.	+00049	-00002	-00003	77773	
102	47	21.000	66.	0.	37.	+00049	-00002	-00003	77773	
102	47	23.000	66.	0.	37.	+00049	-00002	-00003	77773	
102	47	25.000	66.	0.	37.	+00049	-00002	-00003	77773	
102	47	27.000	66.	0.	37.	+00049	-00002	-00003	77773	
102	47	29.000	66.	0.	37.	+00049	-00002	-00003	77773	
102	47	31.000	66.	0.	37.	+00049	-00002	-00003	77773	
102	47	33.000	66.	0.	37.	+00049	-00002	-00003	77773	
102	47	35.000	66.	0.	37.	+00049	-00002	-00003	77773	

APOLLO 11 LM-5 COMPUTER WORDS

TIME HR MIN SECS	MAJOR MODE ELEM 3 158 DATA	NOUN DISPLAYED ELEM 4 159 DATA	VERB DISPLAYED ELEM 5 160 DATA	REGISTER R1 ELEM 6 161 DATA	REGISTER R2 ELEM 7 162 DATA	REGISTER R3 ELEM 8 163 DATA	LIST ID OCTAL ELEM 2 DATA	REDOCTR NUMBER OF COMPUTER RESTARTS ELEM 40 DATA
102 47 37.000	66.	0.	37.	+00049	-00002	-00003	77773	
102 47 39.000	66.	0.	37.	+00049	-00002	-00003	77773	
102 47 41.000	66.	0.	37.	+00049	-00002	-00003	77773	
102 47 43.000	66.	0.	37.	+00049	-00002	-00003	77773	
102 47 45.000	66.	0.	37.	+00049	-00002	-00003	77773	
102 47 47.000	66.	0.	37.	+00049	-00002	-00003	77773	
102 47 49.000	66.	0.	37.	+00049	-00002	-00003	77773	
102 47 51.000	66.	0.	37.	+00049	-00002	-00003	77773	
102 47 53.000	68.	0.	0.	BLANK	BLANK	BLANK	77773	
102 47 55.000	68.	43.	6.	BLANK	BLANK	BLANK	77773	
102 47 57.000	68.	43.	6.	+00078	+02369	-00000	77773	
102 47 59.000	68.	43.	6.	+00078	+02369	-00000	77773	
102 48 3.000	68.	43.	6.	+00078	+02369	-00000	77773	
102 48 5.000	68.	43.	6.	+00078	+02369	-00000	77773	
102 48 7.000	68.	43.	6.	+00078	+02369	-00000	77773	
102 48 9.000	68.	43.	6.	+00078	+02369	-00000	77773	
102 48 11.000	68.	43.	6.	+00078	+02369	-00000	77773	
102 48 13.000	68.	43.	6.	+00078	+02369	-00000	77773	
102 48 15.000	68.	43.	6.	+00078	+02369	-00000	77773	
102 48 17.000	68.	43.	6.	+00078	+02369	-00000	77773	
102 48 19.000	68.	43.	6.	+00078	+02369	-00000	77773	
102 48 21.000	68.	0.	37.	BLANK	BLANK	BLANK	77773	
102 48 23.000	68.	0.	37.	BLANK	BLANK	BLANK	77773	
102 48 25.000	68.	12.	37.	BLANK	BLANK	BLANK	77773	
102 48 27.000	12.	33.	6.	+00102	+00033	+00429	77773	
102 48 29.000	12.	33.	6.	+00102	+00033	+00429	77773	
102 48 31.000	12.	33.	6.	+00102	+00033	+00429	77773	
102 48 33.000	12.	33.	6.	+00102	+00033	+00429	77773	
102 48 35.000	12.	33.	6.	+00102	+00033	+00429	77773	
102 48 37.000	12.	33.	6.	+00102	+00033	+00429	77773	
102 48 39.000	12.	33.	6.	+00102	+00033	+00429	77773	
102 48 41.000	12.	33.	6.	+00102	+00033	+00429	77773	
102 48 43.000	12.	33.	6.	+00102	+00033	+00429	77773	
102 48 45.000	12.	33.	6.	+00102	+00033	+00429	77773	
102 48 47.000	12.	33.	6.	+00102	+00033	+00429	77773	
102 48 49.000	12.	33.	6.	+00102	+00033	+00429	77773	
102 48 51.000	12.	33.	6.	+00102	+00033	+00429	77773	
102 48 53.000	12.	33.	6.	+00102	+00033	+00429	77773	
102 48 55.000	12.	33.	6.	+00102	+00033	+00429	77773	
102 48 57.000	12.	33.	6.	+00102	+00033	+00429	77773	
102 48 59.000	12.	33.	6.	+00102	+00033	+00429	77773	
102 49 1.000	12.	33.	6.	+00102	+00033	+00429	77773	
102 49 3.000	12.	33.	6.	+00102	+00033	+00429	77773	
102 49 5.000	12.	33.	6.	+00102	+00033	+00429	77773	
102 49 7.000	12.	33.	0.	+00102	+00033	+00429	77773	
102 49 9.000	12.	33.	0.	+00102	+00033	+00429	77773	
	12.	33.	25.	+00102	+00033	+00429	77773	

TIME HR	MIN	SECS	ALPHAR ACCEL ABOUT Z BODY AXIS ELEM 113 DATA	ALPHAO ACCEL ABOUT X BODY AXIS ELEM 112 DATA	CSMMASS LGC ESTIMAT OF CSM MASS ELEM 151 DATA	LMMASS LGC ESTIMAT OF LM MASS ELEM 147 DATA
102	45	5.000	-.0165	.0494	36655.9	16758.0
102	45	7.000	.0330	.0330	36655.9	16740.4
102	45	9.000	-.0055	.0549	36655.9	16713.9
102	45	11.000	-.0055	.0385	36655.9	16696.4
102	45	13.000	-.0055	-.0934	36655.9	16678.6
102	45	15.000	.0110	.0439	36655.9	16661.0
102	45	17.000	.0165	-.0494	36655.9	16643.3
102	45	19.000	.0275	.0220	36655.9	16625.7
102	45	21.000	.0330	-.0330	36655.9	16608.1
102	45	23.000	.0549	-.0385	36655.9	16590.4
102	45	25.000	.0110	.0165	36655.9	16572.8
102	45	27.000	.0000	.0110	36655.9	16555.1
102	45	29.000	.0000	-.0439	36655.9	16537.5
102	45	31.000	.0220	-.0220	36655.9	16519.9
102	45	33.000	.0220	-.0110	36655.9	16502.2
102	45	35.000	.0385	-.0824	36655.9	16484.6
102	45	37.000	-.6537	-.4065	36655.9	16466.9
102	45	39.000	-.7635	-.1978	36655.9	16449.3
TD → 102	45	41.000	-1.4802	.3955	36655.9	[illegible]
102	45	43.000	-.5878	.2527	36655.9	[illegible]
102	45	45.000	-.1923	.0934	36655.9	16346.4
102	45	47.000	.0989	.6055	36655.9	16328.7
102	45	49.000	.0000	.0055	36655.9	16311.1
102	45	51.000	.0000	.0055	36655.9	16293.5
102	45	53.000	.0000	.0055	36655.9	16275.9
102	45	55.000	.0000	.0055	36655.9	16258.2
102	45	57.000	.0000	.0055	36655.9	16240.6
102	45	59.000	.0000	.0055	36655.9	16223.0
102	46	1.000	.0000	.0055	36655.9	16205.4
102	46	3.000	.0000	.0055	36655.9	16187.8
102	46	5.000	.0000	.0055	36655.9	16170.1
102	46	7.000	.0000	.0055	36655.9	16152.5
102	46	9.000	.0000	.0055	36655.9	16134.9
102	46	11.000	.0000	.0055	36655.9	16117.2
102	46	13.000	.0000	.0055	36655.9	16099.6
102	46	15.000	.0000	.0055	36655.9	16082.0
102	46	17.000	.0000	.0055	36655.9	16064.3
102	46	19.000	.0000	.0055	36655.9	16046.7
102	46	21.000	.0000	.0055	36655.9	16029.1
102	46	23.000	.0000	.0055	36655.9	16011.4
102	46	25.000	.0000	.0055	36655.9	15993.8
102	46	27.000	.0000	.0055	36655.9	15976.1
102	46	29.000	.0000	.0055	36655.9	15958.5
102	46	31.000	.0000	.0055	36655.9	15940.9
102	46	33.000	.0000	.0055	36655.9	15923.2
102	46	35.000	.0000	.0055	36655.9	15905.6

AB GROUP NO. - 30

ALGOL 11 IN-5 COMPILER

TIME HR	MIN	SECS	TLRRNG TM OF CDL'S FOR LR RANG READING, R12 ELEM 146 DATA	LRRNG DP D.P.LNDNG RADAR SLANT RANGE ELEM 288 DATA	CDLYLRR Y CDL AT LR RNGE RD ELEM 359 DATA	CDLZLRR Z CDL AT LR RNGE RD. ELEM 360 DATA	CDLXLRR X CDL AT LR RNGE ELEM 361 DATA
102	36	9.000	.00	-80312741.0	14.600R		
102	36	11.000	.00	-80312741.0	14.600R		
102	36	57.000	.00	-80312741.0	14.600R		
102	36	59.000	.00	-80312741.0	14.600R		
102	37	1.000	.00	-80312741.0	14.600R		
102	37	2.000	.00	-80312741.0	14.600R		
102	37	5.000	.00	-80312741.0	14.600R		
102	37	15.000	.00	-80312741.0	14.600R		
102	37	17.000	.00	-80312741.0	14.600R		
102	37	19.000	.00	-80312741.0	14.600R		
102	37	25.000	.00	-80312741.0	14.600R		
102	37	27.000	.00	-80312741.0	14.600R		
102	37	27.000	.00	-80312741.0	14.600R		
102	37	31.000	.00	-80312741.0	14.600R		
102	37	37.000	.00	-80312741.0	14.600R		
102	37	49.000	.00	-80312741.0	14.600R		
102	37	51.000	.00	-80312741.0	14.600R		
102	37	53.000	369472.39	43753.4	79.1565		
102	37	55.000	369474.39	41897.6	78.9148		
102	37	57.000	369476.39	40144.2	78.3655		
102	37	59.000	369478.39	39329.5	77.9590		
102	38	1.000	369480.39	39005.8	77.8491		
102	38	3.000	369482.39	38671.4	78.0469		
102	38	5.000	369484.39	38520.3	78.1458		
102	38	7.000	369486.39	38444.8	77.9919		
102	38	9.000	369488.39	37781.2	77.7502		
102	38	11.000	369490.39	37473.7	77.2559		
102	38	13.000	369492.39	37295.6	77.9041		
102	38	15.000	369494.39	37284.8	77.8491		
102	38	17.000	369496.39	36594.3	77.2449		
102	38	19.000	369498.39	36481.0	77.4648		
102	38	21.000	369500.39	36481.0	77.3657		
102	38	23.000	369500.39	36481.0	77.3657		
102	38	25.000	369504.39	35666.3	77.1790		
102	38	27.000	369506.39	35785.0	76.8933		
102	38	29.000	369508.39	35191.6	76.1682		
102	38	31.000	369510.39	34862.5	76.7725		
102	38	33.000	369512.39	34867.9	77.1130		
102	38	35.000	369514.39	34511.8	77.0032		
102	38	37.000	369516.39	34290.6	75.8057		
102	38	39.000	369518.39	33195.4	74.2896		
102	38	41.000	369520.39	33119.9	75.3223		
102	38	43.000	369522.39	33087.5	76.5108		
102	38	45.000	369524.39	32245.9	74.0039		
102	38	47.000	369526.39	31733.4	73.9169		
102	38	49.000	369528.39	31560.7	73.4436		

FIRST RANGE READING →

TIME HR	MIN	SECS	TLRRNG TM OF CDU'S FOR LR RANG READING, R12 ELEM 146 DATA	LRRNG DP D.P.LNG.G RADAR SLANT RANGE ELEM 288 DATA	CDUYLRR Y CDU AT LR RNGE RD ELEM 359 DATA	CDUZLRR Z CDU AT LR RNGE RD. ELEM 360 DATA	CDUXLRR X CDU AT LR RNGE RD. ELEM 361 DATA
102	45	1.000	369906.44	77.7	4.5374		
102	45	3.000	369908.44	77.7	4.5374		
102	45	7.000	369906.44	55.0	6.0535		
102	45	9.000	369908.44	57.2	4.1528		
102	45	11.000	369910.44	56.1	354.9902		
102	45	13.000	369912.44	45.3	355.7593		
102	45	15.000	369914.44	42.1	356.8469		
102	45	17.000	369916.44	34.5	357.4951		
102	45	19.000	369918.44	34.5	358.8554		
102	45	21.000	369920.44	28.1	354.6929		
102	45	23.000	369922.44	28.1	1.7139		
102	45	25.000	369924.44	22.7	2.6587		
102	45	27.000	369926.44	22.7	3.0652		
102	45	29.000	369928.44	11.9	3.5815		
102	45	31.000	369930.44	24.8	4.8999		
102	45	33.000	369932.44	29.1	5.5151		
102	45	35.000	369934.44	21.6	4.7581		
102	45	37.000	369936.44	18.3	3.5046		
102	45	39.000	369938.44	10.8	.3516		
TD → 102	45	41.000	369938.44	10.8	.3516		
102	45	43.000	369938.44	10.8	.3516		
102	45	45.000	369938.44	10.8	.3516		
102	45	47.000	369938.44	10.8	.3516		
102	45	49.000	369938.44	10.8	.3516		
102	45	51.000	369938.44	10.8	.3516		
102	45	53.000	369938.44	10.8	.3516		
102	45	55.000	369938.44	10.8	.3516		
102	45	57.000	369938.44	10.8	.3516		
102	45	59.000	369938.44	10.8	.3516		
102	46	1.000	369938.44	10.8	.3516		
102	46	3.000	369938.44	10.8	.3516		
102	46	5.000	369938.44	10.8	.3516		
102	46	7.000	369938.44	10.8	.3516		
102	46	9.000	369938.44	10.8	.3516		
102	46	11.000	369938.44	10.8	.3516		
102	46	13.000	369938.44	10.8	.3516		
102	46	15.000	369938.44	10.8	.3516		
102	46	17.000	369938.44	10.8	.3516		
102	46	19.000	369938.44	10.8	.3516		
102	46	21.000	369938.44	10.8	.3516		
102	46	23.000	369938.44	10.8	.3516		
102	46	25.000	369938.44	10.8	.3516		
102	46	27.000	369938.44	10.8	.3516		
102	46	29.000	369938.44	10.8	.3516		
102	46	31.000	369938.44	10.8	.3516		
102	46	33.000	369938.44	10.8	.3516		

FIRST READING → 37000 Feet

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TIME HR	MIN	SECS	TTG/R TIME TO PHASE END ELEM 308 DATA	DELTAH LR-LGC ALTITUDE ELEM 326 DATA	LSVECX X COMP LANDING SIT LUNAR COORD ELEM 292 DATA	LSVECY Y COMP. LANDING SIT LUNAR COORD ELEM 293 DATA	LSVECZ Z COMP. LANDING SIT LUNAR COORD ELEM 294 DATA	LSPOSX X COMP. LANDING SIT STB MEM. COORD ELEM 333 DATA	LSPOSY Y COMP. LANDING SIT STB MEM. COORD ELEM 334 DATA	LSPOSZ Z COMP LANDING SI STB MEM COORD ELEM 335 DATA
102	47	49.000	-276.78	99999.0	5211277.9	22878829.7	78279.2	5691886.2	9737.1	7434
102	47	51.000	-274.62	99999.0	5211277.9	22878829.7	78279.2	5691885.2	9726.9	7434
102	47	53.000	-272.47	-2069.0	5211277.9	22878829.7	78279.2	5691885.2	9726.9	7454
102	47	55.000	-270.33	-2104.0	5211277.9	22878829.7	78279.2	5691885.2	9726.9	7454
102	47	57.000	-268.19	-2489.7	5211277.9	22878829.7	78279.2	5691885.2	9726.9	7454
102	47	59.000	-266.06	-2653.4	5211277.9	22878829.7	78279.2	5691885.6	9726.9	7454
102	48	1.000	-263.94	-2785.8	5211277.9	22878829.7	78279.2	5691885.6	9724.8	7454
102	48	3.000	-261.82	-2875.2	5211277.9	22878829.7	78279.2	5691885.6	9724.8	7404
102	48	5.000	-259.71	-2816.6	5211277.9	22878829.7	78279.2	5691885.6	9724.8	7403
102	48	7.000	-257.61	-2612.4	5211277.9	22878829.7	78279.2	5691885.6	9724.8	7404
102	48	9.000	-255.51	-2884.3	5211277.9	22878829.7	78279.2	5691885.6	9724.8	7404
102	48	11.000	-253.43	-2770.7	5211277.9	22878829.7	78279.2	5691885.6	9722.8	7404
102	48	13.000	-251.36	-2928.6	5211277.9	22878829.7	78279.2	5691885.6	9722.8	7155
102	48	15.000	-249.29	-2716.9	5211277.9	22878829.7	78279.2	5691885.6	9722.8	7155
102	48	17.000	-247.29	-2884.9	5211277.9	22878829.7	78279.2	5691885.6	9722.8	7155
102	48	19.000	-245.23	-2822.5	5211277.9	22878829.7	78279.2	5691886.1	9722.8	7155
102	48	21.000	-243.18	-2569.9	5211277.9	22878829.7	78279.2	5691886.1	9720.7	7155
102	48	23.000	-243.15	-2569.9	5211277.9	22878829.7	78279.2	5691886.1	9720.7	7005
102	48	25.000	-239.10	-2770.7	5211277.9	22878829.7	78279.2	5691886.1	9720.7	7005
102	48	27.000	-237.09	-2354.0	5211277.9	22878829.7	78279.2	5691886.1	9720.7	7005
102	48	29.000	-235.09	-2415.3	5211277.9	22878829.7	78279.2	5691886.1	9720.7	7005
102	48	31.000	-233.11	-2646.4	5211277.9	22878829.7	78279.2	5691886.1	9718.7	7005
102	48	33.000	-231.13	-2508.6	5211277.9	22878829.7	78279.2	5691886.1	9718.7	7005
102	48	35.000	-229.17	-2540.2	5211277.9	22878829.7	78279.2	5691886.1	9718.7	[illegible]
102	48	37.000	-227.21	-2141.2	5211277.9	22878829.7	78279.2	5691886.1	9718.7	6855
102	48	39.000	-225.27	-2437.3	5211277.9	22878829.7	78279.2	5691886.1	9718.7	6855
102	48	41.000	-223.34	-2537.9	5211277.9	22878829.7	78279.2	5691886.4	9718.7	6855
102	48	43.000	-221.42	-2655.2	5211277.9	22878829.7	78279.2	5691886.4	9716.6	6855
102	48	45.000	-219.49	-2454.7	5211277.9	22878829.7	78279.2	5691886.4	9716.6	6705
102	48	47.000	-217.59	-2319.6	5211277.9	22878829.7	78279.2	5691886.4	9716.6	6705
102	48	49.000	-215.70	-1785.2	5211277.9	22878829.7	78279.2	5691886.4	9716.6	6705
102	48	51.000	-213.82	-1772.3	5211277.9	22878829.7	78279.2	5691886.4	9716.6	6705
102	48	53.000	-211.95	-1628.7	5211277.9	22878829.7	78279.2	5691886.4	9714.6	6705
102	48	55.000	-211.95	-1347.6	5211277.9	22878829.7	78279.2	5691886.4	9714.6	6555
102	48	57.000	-208.09	-907.2	5211277.9	22878829.7	78279.2	5691886.4	9714.6	6555
102	48	59.000	-206.25	-933.4	5211277.9	22878829.7	78279.2	5691886.4	9714.6	6555
102	49	1.000	-204.43	-821.9	5211277.9	22878829.7	78279.2	5691886.4	9714.6	6555
102	49	3.000	-202.61	-1826.0	5211277.9	22878829.7	78279.2	5691886.4	9712.5	6555
102	49	5.000	-200.81	-493.6	5211277.9	22878829.7	78279.2	5691886.4	9712.5	6406
102	49	7.000	-199.25	-438.8	5211277.9	22878829.7	78279.2	5691886.4	9712.5	6406
102	49	9.000	-197.50	-414.4	5211277.9	22878829.7	78279.2	5691886.4	9712.5	6406
102	49	11.000	-195.75	-269.0	5211277.9	22878829.7	78279.2	5691886.9	9712.5	6406
102	49	13.000	-194.02	-119.3	5211277.9	22878829.7	78279.2	5691886.9	9710.5	6406
102	49	15.000	-192.34	4.9	5211277.9	22878829.7	78279.2	5691886.9	9710.5	6256
102	49	17.000	-190.63	-26.0	5211277.9	22878829.7	78279.2	5691886.9	9710.5	6256
102	49	19.000	-188.95	-76.7	5211277.9	22878829.7	78279.2	5691886.9	9710.5	6256

TIME HR	MIN	SECS	TLAND TIME OF LANDING ELEM 337	DDPSTHR DPS THRUST ELEM 338	VTHACCEL VEHICLE ACCEL, ELEM 346	TTOGO TIME TO IGN ON ENGINE CUT OFF ELEM 340	CMDECA THRT. OUTPUT COUNTER ELEM 339
102	32	27.000	369874.36	2187.0	8.195	-35.98	-29.7
102	32	29.000	369874.36	2187.0	8.195	-33.98	-29.7
102	32	31.000	369874.36	2187.0	8.195	-31.98	-29.7
102	32	35.000	369874.36	2187.0	8.195	-27.98	-29.7
102	32	37.000	369874.36	2187.0	8.195	-25.98	-29.7
102	32	39.000	369874.36	2187.0	8.195	-23.98	-29.7
102	32	41.000	369874.36	2187.0	8.195	-23.98	-29.7
102	32	43.000	369874.36	2187.0	8.195	-23.98	-29.7
102	32	45.000	369874.36	2187.0	8.195	-17.98	-29.7
102	32	47.000	369874.36	2187.0	8.195	-15.98	-29.7
102	32	49.000	369874.36	2187.0	8.195	-13.98	-29.7
102	32	54.000	369874.36	2187.0	8.195	-7.98	-29.7
102	32	57.000	369874.36	2187.0	8.195	-5.98	-29.7
102	32	59.000	369874.36	2187.0	8.195	-3.98	-29.7
102	33	1.000	369874.36	2187.0	8.195	-1.98	-29.7
102	33	3.000	369874.36	2187.0	8.195	-.98	-29.7
ON → 102	33	5.000	369874.36	2187.0	8.195	-.98	-29.7
102	33	7.000	369874.36	2187.0	8.195	-.98	-29.7
102	33	9.000	369874.36	2187.0	8.195	-.98	-29.7
102	33	11.000	369874.36	2187.0	8.195	-.98	-29.7
102	34	3.000	369874.36	2187.0	8.195	-.98	11059.2
102	34	5.000	369874.36	15527.7	7.805	-.98	11059.2
102	34	7.000	369874.36	15498.0	7.805	-.98	11059.2
102	34	9.000	369874.36	15465.6	7.805	-.98	11059.2
102	34	11.000	369874.36	15435.9	7.805	-.98	11059.2
102	34	13.000	369874.36	15403.5	7.805	-.98	11059.2
102	34	15.000	369874.36	15373.8	7.674	-.98	11059.2
102	34	17.000	369874.36	15341.4	7.674	-.98	11059.2
102	34	19.000	369874.36	15309.0	7.674	-.98	11059.2
102	34	21.000	369874.36	15279.3	7.674	-.98	11059.2
102	34	23.000	369874.36	15246.9	7.674	-.98	11059.2
102	34	25.000	369874.36	15214.5	7.540	-.98	11059.2
102	34	29.000	369874.36	15182.1	7.540	-.98	11059.2
102	34	31.000	369874.36	15117.3	7.540	-.98	11059.2
102	34	33.000	369874.36	15087.6	7.540	-.98	11059.2
102	34	35.000	369874.36	15052.5	7.403	-.98	11059.2
102	34	37.000	369874.36	15020.1	7.403	-.98	11059.2
102	34	39.000	369874.36	14990.4	7.403	-.98	11059.2
102	34	41.000	369874.36	14955.3	7.403	-.98	11059.2
102	34	43.000	369874.36	14925.6	7.403	-.98	11059.2
102	34	45.000	369874.36	14893.2	7.263	-.98	11059.2
102	34	47.000	369874.36	14860.8	7.263	-.98	11059.2
102	34	49.000	369874.36	14828.4	7.263	-.98	11059.2
102	34	51.000	369874.36	14796.0	7.263	-.98	11059.2
102	34	53.000	369874.36	14763.6	7.263	-.98	11059.2
102	34	55.000	369874.36	14731.2	7.121	-.98	11059.2

SUB GROUP NO.- 32

APOLLO 11 LM-5 COMPUTER WORDS

TIME HR MIN SECS	TLAND TIME OF LANDING ELEM 337	DOPSTHR DPS THRUST ELEM 338	VTHACCEL VEHICLE ACCEL. ELEM 336	TTOGO TIME TO IGN ON ENGINE CUT OFF ELEM 340	CMDECA THRT. OUTPUT COUNTER ELEM 339
102 14 57.000	369874.36	14698.8	7.121	-.98	11059.2
102 14 59.000	369874.36	14666.4	7.121	-.98	11059.2
102 15 1.000	369874.36	14634.0	7.121	-.98	11059.2
102 15 3.000	369874.36	14598.9	7.121	-.98	11059.2
102 15 5.000	369874.36	14566.5	6.976	-.98	11059.2
102 15 7.000	369874.36	14531.4	6.976	-.98	11059.2
102 15 9.000	369874.36	14499.0	6.976	-.98	11059.2
102 15 11.000	369874.36	14466.6	6.976	-.98	11059.2
102 15 13.000	369874.36	14434.2	6.976	-.98	11059.2
102 15 15.000	369874.36	14401.8	6.829	-.98	11059.2
102 15 17.000	369874.36	14366.7	6.829	-.98	11059.2
102 15 19.000	369874.36	14334.3	6.829	-.98	11059.2
102 15 21.000	369874.36	14301.9	6.829	-.98	11059.2
102 15 23.000	369874.36	14266.8	6.829	-.98	11059.2
102 15 25.000	369874.36	14231.7	6.679	-.98	11059.2
102 15 27.000	369874.36	14196.6	6.679	-.98	11059.2
102 15 29.000	369874.36	14164.2	6.679	-.98	11059.2
102 15 31.000	369874.36	14129.1	6.679	-.98	11059.2
102 15 33.000	369874.36	14094.0	6.679	-.98	11059.2
102 15 37.000	369874.36	14026.5	6.679	-.98	11059.2
102 15 39.000	369874.36	13991.4	6.679	-.98	11059.2
102 15 41.000	369874.36	13956.3	6.679	-.98	11059.2
102 15 43.000	369874.36	13921.2	6.679	-.98	11059.2
102 15 45.000	369874.36	13886.1	6.371	-.98	11059.2
102 15 47.000	369874.36	13848.3	6.371	-.98	11059.2
102 15 51.000	369874.36	13778.1	6.371	-.98	11059.2
102 15 57.000	369874.36	13778.1	6.371	-.98	11059.2
102 16 1.000	369874.36	13778.1	6.371	-.98	11059.2
102 16 3.000	369874.36	13559.1	6.371	-.98	11059.2
102 16 5.000	369874.36	13521.6	6.053	-.98	11059.2
102 16 7.000	369874.36	13483.8	6.053	-.98	11059.2
102 16 9.000	369874.36	13446.0	6.053	-.98	11059.2
102 16 11.000	369874.36	13408.2	6.053	-.98	11059.2
102 16 57.000	369874.36	11167.7	6.053	-.98	11059.2
102 16 59.000	369874.36	12395.7	6.053	-.98	11059.2
102 17 1.000	369874.36	12352.5	6.053	-.98	11059.2
102 17 2.000	369874.36	12352.5	6.053	-.98	11059.2
102 17 5.000	369874.36	12352.5	5.113	-.98	11059.2
102 17 15.000	369874.36	12206.7	5.008	-.98	11059.2
102 17 17.000	369874.36	11955.6	5.008	-.98	11059.2
102 17 19.000	369874.36	11904.3	5.008	-.98	11059.2
102 17 25.000	369874.36	11847.6	4.760	-.98	11059.2
102 17 27.000	369874.36	11685.6	4.760	-.98	11059.2
102 17 27.000	369874.36	11685.6	4.760	-.98	11059.2
102 17 31.000	369874.36	11685.6	4.760	-.98	11059.2
102 17 47.000	369874.36	11685.6	4.760	-.98	11059.2

TIME HR	MIN	SECS	TLAND TIME OF LANDING ELEM 337	DDPSTHR DPS THRUST ELEM 338	VTHACCEL VEHICLE ACCEL. ELEM 336	TTOGO TIME TO IGN ON ENGINE CUT OFF ELEM 340	CMDECA THRT. OUTPUT COUNTER ELEM 339
			DATA	DATA	DATA	DATA	DATA
102	37	49.000	369874.36	11342.7	4.760	-.98	11059.2
102	37	51.000	369874.36	10964.7	4.760	-.98	11059.2
102	37	53.000	369874.36	10899.9	4.760	-.98	11059.2
102	37	55.000	369874.36	10832.4	4.136	-.98	11059.2
102	37	57.000	369874.36	10767.6	4.136	-.98	11059.2
102	37	59.000	369874.36	10697.4	4.136	-.98	11059.2
102	38	1.000	369874.36	10624.5	4.136	-.98	11059.2
102	38	3.000	369874.36	10554.3	4.136	-.98	11059.2
102	38	5.000	369874.36	10478.7	3.947	-.98	11059.2
102	38	7.000	369874.36	10405.8	3.947	-.98	11059.2
102	38	9.000	369874.36	10332.9	3.947	-.98	11059.2
102	38	11.000	369874.36	10254.6	3.947	-.98	11059.2
102	38	13.000	369874.36	10176.3	3.947	-.98	11059.2
102	38	15.000	369874.36	10095.3	3.756	-.98	11059.2
102	38	17.000	369874.36	10019.7	3.756	-.98	11059.2
102	38	19.000	369874.36	9938.0	3.756	-.98	11059.2
102	38	21.000	369874.36	9849.6	3.756	-.98	11059.2
102	38	23.000	369874.36	9765.9	3.756	-.98	11059.2
102	38	25.000	369874.36	9676.8	3.561	-.98	11059.2
102	38	27.000	369874.36	9590.4	3.561	-.98	11059.2
102	38	29.000	369874.36	9501.3	3.561	-.98	11059.2
102	38	31.000	369874.36	9409.5	3.561	-.98	11059.2
102	38	33.000	369874.36	9315.0	3.561	-.98	11059.2
102	38	35.000	369874.36	9220.5	3.365	-.98	11059.2
102	38	37.000	369874.36	9123.3	3.365	-.98	11059.2
102	38	39.000	369874.36	9026.1	3.365	-.98	11059.2
102	38	41.000	369874.36	8920.8	3.365	-.98	11059.2
102	38	43.000	369874.36	8818.2	3.365	-.98	11059.2
102	38	45.000	369874.36	8712.9	3.166	-.98	11059.2
102	38	47.000	369874.36	8623.8	3.166	-.98	11059.2
102	38	49.000	369874.36	8526.6	3.166	-.98	11059.2
102	38	51.000	369874.36	8432.1	3.166	-.98	11059.2
102	38	53.000	369874.36	8329.5	3.166	-.98	11059.2
102	38	55.000	369874.36	8228.9	2.966	-.98	11059.2
102	38	57.000	369874.36	8226.9	2.966	-.98	11059.2
102	38	59.000	369874.36	8013.8	2.966	-.98	11059.2
102	39	1.000	369874.36	7897.5	2.966	-.98	11059.2
102	39	3.000	369874.36	7776.0	2.966	-.98	11059.2
102	39	5.000	369874.36	7665.3	2.765	-.98	11059.2
102	39	7.000	369874.36	7541.1	2.765	-.98	11056.5
102	39	9.000	369874.36	7408.8	2.765	-.98	11059.2
102	39	11.000	369874.36	7268.4	2.765	-.98	11059.2
102	39	13.000	369874.36	7133.4	2.765	-.98	11059.2
102	39	15.000	369874.36	6990.3	2.564	-.98	11059.2
102	39	17.000	369874.36	6843.7	2.564	-.98	11059.2
102	39	19.000	369874.36	6679.8	2.564	-.98	11059.2

TIME HR	MIN	SECS	TLAND TIME OF LANDING ELEM 337 DATA	DDPSTHR DPS THRUST ELEM 338 DATA	VTHACCEL VEHICLE ACCEL ELEM 338 DATA	TTOGO TIME TO IGN ON ENGINE CUT OFF ELEM 340 DATA	CMDECA THRT. OUTPUT COUNTER ELEM 339 DATA
102	39	21.000	36987.36	6517.8	2.564	-.98	11059.2
102	39	23.000	36987.36	6350.4	2.564	-.98	11059.2
102	39	25.000	36987.36	6183.0	2.363	-.98	11059.2
102	39	29.000	36987.36	5832.0	2.363	-.98	-4708.8
102	39	31.000	36987.36	5661.9	2.363	-.98	-170.1
102	39	33.000	36987.36	5489.1	2.363	-.98	-180.9
102	39	35.000	36987.36	5475.6	2.177	-.98	48.6
102	39	37.000	36987.36	5472.9	2.177	-.98	-13.5
102	39	39.000	36987.36	5475.6	2.177	-.98	-35.1
102	39	41.000	36987.36	5487.5	2.177	-.98	5.4
102	39	43.000	36987.36	5481.0	2.177	-.98	21.6
102	39	45.000	36987.36	5483.7	2.059	-.98	.0
102	39	47.000	36987.36	5486.4	2.059	-.98	-18.9
102	39	49.000	36987.36	5494.5	2.059	-.98	13.5
102	39	51.000	36987.36	5494.5	2.059	-.98	29.7
102	39	53.000	36987.36	5489.1	2.059	-.98	-13.5
102	39	55.000	36987.36	5502.6	1.943	-.98	-21.6
102	39	57.000	36987.36	5508.0	1.943	-.98	18.9
102	39	59.000	36987.36	5508.0	1.943	-.98	21.6
102	40	1.000	36987.36	5518.8	1.943	-.98	-10.8
102	40	1.000	36987.36	5521.5	1.943	-.98	-16.2
102	40	5.000	36987.36	5516.1	1.826	-.98	8.1
102	40	7.000	36987.36	5524.2	1.826	-.98	2.7
102	40	9.000	36987.36	5526.9	1.826	-.98	5.4
102	40	11.000	36987.36	5524.2	1.826	-.98	2.7
102	40	13.000	36987.36	5532.3	1.826	-.98	27.0
102	40	15.000	36987.36	5535.0	1.710	-.98	-16.2
102	40	17.000	36987.36	5540.4	1.710	-.98	18.9
102	40	19.000	36987.36	5556.6	1.710	-.98	-10.8
102	40	21.000	36987.36	5559.3	1.710	-.98	54.0
102	40	23.000	36987.36	5567.4	1.710	-.98	-18.9
102	40	25.000	36987.36	5578.2	1.594	-.98	-8.1
102	40	27.000	36987.36	5578.2	1.594	-.98	-5.4
102	40	29.000	36987.36	5578.2	1.594	-.98	40.5
102	40	31.000	36987.36	5586.3	1.594	-.98	-10.8
102	40	33.000	36987.36	5589.0	1.594	-.98	-29.7
102	40	35.000	36987.36	5591.7	1.478	-.98	43.2
102	40	37.000	36987.36	5607.9	1.478	-.98	2.7
102	40	39.000	36987.36	5610.6	1.478	-.98	2.7
102	40	41.000	36987.36	5618.7	1.478	-.98	35.1
102	40	43.000	36987.36	5629.5	1.478	-.98	.0
102	40	45.000	36987.36	5632.2	1.362	-.98	-48.6
102	40	47.000	36987.36	5624.1	1.362	-.98	40.5
102	40	49.000	36987.36	5640.3	1.362	-.98	72.9
102	40	51.000	36987.36	5653.8	1.362	-.98	-62.1
102	40	53.000	36987.36	5651.1	1.362	-.98	18.9

TIME HR	MIN	SECS	TLAND TIME OF LANDING ELEM 337 DATA	DDPSTHR DPS THRUST ELEM 338 DATA	VTHACCEL VEHICLE ACCEL. ELEM 336 DATA	TTOGO TIME TO IGN ON ENGINE CUT OFF ELEM 340 DATA	CMDECA THRT. OUTPUT COUNTER ELEM 339 DATA
102	40	55.000	369874.36	5664.8	1.241	-.98	29.7
102	40	57.000	369874.36	5670.0	1.241	-.98	0
102	40	59.000	369874.36	5678.1	1.241	-.98	-21.6
102	41	1.000	369874.36	5680.8	1.241	-.98	16.2
102	41	3.000	369874.36	5683.5	1.241	-.98	5.4
102	41	5.000	369874.36	5678.1	1.122	-.98	-13.5
102	41	7.000	369874.36	5678.1	1.122	-.98	24.3
102	41	9.000	369874.36	5686.2	1.122	-.98	-24.3
102	41	11.000	369874.36	5678.1	1.122	-.98	-8.1
102	41	13.000	369874.36	5680.8	1.122	-.98	2.7
102	41	15.000	369874.36	5680.8	1.001	-.98	16.2
102	41	17.000	369874.36	5688.9	1.001	-.98	40.5
102	41	19.000	369874.36	5702.4	1.001	-.98	-27.0
102	41	21.000	369874.36	5699.7	1.001	-.98	.0
102	41	23.000	369874.36	5697.0	1.001	-.98	-5.4
102	41	25.000	369874.36	5688.9	.877	-.98	21.6
102	41	27.000	369874.36	5702.4	.877	-.98	-5.4
102	41	29.000	369874.36	5699.7	.877	-.98	5.4
102	41	31.000	369874.36	5710.5	.877	-.98	97.2
102	41	33.000	369874.36	5805.0	.877	-.98	-70.2
102	41	35.000	369874.36	5732.1	.755	-.98	-37.8
102	41	37.000	369874.36	5651.1	.755	-.98	-145.8
102	41	39.000	369874.36	5567.4	.755	-.98	-59.4
102	41	41.000	369874.36	5483.7	.755	-.98	-64.8
102	41	45.000	369874.36	5337.9	.645	-.98	-54.0
102	41	47.000	369874.36	5270.4	.645	-.98	-51.3
102	41	49.000	369874.36	5200.2	.645	-.98	-113.4
102	41	51.000	369874.36	5127.3	.645	-.98	-62.1
102	41	53.000	369874.36	5057.1	.645	-.98	-62.1
102	41	55.000	369874.36	4989.6	.547	-.98	-94.5
102	41	57.000	369874.36	4919.4	.547	-.98	-67.5
102	41	59.000	369874.36	4843.8	.547	-.98	-64.8
102	42	1.000	369874.36	4781.7	.547	-.98	-8.1
102	42	3.000	369874.36	4719.6	.547	-.98	-143.1
102	42	5.000	369874.36	4652.1	.459	-.98	-27.0
102	42	7.000	369874.36	4587.3	.459	-.98	-81.0
102	42	9.000	369874.36	4525.2	.459	-.98	-70.2
102	42	11.000	369874.36	4471.2	.459	-.98	-83.7
102	42	13.000	369874.36	4411.8	.459	-.98	-24.3
102	42	15.000	369874.36	4352.4	.383	-.98	-27.0
102	42	17.000	369874.36	4306.5	.383	-.98	-81.0
102	42	19.000	369874.36	4255.2	.383	-.98	-72.9
102	42	21.000	369874.36	4198.5	.383	-.98	-45.9
102	42	23.000	369874.36	4147.2	.383	-.98	-40.5
102	42	25.000	369874.36	4101.3	.317	-.98	-54.0
102	42	27.000	369874.36	4055.4	.317	-.98	-40.5

TIME HR	MIN	SECS	TLAND TIME OF LANDING ELEM 337	DDPSTHR DPS THRUST ELEM 338	VTHACCEL VEHICLE ACCEL. ELEM 336	TTOGO TIME TO IGN ON ENGINE CUT OFF ELEM 340	CNDECA THRT. OUTPUT COUNTER ELEM 339
102	42	29.000	369874.36	4017.6	.317	-.98	-32.4
102	42	31.000	369874.36	3974.4	.317	-.98	-48.6
102	42	33.000	369874.36	3928.5	.317	-.98	-51.4
102	42	35.000	369874.36	3882.6	.260	-.98	-83.7
102	42	37.000	369874.36	3831.3	.260	-.98	-48.6
102	42	39.000	369874.36	3785.4	.260	-.98	-8.1
102	42	41.000	369874.36	3744.9	.260	-.98	-48.6
102	42	43.000	369874.36	3709.8	.260	-.98	43.2
102	42	45.000	369874.36	3677.4	.211	-.98	-126.9
102	42	47.000	369874.36	3642.3	.211	-.98	24.3
102	42	49.000	369874.36	3601.8	.211	-.98	-32.4
102	42	51.000	369874.36	3574.8	.211	-.98	-11.5
102	42	53.000	369874.36	3547.8	.211	-.98	-32.4
102	42	55.000	369874.36	3512.7	.167	-.98	-27.0
102	42	57.000	369874.36	3480.3	.167	-.98	11.5
102	42	59.000	369874.36	3512.7	.167	-.98	-48.6
102	43	1.000	369874.36	3458.7	.167	-.98	-45.9
102	43	3.000	369874.36	3410.1	.167	-.98	-45.9
102	43	5.000	369874.36	3366.9	.132	-.98	-32.4
102	43	7.000	369874.36	3331.8	.132	-.98	-29.7
102	43	9.000	369874.36	3298.7	.132	-.98	-18.9
102	43	11.000	369874.36	3269.7	.132	-.98	-56.7
102	43	13.000	369874.36	3231.9	.132	-.98	-18.9
102	43	15.000	369874.36	3204.9	.104	-.98	70.2
102	43	17.000	369874.36	3191.4	.104	-.98	-43.2
102	43	19.000	369874.36	3180.6	.104	-.98	-178.2
102	43	21.000	369874.36	3132.0	.104	-.98	172.8
102	43	23.000	369874.36	2986.2	.104	-.98	297.0
102	43	25.000	369874.36	3299.4	.091	-.98	-699.3
102	43	27.000	369874.36	3620.7	.091	-.98	-915.3
102	43	29.000	369874.36	3763.8	.091	-.98	-226.8
102	43	31.000	369874.36	3026.7	.091	-.98	-72.9
102	43	33.000	369874.36	2848.5	.091	-.98	54.0
102	43	35.000	369874.36	2789.1	.083	-.98	-81.0
102	43	37.000	369874.36	2818.8	.083	-.98	29.7
102	43	39.000	369874.36	2845.8	.083	-.98	-2.7
102	43	41.000	369874.36	2770.2	.083	-.98	-94.5
102	43	43.000	369874.36	2791.8	.083	-.98	359.1
102	43	45.000	369874.36	2907.9	.074	-.98	10.8
102	43	47.000	369874.36	3175.2	.074	-.98	898.4
102	43	49.000	369874.36	2729.7	.074	-.98	521.1
102	43	51.000	369874.36	2632.5	.074	-.98	216.0
102	43	53.000	369874.36	2740.5	.074	-.98	148.5
102	43	55.000	369874.36	2786.4	.056	-.98	51.3
102	43	57.000	369874.36	2816.1	.056	-.98	-70.2
102	43	59.000	369874.36	2880.9	.056	-.98	-18.9

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TIME HR	MIN	SECS	TLAND TIME OF LANDING ELEM 117	DDPSTHR DPS THRUST ELEM 118	VTHACCEL VEHICLE ACCEL. ELEM 116	TTOGO TIME TO IGN ON ENGINE CUT OFF ELEM 140	CMDECA THRT. OUTPUT COUNTER ELEM 119
102	44	1.000	369074.36	2040.4	.056	-.90	-353.7
102	44	3.000	369074.36	2026.9	.056	-.90	-70.3
102	44	5.000	369074.36	2000.0	.034	-.90	714.4
102	44	7.000	369074.36	2430.0	.034	-.90	1255.5
102	44	9.000	369074.36	2297.7	.034	-.90	329.4
102	44	11.000	369074.36	2513.7	.034	-.90	-194.4
102	44	13.000	369074.36	2675.7	.034	-.90	303.4
102	44	15.000	369074.36	3105.0	.022	-.90	70.3
102	44	17.000	369074.36	2816.1	.022	-.90	15.1
102	44	19.000	369074.36	2373.3	.022	-.90	-367.2
102	44	21.000	369074.36	2273.4	.022	-.90	243.0
102	44	23.000	369074.36	2573.1	.022	-.90	116.1
102	44	25.000	369074.36	2718.9	.016	-.90	-0.1
102	44	27.000	369074.36	2710.8	.016	-.90	394.2
102	44	29.000	369074.36	2781.0	.016	-.90	-334.0
102	44	31.000	369074.36	2943.0	.016	-.90	-302.4
102	44	33.000	369074.36	2897.1	.016	-.90	-126.9
102	44	35.000	369074.36	2743.2	.015	-.90	-612.9
102	44	37.000	369074.36	3161.7	.015	-.90	-143.1
102	44	39.000	369074.36	2840.4	.015	-.90	-226.8
102	44	41.000	369074.36	2700.0	.015	-.90	-720.9
102	44	43.000	369074.36	3018.6	.015	-.90	102.6
102	44	45.000	369074.36	2756.7	.015	-.90	-685.0
102	44	47.000	369074.36	3234.6	.015	-.90	91.8
102	44	49.000	369074.36	2902.5	.015	-.90	515.7
102	44	51.000	369074.36	2682.2	.015	-.90	180.9
102	44	53.000	369074.36	2613.6	.015	-.90	-170.2
102	44	55.000	369074.36	2397.6	.010	-.90	-170.2
102	44	57.000	369074.36	2276.1	.010	-.90	75.6
102	44	59.000	369074.36	2654.1	.010	-.90	-183.6
102	45	1.000	369074.36	2586.6	.010	-.90	-10.9
102	45	3.000	369074.36	2678.4	.010	-.90	24.3
102	45	5.000	369074.36	2691.9	.008	-.90	-59.4
102	45	7.000	369074.36	2646.0	.008	-.90	-5.4
102	45	9.000	369074.36	2670.3	.008	-.90	-583.2
102	45	11.000	369074.36	2440.8	.008	-.90	-32.4
102	45	13.000	369074.36	2651.4	.006	-.90	32.4
102	45	15.000	369074.36	2664.9	.004	-.90	-143.1
102	45	17.000	369074.36	2686.5	.004	-.90	113.4
102	45	19.000	369074.36	2656.8	.004	-.90	-317.5
102	45	21.000	369074.36	2662.2	.004	-.90	-121.5
102	45	23.000	369074.36	2702.1	.004	-.90	389.9
102	45	25.000	369074.36	2956.5	.006	-.90	-488.7
102	45	27.000	369074.36	2664.9	.006	-.90	-197.1
102	45	29.000	369074.36	2610.9	.006	-.90	334.8
102	45	31.000	369074.36	2357.1	.006	-.90	102.4

	TLAN TIME OF LANDING ELEM 137	DDPSTHR DPS THRUST ELEM 138	VTHACCEL VEHICLE ACCEL ELEM 138	TTOIO TIME TO IGN OR ENGINE CUT OFF ELEM 140	CNDECA THRT OUTPUT COUNTER ELEM 139
TIME HR MIN SECS	DATA	DATA	DATA	DATA	DATA
[illegible] 15 000	[illegible]	2556.9	.006	[illegible]	[illegible]
102 45 15 000	[illegible]	2513.7	.006	[illegible]	[illegible]
102 45 17 000	[illegible]	2322.0	.006	[illegible]	[illegible]
102 45 39.000	[illegible]	2500.2	.006	[illegible]	[illegible]
TD → 102 45 41.000	[illegible]	2083.4	.006	[illegible]	[illegible]
102 45 43 000	[illegible]	1903.5	.006	[illegible]	[illegible]
102 45 45 000	[illegible]	1927.8	.004	[illegible]	[illegible]
102 45 47.000	[illegible]	1919.7	.004	[illegible]	[illegible]
102 45 49 000	[illegible]	1933.2	.003	[illegible]	[illegible]
102 45 51 000	[illegible]	1930.5	.004	[illegible]	[illegible]
[illegible] 45 53 000	[illegible]	1930.5	.004	[illegible]	[illegible]
[illegible] 45 55 000	[illegible]	1941.3	.005	[illegible]	[illegible]
[illegible] 45 57.000	[illegible]	1930.5	.005	[illegible]	[illegible]
[illegible] 45 59 000	[illegible]	1941.3	.005	[illegible]	[illegible]
[illegible] 46 1 000	[illegible]	1944.0	.005	[illegible]	[illegible]
[illegible] 46 3.000	369874.[illegible]	1927.8	.005	[illegible]	[illegible]
[illegible] 46 5	369874.[illegible]	1918.6	.005	[illegible]	[illegible]
[illegible] 46 7 [illegible]	369874.[illegible]	1925.1	.005	[illegible]	[illegible]
[illegible] 46 9 [illegible]	369874.[illegible]	1919.7	.005	[illegible]	[illegible]
[illegible] 46 11 [illegible]	369874.[illegible]	1940.5	.005	[illegible]	[illegible]
[illegible] 46 [illegible]	[illegible]74.[illegible]	1935.0	.005	[illegible]	[illegible]
[illegible] 46 15 000		1925.1	.005	[illegible]	[illegible]
[illegible] 46 17 000		1927.8	.005	[illegible]	[illegible]
[illegible] 46 19 000		1925.1	.005	[illegible]	[illegible]
[illegible] 46 21 000		1911.6	.005	[illegible]	[illegible]
[illegible] 46 23 000		1906.2	.005	[illegible]	[illegible]
[illegible] 46 25 000		1917.0	.006	[illegible]	[illegible]
[illegible] 46 27 000		[illegible]	.006	[illegible]	[illegible]
[illegible] 46 29 000		[illegible]	[illegible]	[illegible]	[illegible]
[illegible] 46 31 000		1914.3	.006	[illegible]	[illegible]
[illegible] 46 33 000		1903.5	.006	-.98	-402.1
[illegible] 46 35 000	369874.[illegible]	1917.0	.005	-.98	-378.0
[illegible] 46 37 000	369874.[illegible]	1914.3	.006	-.98	-386.1
[illegible] 46 39 000	369874.[illegible]	1922.4	.006	-.98	-348.3
[illegible] 46 41.000	369874.[illegible]	1911.6	.006	-.98	-359.1
[illegible] 46 43 000	369874.[illegible]	1922.4	.006	-.98	-326.7
[illegible] 46 45.000	369874.[illegible]	1903.5	.006	-.98	-375.3
46 47 000	369874.[illegible]	1911.6	.006	-.98	-348.2
46 49.000	369874.[illegible]	1906.2	.006	-.98	-361.8
46 51 000	369874.[illegible]	1914.3	.006	-.98	-332.1
46 53 000	369874.[illegible]	1919.7	.006	-.98	-313.2
[illegible]	369874.[illegible]	1911.6	.007	-.98	-340.2
[illegible]	369874.[illegible]	1917.0	.007	-.98	-315.9
[illegible]	369874.[illegible]	[illegible]	[illegible]	-.98	-337.5
[illegible]	369874.[illegible]	1889.1	.007	-.98	-372.6
[illegible]	369874.[illegible]	1881.9	.007	-.98	-402.1
					-450.4

TIME HR MIN SECS	TLAND TIME OF LANDING ELEM 137 DATA	DDPSTHR DPS THRUST ELEM 138 DATA	VTHACCEL VEHICLE ACCEL ELEM 136 DATA	TTOGO TIME TO IGN OR ENGINE CUT OFF ELEM 140 DATA	CNDECA TORQUE OUTPUT COUNTER ELEM 139 DATA
102 47 5.000	369874.36	1895.4	.007	-.98	-459.1
102 47 7.000	369874.36	1892.7	.007	-.98	-488.8
102 47 [illegible].000	369874.36	1879.2	.007	-.98	-475.[illegible]
102 47 11.000	369874.36	1884.6	.007	-.98	-478.0
102 47 13.000	369874.36	1884.6	.007	-.98	-437.5
102 47 15.000	369874.36	1895.4	.007	-.98	-294.4
102 47 17.000	369874.36	1900.8	.007	-.98	-430.2
102 47 19.000	369874.36	1887.3	.007	-.98	-291.6
102 47 21.000	369874.36	1908.9	.007	-.98	-307.8
102 47 23.000	369874.36	1892.7	.007	-.98	-307.8
[illegible]	369874.36	1892.7	.008	-.98	-307.8
[illegible]	369874.36	1892.7	.008	-.98	-307.8
[illegible]	369874.36	1892.7	.008	-.98	-307.8
[illegible]	369874.36	1892.7	.008	-.98	-307.8
[illegible]	369874.36	1892.7	.008	-.98	-307.8
[illegible]	369874.36	1892.7	.008	-.98	-307.8
[illegible]	369874.36	1892.7	.008	-.98	-307.8
[illegible]	369874.36	1892.7	.008	-.98	-307.8
[illegible]	369874.36	1892.7	.008	-.98	-307.8
[illegible]	369874.36	1892.7	.008	-.98	-307.8
[illegible]	369874.36	1892.7	.008	-.98	-307.8
[illegible]	369874.36	1892.7	.008	-.98	-307.8
[illegible]	369874.36	1892.7	.008	-.98	-307.8
[illegible]	369874.36	1892.7	.008	-.98	-307.8
[illegible]	369874.36	1892.7	.008	-.98	-307.8
[illegible]	369874.36	1892.7	.008	-.98	-307.8
[illegible]	369874.36	1892.7	.008	-.98	-307.8
[illegible]	369874.36	1892.7	.008	-.98	-307.8
[illegible]	369874.36	1892.7	.008	-.98	-307.8
[illegible]	369874.36	[illegible]	.008	-.98	-307.8
[illegible]	369874.36	1892.7	.008	-.98	-307.8
[illegible]	369874.36	1892.7	.008	-.98	-307.8
[illegible]	369874.36	1892.7	.008	-.98	-307.8
[illegible]	369874.36	1892.7	.008	-.98	-307.8
[illegible]	369874.36	1892.7	.008	-.98	-307.8
[illegible]	369874.36	1892.7	.008	-.98	-307.8
[illegible]	369874.36	1892.7	.008	-.98	-307.8
[illegible]	369874.36	1892.7	.008	-.98	-307.8
[illegible]	369874.36	1892.7	.008	-.98	-307.8
[illegible]	369874.36	1892.7	.008	-.98	-307.8
[illegible]	369874.36	1892.7	.008	-.98	-307.8
[illegible]	369874.36	1892.7	.008	-.98	-307.8
[illegible]	369874.36	1892.7	.008	-.98	-307.8
[illegible]	369874.36	1892.7	.008	-.98	-307.8
[illegible]	369874.36	1892.7	.008	-.98	-307.8
[illegible]	369874.36	1892.7	.008	-.98	-307.8

TIME HR	MIN	SECS	FAILREG+0 1ST ALARM ELEM 165 DATA	FAILREG+1 2ND ALARM ELEM 166 DATA	FAILREG+2 3RD ALARM ELEM 167 DATA	RSBBQ CALLING ADD TO RESTART ROUTINE ELEM 213 DATA	RSBBQ+1 Q REGISTER CONTENT ELEM 214 DATA	CADREFSH+0 OCTAL ADDRESS ELEM 201 DATA	CADREFSH+1 OCTAL ADDRESS ELEM 202 DATA	CADREFSH+2 OCTAL ADDRESS ELEM 203 DATA
102	36	9.000	00000	00000	00000	76127	75777	51126	77116	750
102	36	11.000	00000	00000	00000	76127	75777	51126	77116	750
102	36	57.000	00000	00000	00000	76127	75777	51126	77116	750
102	36	59.000	00000	00000	00000	76127	75777	51126	77116	750
102	37	1.000	00000	00000	00000	76127	75777	51126	77116	750
102	37	2.000	00000	00000	00000	76127	75777	51126	77116	750
102	37	5.000	00000	00000	00000	76127	75777	51126	77116	750
102	37	15.000	00000	00000	00000	76127	75777	51126	77116	750
102	37	17.000	00000	00000	00000	76127	75777	51126	77116	750
102	37	19.000	00000	00000	00000	76127	75777	51126	77116	750
102	37	25.000	00000	00000	00000	76127	75777	51126	77116	750
102	37	27.000	00000	00000	00000	76127	75777	51126	77116	750
102	37	27.000	00000	00000	00000	76127	75777	51126	77116	750
102	37	31.000	00000	00000	00000	76127	75777	51126	77116	750
102	37	37.000	00000	00000	00000	76127	75777	51126	77116	750
102	37	49.000	00000	00000	00000	76127	75777	51126	77116	750
102	37	51.000	00000	00000	00000	76127	75777	51126	77116	750
102	37	53.000	00000	00000	00000	76127	75777	51126	77116	750
102	37	55.000	00000	00000	00000	76127	75777	51126	77116	750
102	37	57.000	00000	00000	00000	76127	75777	51126	77116	750
102	37	59.000	00000	00000	00000	76127	75777	51126	77116	750
102	38	1.000	00000	00000	00000	76127	75777	51126	77116	750
102	38	3.000	00000	00000	00000	76127	75777	51126	77116	750
102	38	5.000	00000	00000	00000	76127	75777	51126	77116	750
102	38	7.000	00000	00000	00000	76127	75777	51126	77116	750
102	38	9.000	00000	00000	00000	76127	75777	51126	77116	750
102	38	11.000	00000	00000	00000	76127	75777	51126	77116	750
102	38	13.000	00000	00000	00000	76127	75777	51126	77116	750
102	38	15.000	00000	00000	00000	76127	75777	51126	77116	750
102	38	17.000	00000	00000	00000	76127	75777	51126	77116	750
102	38	19.000	00000	00000	00000	76127	75777	51126	77116	750
102	38	21.000	01202	00000	00000	76127	75777	51126	77116	750
102	38	23.000	01202	00000	00000	76127	75777	51126	77116	750
102	38	25.000	01202	00000	00000	76127	75777	51126	77116	750
102	38	27.000	01202	00000	00000	76127	75777	51126	77116	750
102	38	29.000	01202	00000	00000	76127	75777	51126	77116	750
102	38	31.000	01202	00000	00000	76127	75777	51126	77116	750
102	38	33.000	01202	00000	00000	76127	75777	51126	77116	750
102	38	35.000	01202	00000	00000	76127	75777	51126	77116	750
102	38	37.000	01202	00000	00000	76127	75777	51126	77116	750
102	38	39.000	01202	00000	00000	76127	75777	51126	77116	750
102	38	41.000	00000	00000	00000	76127	75777	51126	77116	750
102	38	43.000	00000	00000	00000	76127	75777	51126	77116	750
102	38	45.000	00000	00000	00000	76127	75777	51126	77116	750
102	38	47.000	00000	00000	00000	76127	75777	51126	77116	750
102	38	49.000	00000	00000	00000	76127	75777	51126	77116	750

TIME HR	MIN	SECS	FAILREG+0 1ST ALARM ELEM 165 DATA	FAILREG+1 2ND ALARM ELEM 166 DATA	FAILREG+2 3RD ALARM ELEM 167 DATA	RSBBQ CALLING ADD TO RESTART ROUTINE ELEM 213 DATA	RSBBQ+1 Q REGISTER CONTENT ELEM 214 DATA	CADREFLSH+0 OCTAL ADDRESS ELEM 201 DATA	CADREFLSH+1 OCTAL ADDRESS ELEM 202 DATA	CADREFLSH+2 OCTAL ADDRESS ELEM 203 DATA
102	38	51.000	00000	00000	00000	76127	75777	51126	77116	750
102	38	53.000	00000	00000	00000	76127	75777	51126	77116	750
102	38	55.000	00000	00000	00000	76127	75777	51126	77116	750
102	38	57.000	00000	00000	00000	76127	75777	51126	77116	750
102	38	59.000	00000	00000	00000	76127	75777	51126	77116	750
102	39	1.000	01202	00000	00000	76127	75777	51126	77116	750
102	39	3.000	01202	00000	00000	76127	75777	51126	77116	750
102	39	5.000	01202	00000	00000	76127	75777	51126	77116	750
102	39	7.000	01202	00000	00000	76127	75777	51126	77116	750
102	39	9.000	01202	00000	00000	76127	75777	51126	77116	750
102	39	11.000	00000	00000	00000	76127	75777	51126	77116	750
102	39	13.000	00000	00000	00000	76127	75777	51126	77116	750
102	39	15.000	00000	00000	00000	76127	75777	51126	77116	750
102	39	17.000	00000	00000	00000	76127	75777	51126	77116	750
102	39	19.000	00000	00000	00000	76127	75777	51126	77116	750
102	39	21.000	00000	00000	00000	76127	75777	51126	77116	750
102	39	23.000	00000	00000	00000	76127	75777	51126	77116	750
102	39	25.000	00000	00000	00000	76127	75777	51126	77116	750
102	39	29.000	00000	00000	00000	76127	75777	51126	77116	750
102	39	31.000	00000	00000	00000	76127	75777	51126	77116	750
102	39	33.000	00000	00000	00000	76127	75777	51126	77116	750
102	39	35.000	00000	00000	00000	76127	75777	51126	77116	750
102	39	37.000	00000	00000	00000	76127	75777	51126	77116	750
102	39	39.000	00000	00000	00000	76127	75777	51126	77116	750
102	39	41.000	00000	00000	00000	76127	75777	51126	77116	750
102	39	43.000	00000	00000	00000	76127	75777	51126	77116	750
102	39	45.000	00000	00000	00000	76127	75777	51126	77116	750
102	39	47.000	00000	00000	00000	76127	75777	51126	77116	750
102	39	49.000	00000	00000	00000	76127	75777	51126	77116	750
102	39	51.000	00000	00000	00000	76127	75777	51126	77116	750
102	39	53.000	00000	00000	00000	76127	75777	51126	77116	750
102	39	55.000	00000	00000	00000	76127	75777	51126	77116	750
102	39	57.000	00000	00000	00000	76127	75777	51126	77116	750
102	39	59.000	00000	00000	00000	76127	75777	51126	77116	750
102	40	1.000	00000	00000	00000	76127	75777	51126	77116	750
102	40	3.000	00000	00000	00000	76127	75777	51126	77116	750
102	40	5.000	00000	00000	00000	76127	75777	51126	77116	750
102	40	7.000	00000	00000	00000	76127	75777	51126	77116	750
102	40	9.000	00000	00000	00000	76127	75777	51126	77116	750
102	40	11.000	00000	00000	00000	76127	75777	51126	77116	750
102	40	13.000	00000	00000	00000	76127	75777	51126	77116	750
102	40	15.000	00000	00000	00000	76127	75777	51126	77116	750
102	40	17.000	00000	00000	00000	76127	75777	51126	77116	750
102	40	19.000	00000	00000	00000	76127	75777	51126	77116	750
102	40	21.000	00000	00000	00000	76127	75777	51126	77116	750
102	40	23.000	00000	00000	00000	76127	75777	51126	77116	750

TIME HR	MIN	SECS	FAILREG+0 1ST ALARM ELEM 165 DATA	FAILREG+1 2ND ALARM ELEM 166 DATA	FAILREG+2 3RD ALARM ELEM 167 DATA	RSBBQ CALLING ADD TO RESTART ROUTINE ELEM 213 DATA	RSBBQ+1 Q REGISTER CONTENT ELEM 214 DATA	CADRELSH+0 OCTAL ADDRESS ELEM 201 DATA	CADRELSH+1 OCTAL ADDRESS ELEM 202 DATA	CADRELSH+2 OCTAL ADDRESS ELEM 203 DATA
102	40	25.000	00000	00000	00000	76127	75777	51126	77116	750
102	40	27.000	00000	00000	00000	76127	75777	51126	77116	750
102	40	29.000	00000	00000	00000	76127	75777	51126	77116	750
102	40	31.000	00000	00000	00000	76127	75777	51126	77116	750
102	40	33.000	00000	00000	00000	76127	75777	51126	77116	750
102	40	35.000	00000	00000	00000	76127	75777	51126	77116	750
102	40	37.000	00000	00000	00000	76127	75777	51126	77116	750
102	40	39.000	00000	00000	00000	76127	75777	51126	77116	750
102	40	41.000	00000	00000	00000	76127	75777	51126	77116	750
102	40	43.000	00000	00000	00000	76127	75777	51126	77116	750
102	40	45.000	00000	00000	00000	76127	75777	51126	77116	750
102	40	47.000	00000	00000	00000	76127	75777	51126	77116	750
102	40	49.000	00000	00000	00000	76127	75777	51126	77116	750
102	40	51.000	00000	00000	00000	76127	75777	51126	77116	750
102	40	53.000	00000	00000	00000	76127	75777	51126	77116	750
102	40	55.000	00000	00000	00000	76127	75777	51126	77116	750
102	40	57.000	00000	00000	00000	76127	75777	51126	77116	750
102	40	59.000	00000	00000	00000	76127	75777	51126	77116	750
102	41	1.000	00000	00000	00000	76127	75777	51126	77116	750
102	41	3.000	00000	00000	00000	76127	75777	51126	77116	750
102	41	5.000	00000	00000	00000	76127	75777	51126	77116	750
102	41	7.000	00000	00000	00000	76127	75777	51126	77116	750
102	41	9.000	00000	00000	00000	76127	75777	51126	77116	750
102	41	11.000	00000	00000	00000	76127	75777	51126	77116	750
102	41	13.000	00000	00000	00000	76127	75777	51126	77116	750
102	41	15.000	00000	00000	00000	76127	75777	51126	77116	750
102	41	17.000	00000	00000	00000	76127	75777	51126	77116	750
102	41	19.000	00000	00000	00000	76127	75777	51126	77116	750
102	41	21.000	00000	00000	00000	76127	75777	51126	77116	750
102	41	23.000	00000	00000	00000	76127	75777	51126	77116	750
102	41	25.000	00000	00000	00000	76127	75777	51126	77116	750
102	41	27.000	00000	00000	00000	76127	75777	51126	77116	750
102	41	29.000	00000	00000	00000	76127	75777	51126	77116	750
102	41	31.000	00000	00000	00000	76127	75777	51126	77116	750
102	41	33.000	00000	00000	00000	76127	75777	51126	77116	750
102	41	35.000	00000	00000	00000	76127	75777	51126	77116	635
102	41	37.000	00000	00000	00000	76127	75777	51126	77116	635
102	41	39.000	00000	00000	00000	76127	75777	51126	77116	635
102	41	41.000	00000	00000	00000	76127	75777	51126	77116	635
102	41	45.000	00000	00000	00000	76127	75777	51126	77116	635
102	41	47.000	00000	00000	00000	76127	75777	51126	77116	635
102	41	49.000	00000	00000	00000	76127	75777	51126	77116	635
102	41	51.000	00000	00000	00000	76127	75777	51126	77116	635
102	41	53.000	00000	00000	00000	76127	75777	51126	77116	635
102	41	55.000	00000	00000	00000	76127	75777	51126	77116	635
102	41	57.000	00000	00000	00000	76127	75777	51126	77116	635

TIME HR MIN SEC'S	FAILREG+0 1ST ALARM ELEM 165 DATA	FAILREG+1 2ND ALARM ELEM 166 DATA	FAILREG+2 3RD ALARM ELEM 167 DATA	RSBBQ CALLING ADD TO RESTART ROUTINE ELEM 213 DATA	RSBBQ+1 Q REGISTER CONTENT ELEM 214 DATA	CADREFSH+0 OCTAL ADDRESS ELEM 201 DATA	CADREFSH+1 OCTAL ADDRESS ELEM 202 DATA	CADREFSH+2 OCTAL ADDRESS ELEM 203 DATA
102 41 59.000	00000	00000	00000	76127	75777	51126	77116	635
102 42 1.000	00000	00000	00000	76127	75777	51126	77116	635
102 42 3.000	00000	00000	00000	76127	75777	51126	77116	635
102 42 5.000	00000	00000	00000	76127	75777	51126	77116	635
102 42 7.000	00000	00000	00000	76127	75777	51126	77116	635
102 42 9.000	00000	00000	00000	76127	75777	51126	77116	635
102 42 11.000	00000	00000	00000	76127	75777	51126	77116	635
102 42 13.000	00000	00000	00000	76127	75777	51126	77116	635
102 42 15.000	00000	00000	00000	76127	75777	51126	77116	635
102 42 17.000	01201	00000	00000	76127	75777	51126	77116	635
102 42 19.000	01201	00000	00000	76127	75777	51126	77116	635
102 42 21.000	00000	00000	00000	76127	75777	51126	77116	635
102 42 23.000	00000	00000	00000	76127	75777	51126	77116	635
102 42 25.000	00000	00000	00000	76127	75777	51126	77116	635
102 42 27.000	00000	00000	00000	76127	75777	51126	77116	635
102 42 29.000	00000	00000	00000	76127	75777	51126	77116	635
102 42 31.000	00000	00000	00000	76127	75777	51126	77116	635
102 42 33.000	00000	00000	00000	76127	75777	51126	77116	635
102 42 35.000	00000	00000	00000	76127	75777	51126	77116	635
102 42 37.000	00000	00000	00000	76127	75777	51126	77116	635
102 42 39.000	00000	00000	00000	76127	75777	51126	77116	635
102 42 41.000	01202	00000	00000	76127	75777	51126	77116	635
102 42 43.000	01202	00000	00000	76127	75777	51126	77116	635
102 42 45.000	01202	00000	00000	76127	75777	51126	77116	635
102 42 47.000	01202	00000	00000	76127	75777	51126	77116	635
102 42 49.000	01202	00000	00000	76127	75777	51126	77116	635
102 42 51.000	00000	00000	00000	76127	75777	51126	77116	635
102 42 53.000	00000	00000	00000	76127	75777	51126	77116	635
102 42 55.000	00000	00000	00000	76127	75777	51126	77116	635
102 42 57.000	01202	00000	00000	76127	75777	51126	77116	635
102 42 59.000	01202	00000	00000	76127	75777	51126	77116	635
102 43 1.000	00000	00000	00000	76127	75777	51126	77116	635
102 43 3.000	00000	00000	00000	76127	75777	51126	77116	635
102 43 5.000	00000	00000	00000	76127	75777	51126	77116	635
102 43 7.000	00000	00000	00000	76127	75777	51126	77116	635
102 43 9.000	00000	00000	00000	76127	75777	51126	77116	635
102 43 11.000	00000	00000	00000	76127	75777	51126	77116	635
102 43 13.000	00000	00000	00000	76127	75777	51126	77116	635
102 43 15.000	00000	00000	00000	76127	75777	51126	77116	635
102 43 17.000	00000	00000	00000	76127	75777	51126	77116	635
102 43 19.000	00000	00000	00000	76127	75777	51126	77116	635
102 43 21.000	00000	00000	00000	76127	75777	51126	77116	635
102 43 23.000	00000	00000	00000	76127	75777	51126	77116	635
102 43 25.000	00000	00000	00000	76127	75777	51126	77116	635
102 43 27.000	00000	00000	00000	76127	75777	51126	77116	635
102 43 29.000	00000	00000	00000	76127	75777	51126	77116	635

TIME HR MIN SECS	FAILREG+0 1ST ALARM ELEM 165 DATA	FAILREG+1 2ND ALARM ELEM 166 DATA	FAILREG+2 3RD ALARM ELEM 167 DATA	RSBBQ CALLING ADD TO PESTART ROUTINE ELEM 213 DATA	RSBBQ+1 Q REGISTER CONTENT ELEM 214 DATA	CADREL SH+0 OCTAL ADDRESS ELEM 201 DATA	CADREL SH+1 OCTAL ADDRESS ELEM 202 DATA	CADREL SH+ OCTAL ADDRESS ELEM 203 DATA
102 43 31.000	00000	00000	00000	76127	75777	51126	77116	6
102 43 33.000	00000	00000	00000	76127	75777	51126	77116	63
102 43 35.000	00000	00000	00000	76127	75777	51126	77116	63
102 43 37.000	00000	00000	00000	76127	75777	51126	77116	63
102 43 39.000	00000	00000	00000	76127	75777	51126	77116	63
102 43 41.000	00000	00000	00000	76127	75777	51126	77116	63
102 43 43.000	00000	00000	00000	76127	75777	51126	77116	63
102 43 45.000	00000	00000	00000	76127	75777	51126	77116	63
102 43 47.000	00000	00000	00000	76127	75777	51126	77116	63
102 43 49.000	00000	00000	00000	76127	75777	51126	77116	63
102 43 51.000	00000	00000	00000	76127	75777	51126	77116	63
102 43 53.000	00000	00000	00000	76127	75777	51126	77116	63
102 43 55.000	00000	00000	00000	76127	75777	51126	77116	63
102 43 57.000	00000	00000	00000	76127	75777	51126	77116	63
102 43 59.000	00000	00000	00000	76127	75777	51126	77116	63
102 44 1.000	00000	00000	00000	76127	75777	51126	77116	63
102 44 3.000	00000	00000	00000	76127	75777	51126	77116	63
102 44 5.000	00000	00000	00000	76127	75777	51126	77116	63
102 44 7.000	00000	00000	00000	76127	75777	51126	77116	63
102 44 9.000	00000	00000	00000	76127	75777	51126	77116	63
102 44 11.000	00000	00000	00000	76127	75777	51126	77116	63
102 44 13.000	00000	00000	00000	76127	75777	51126	77116	63
102 44 15.000	00000	00000	00000	76127	75777	51126	77116	63
102 44 17.000	00000	00000	00000	76127	75777	51126	77116	63
102 44 19.000	00000	00000	00000	76127	75777	51126	77116	63
102 44 21.000	00000	00000	00000	76127	75777	51126	77116	63
102 44 23.000	00000	00000	00000	76127	75777	51126	77116	63
102 44 25.000	00000	00000	00000	76127	75777	51126	77116	63
102 44 27.000	00000	00000	00000	76127	75777	51126	77116	63
102 44 29.000	00000	00000	00000	76127	75777	51126	77116	63
102 44 31.000	00000	00000	00000	76127	75777	51126	77116	63
102 44 33.000	00000	00000	00000	76127	75777	51126	77116	63
102 44 35.000	00000	00000	00000	76127	75777	51126	77116	63
102 44 37.000	00000	00000	00000	76127	75777	51126	77116	63
102 44 39.000	00000	00000	00000	76127	75777	51126	77116	63
102 44 41.000	00000	00000	00000	76127	75777	51126	77116	63
102 44 43.000	00000	00000	00000	76127	75777	51126	77116	63
102 44 45.000	00000	00000	00000	76127	75777	51126	77116	63
102 44 47.000	00000	00000	00000	76127	75777	51126	77116	63
102 44 49.000	00000	00000	00000	76127	75777	51126	77116	63
102 44 51.000	00000	00000	00000	76127	75777	51126	77116	63
102 44 53.000	00000	00000	00000	76127	75777	51126	77116	63
102 44 55.000	00000	00000	00000	76127	75777	51126	77116	63
102 44 57.000	00000	00000	00000	76127	75777	51126	77116	63
102 44 59.000	00000	00000	00000	76127	75777	51126	77116	63
102 45 1.000	00000	00000	00000	76127	75777	51126	77116	63

1	FAILREG+0 1ST ALARM ELEM 165	FAILREG+1 2ND ALARM ELEM 166	FAILREG+2 3RD ALARM ELEM 167	RSBBQ CALLING ADD TO RESTART ROUTINE ELEM 213	RSBBQ+1 Q REGISTER CONTENT ELEM 214	CADREFLSH+0 OCTAL ADDRESS ELEM 201	CADREFLSH+1 OCTAL ADDRESS ELEM 202	CADREFLSH+2 OCTAL ADDRESS ELEM 203
TIME HR MIN SECS	DATA	DATA	DATA	DATA	DATA	DATA	DATA	DATA
102 45 3.000	00000	00000	00000	76127	75777	51126	77116	635
102 45 5.000	00000	00000	00000	76127	75777	51126	77116	635
102 45 7.000	00000	00000	00000	76127	75777	51126	77116	635
102 45 9.000	00000	00000	00000	76127	75777	51126	77116	635
102 45 11.000	00000	00000	00000	76127	75777	51126	77116	635
102 45 13.000	00000	00000	00000	76127	75777	51126	77116	635
102 45 15.000	00000	00000	00000	76127	75777	51126	77116	635
102 45 17.000	00000	00000	00000	76127	75777	51126	77116	635
102 45 19.000	00000	00000	00000	76127	75777	51126	77116	635
102 45 21.000	00000	00000	00000	76127	75777	51126	77116	635
102 45 23.000	00000	00000	00000	76127	75777	51126	77116	635
102 45 25.000	00000	00000	00000	76127	75777	51126	77116	635
102 45 27.000	00000	00000	00000	76127	75777	51126	77116	635
102 45 29.000	00000	00000	00000	76127	75777	51126	77116	635
102 45 31.000	00000	00000	00000	76127	75777	51126	77116	635
102 45 33.000	00000	00000	00000	76127	75777	51126	77116	635
102 45 35.000	00000	00000	00000	76127	75777	51126	77116	635
102 45 37.000	00000	00000	00000	76127	75777	51126	77116	635
102 45 39.000	00000	00000	00000	76127	75777	51126	77116	635
102 45 41.000	00000	00000	00000	76127	75777	51126	77116	635
102 45 43.000	00000	00000	00000	76127	75777	51126	77116	635
102 45 45.000	00000	00000	00000	76127	75777	51126	77116	635
102 45 47.000	00000	00000	00000	76127	75777	51126	77116	635
102 45 49.000	00000	00000	00000	76127	75777	51126	77116	635
102 45 51.000	00000	00000	00000	76127	75777	51126	77116	635
102 45 53.000	00000	00000	00000	76127	75777	51126	77116	635
102 45 55.000	00000	00000	00000	76127	75777	51126	77116	635
102 45 57.000	00000	00000	00000	76127	75777	51126	77116	635
102 45 59.000	00000	00000	00000	76127	75777	51126	77116	635
102 46 1.000	00000	00000	00000	76127	75777	51126	77116	635
102 46 3.000	00000	00000	00000	76127	75777	51126	77116	635
102 46 5.000	00000	00000	00000	76127	75777	51126	77116	635
102 46 7.000	00000	00000	00000	76127	75777	51126	77116	635
102 46 9.000	00000	00000	00000	76127	75777	51126	77116	635
102 46 11.000	00000	00000	00000	76127	75777	51126	77116	635
102 46 13.000	00000	00000	00000	76127	75777	51126	77116	635
102 46 15.000	00000	00000	00000	76127	75777	51126	77116	635
102 46 17.000	00000	00000	00000	76127	75777	51126	77116	635
102 46 19.000	00000	00000	00000	76127	75777	51126	77116	635
102 46 21.000	00000	00000	00000	76127	75777	51126	77116	635
102 46 23.000	00000	00000	00000	76127	75777	51126	77116	635
102 46 25.000	00000	00000	00000	76127	75777	51126	77116	635
102 46 27.000	00000	00000	00000	76127	75777	51126	77116	635
102 46 29.000	00000	00000	00000	76127	75777	51126	77116	635
102 46 31.000	00000	00000	00000	76127	75777	51126	77116	635
102 46 33.000	00000	00000	00000	76127	75777	51126	77116	635

APOLLO 11 TM-5 DOWNLINK BITLEVELS

TAB 1

DELTA T = 1.84	DELTA T = 1.84	DELTA T = 1.86	DELTA T = 1.86
1ABORT	1RHC +Q	1JET 2+4 FAIL	1SPARE
2DF SIG ATTCD	2RHC -Q	2JET 5+8 FAIL	2RR ON LGC
3ENG ARMED	3RHC +P	3JET 1+3 FAIL	3RR LOW SCALE
4ABORT STAGE	4RHC -P	4JET 6+7 FAIL	4RR DATA GOOD
5DPS THRTL ENBL	5RHC +R	5JET 14+16 FAIL	5LR DATA GOOD
6DISPLAY INT DATA	6RHC -R	6JET 13+15 FAIL	6LR POS 1
7RR BDL FAIL	7THC +X TRANS	7JET 9+12 FAIL	7LR POS 2
8SPARE	8THC -X TRANS	8JET 10+11 FAIL	8LR DATA GOOD
9IMU OPERATE	9THC +Y TRANS	9GIMBAL OFF	9LR LOW SCALE
APGNCS XTROL SC	ATHC -Y TRANS	AAPP GIMBAL FAIL	ABLOCK UPLINK
BIMU CAGE	BTHC +Z TRANS	BSPARE	BUPLINK FAST
CIMU CDU FAIL	CTHC -Z TRANS	CSPARE	CDNLNK TO FAST
DIMU FAIL	DATTITUDE HOLD	DSPARE	DPIPA FAIL
EISS ON REG	EAUTO STAB	EPROCEED KEY	EWARNING
FTEMP IN LIMIT	FATT CONT OUDET	FSPARE	FOSC ALARM
CHANNEL 10	CHANNEL 11	CHANNEL 12	CHANNEL 13
123456789ABCDEF	123456789ABCDEF	123456789ABCDEF	123456789ABCDEF
010011001100001	000000000000010	000000000000000	000100000000000
.....	.....	.....	.....1.....
.....	**********	.....	.....
.....	000000000000010	.....	.....
.....	...1.....1	.....	.....
	0		
.....	...1.....	.....	.....
.....	...0.....0	.....	.....
.....	.....	.....	**********
.1.....	.....	.....	000101000000000
.....	.....	.....	.....
.....	.....	.....	..10.....
.....	..1.....1	.....	.....
.....	.....1.....	.....	.....
.....	.....	.....	....1..1.....
.....	...0.0.....	.....	.....
.....	..1.....	.....	.....
.....	..0.....0	.....	.....
.....	.....	.....1.	.....
.....	.....	.....0.	.....
.....	.....	.....1.	.....
.....	.....	.....0.	.....
.....	.....	.....	.....0.....
.....	.....	.....	.....1.....
.....	....1.....10	.....	.....
.....	....0.....0	.....	.....
.....	.....1.....1	.....	.....
.....	1...0.....	.....	.....
.....	0.....0	.....	.....
.....	01	.....	.....
.....	.....	.....	.....1.....
.....	.....	1	.....
.....	.....	.....0.	.....
.....	1.....1	.....	.....

HR	MN	SEC
102	17	17.000
102	20	51.000
102	25	3.000
102	25	11.000
102	27	29.000
102	27	31.000
102	27	33.000
102	27	35.000
102	30	7.000
102	40	9.000
102	42	53.000
102	45	31.000
102	45	57.000
102	47	47.000
369469 → 102	47	49.000
102	47	51.000
102	47	59.000
102	48	1.000
102	48	47.000
102	48	49.000
102	49	9.000
102	49	11.000
102	41	29.000
102	41	35.000
102	41	51.000
102	41	53.000
102	41	55.000
102	41	57.000
102	41	59.000
102	42	1.000
102	42	17.000
102	42	51.000
102	42	55.000
102	43	7.000

ungomed

att. hold

data good

REPOSITIONING

32:54 ARM

APOLLO 11 LM-5 DOWNLINK BILEVELS

TAB 1

DELTA T = 1.84	DELTA T = 1.84	DELTA T = 1.86	DELTA T = 1.86
1ABORT	1RHC +Q	1JET 2+4 FAIL	1SPARE
2DF SIG ATT'D	2RHC -Q	2JET 5+8 FAIL	2RR ON LGC
3ENG ARMED	3RHC +P	3JET 1+3 FAIL	3RR LOW SCALE
4ABORT STAGE	4RHC -P	4JET 6+7 FAIL	4RR DATA GOOD
5DPS THRTL ENBL	5RHC +R	5JET 14+16 FAIL	5LR DATA GOOD
6DSPLAY INT DATA	6RHC -R	6JET 13+15 FAIL	6LR POS 1
7RR CDU FAIL	7THC +X TRANS	7JET 9+12 FAIL	7LR POS 2
8SPARE	8THC -X TRANS	8JET 10+11 FAIL	8LR DATA GOOD
9IMU OPERATE	9THC +Y TRANS	9GIMBAL OFF	9LR LOW SCALE
APGNCS XTROL SC	ATHC -Y TRANS	AAPP GIMBAL FAIL	ABLOCK UPLINK
BIMU CAGE	BTHC +Z TRANS	BSPARE	BUPLINK FAST
CIMU CDU FAIL	CTHC -Z TRANS	CSPARE	CDNLNK TO FAST
DIMU FAIL	DATTITUDE HOLD	DSPARE	DPIPA FAIL
ETSS ON REG	EAUTO STAB	EPROCEED KEY	EWARNING
FTEMP IN LIMIT	FATT CONT OUTDET	FSPARE	FOSC ALARM
CHANNEL 30	CHANNEL 31	CHANNEL 32	CHANNEL 33
123456789ABCDEF	123456789ABCDEF	123456789ABCDEF	123456789ABCDEF
011011101100001	010000000000011	000000000000000	001010111000000

HR MN SEC STATUS				
102 43 9.000	.....	.0.....0	.....	.....
102 43 11.000	.....	10	.....	.....
102 43 15.000	.....	.1.....1	.....	.....
102 43 17.000	.....	.0.....0	.....	.....
102 43 19.000	.....	1	.....	.....
102 43 41.000	.....	1.....	.....	.....
102 43 43.000	.....	0.....	.....	.....
102 43 45.000	.....	1.....1..	.....	.....
102 43 47.000	.....	0.....0	.....	.....
102 44 7.000	.....	1	.....	.....
102 44 9.000	.....	0	.....	....0..0.....
102 44 19.000	.....	.....	.....	....1..1.....
102 44 25.000	.....	.1.....1	.....	.....
102 44 23.000	.....	.0..1.....	.....	.....
102 44 31.000	.....	....0.....0	.....	.....
102 44 35.000	.....	.....1.....1	.....	.....
102 44 37.000	.....	.....0.....0	.....	....1.....
102 44 39.000	.....	1	.....	.....
102 44 41.000	.....	0	.....	.....
102 44 43.000	.....	.....!.....1	.....	.....
102 44 47.000	.....	.....0.....0	.....	.....
102 44 51.000	.....0.....	.....	.....	.....
102 44 57.000	.....	.....	.....	....0..0.....
102 45 1.000	.....	....1.....1	.....	....1..1.....
102 45 3.000	.....	....0.....0	.....	.....
102 45 5.000	.....	.1.....1	.....	.....
102 45 9.000	.....	.0.....0	.....	.....
102 45 13.000	.....1.....	.....	.....	.....
102 45 15.000	.....	1	.....	.....
102 45 17.000	.....0.....	0	.....	.....
102 45 19.000	.....	1	.....	.....
102 45 23.000	.....	0	.....	.....
102 45 25.000	.....	.....1.....1	.....	.....

APOLLO 11 LM-5 DOWNLINK BILEVELS

TAB 1

DELTA T = 1.84	DELTA T = 1.84	DELTA T = 1.86	DELTA T = 1.86
1ABORT	1RHC +Q	1JET 2+4 FAIL	1SPARE
2DF SIG ATTCD	2RHC -Q	2JET 5+8 FAIL	2RR ON LGC
3ENG ARMED	3RHC +P	3JET 1+3 FAIL	3RR LOW SCALE
4ABORT STAGE	4RHC -P	4JET 6+7 FAIL	4RR DATA GOOD
5DPS THRTL ENBL	5RHC +R	5JET 14+16 FAIL	5LR DATA GOOD
6DSPLAY INT DATA	6RHC -R	6JET 13+15 FAIL	6LR POS 1
7RR CDU FAIL	7THC +X TRANS	7JET 9+12 FAIL	7LR POS 2
8SPARE	8THC -X TRANS	8JET 10+11 FAIL	8LR DATA GOOD
9IMU OPERATE	9THC +Y TRANS	9GIMBAL OFF	9LR LOW SCALE
APGNCS XTROLSC	ATHC -Y TRANS	AAPP GIMBAL FAIL	ABLOCK UPLINK
BIMU CAGE	BTHC +Z TRANS	BSPARE	BUPLINK FAST
CIMU CDU FAIL	CTHC -Z TRANS	CSPARE	CDNLNK TO FAST
DIMU FAIL	DATTITUDE HOLD	DSPARE	DPIPA FAIL
EISS ON REG	EAUTO STAB	EPROCEED KEY	EWARNING
FTEMP IN LIMIT	FATT CONT OUTDET	FSPARE	FOSC ALARM
CHANNEL 30	CHANNEL 31	CHANNEL 32	CHANNEL 33
1234567890ABCDEF	1234567890ABCDEF	1234567890ABCDEF	1234567890ABCDEF
011011001100001	000001000000101	000000000000000	001010111000000
.....	1....0.....	.....	.....
.....	0.....0	.....	.....
.....	1	.....	.....
.....	....1.....	.....	.....
.....	....0.....0	.....	.....
.....	.....1.....1	.....	....0..0.....
.....	.....0.....0	.....	.....
.....	.....01.	.....	.....
0	.....	.....	.....
.....	.....	.....	.....0.0.....

HR MN SEC STATUS
102 45 27.000
102 45 29.000
102 45 31.000
102 45 33.000
102 45 37.000
102 45 39.000
102 45 41.000
102 45 45.000
102 45 51.000
102 47 35.000
102 49 20.000 WAS FINAL TIME

APOLLO 11 LM-5 DOWNLINK BILEVELS

TAB 2

HR MN SEC	DELTA T = 1.80	DELTA T = 1.80	DELTA T = 1.82	DELTA T = 1.82
	1FSS WARNING	1ZERO RR	1RR SELECT C	1OUTLINK ACTIVITY
	2COMP ACTIV	2ENABL RR ERR CT	2RR SELECT B	2ALT RATE SEL
	3UPLINK ACTIV	3SPARE	3RR SELECT A	3ALT MOTOR ACT.
	4TEMP CAUTION	4CRSAL ENABLE	4RADAR ACT	4THRUST DRIVE
	5RELEASE	5XERO IMU CDUS	5INHIBIT UPLINK	5SPARE
	6EL VERB NOUN	6ICDUERR ENABL	6BLOCK UPLINK	6GYRO ENABLE
	7OPERATOR ERR	7SPARE	7DLWOC	7GYRO SELECT B
	8SPARE	8DSP LD'G DATA	8ENABLE RHC CTR	8GYRO SELECT A
	9TEST CONNECTOR	9+P GMTVMCMD	9STRT RHC READ	9GYRO SIGN NEG
	ACAUTION RESET	A-P GIMTVMCMD	ATEST ALARMS	AGYRO ACTIVITY
	BSPARE	B+R GIMTRM CMD	BENABLE STDBY	BDRIVE CDU S
	CSPARE	C-R GIMTRM CMD	CRESET TRAP 31-A	CDRIVE CDU T
	DENGINE ON	DLR REPOS 2 CMD	DRESET TRAP 31-B	DDRIVE CDU Z
	EENGINE OFF	ERR ENABLE	ERESET TRAP 32	EDRIVE CDU Y
	FSPARE	FTSS DELAY OFF	FENABLE T6RUPT	FDRIVE CDU X
	CHANNEL 11	CHANNEL 12	CHANNEL 13	CHANNEL 14
	123456789ABCDEF	123456789ABCDEF	123456789ABCDEF	123456789ABCDEF
102 17 17.000	000001000000010	000001000000000	000000100000000	000001000000000
102 20 41.000	.1...0.....	.....	.....	.....
102 20 43.000	.0.....	.....	.....	.....
102 20 45.000	.1.....	.....	.....	.....
102 20 47.000	.0...1.....	.....	.....	.....
102 23 21.000	.....0.....	.....	.....	.....
102 23 43.000	....1.....	.....	.....	.....
102 23 45.000	....01.....	.....	.....	.....
102 24 1.000	.1...0.....	.....	.....	.....
102 24 15.000	.0.....	.....	.....	.....
102 25 1.000	.....1.....	.....	.....	.....
102 25 21.000	.....0.....	.....	.....	.....
102 25 25.000	.1.....	.....	.....	.....
102 26 21.000	.....1.....	.....	.....	.....
102 26 35.000	**********	.....	.....	.....
102 26 37.000	010001000000010	.....	.....	.....
102 26 11.000	....1.....	.....	.....	.....
102 27 19.000	....0.....	.....0.....	.....	.....
102 27 29.000	.....	.....1.....	.....1.....	.....
102 27 39.000	...1.....	.....	.....	.....
102 27 45.000	....0.....	.....0.....	.....	.....
102 28 15.000	.0...0.....	.....1.....	.....	.....
102 30 45.000	....1.....	.....	.....	.....
102 30 47.000	....0.....	.....	.....	.....
102 30 49.000	....1.....	.....	**********	.....
102 30 51.000	....0.....	.....	000000110000000	.....
102 32 15.000	.....1.....	.....	.....	.....
102 32 47.000	.....	**********	.....	.....
102 32 49.000	.....	000001000000000	.....	.....
102 32 54.000	.....	.....	111.....*....	.....
102 32 59.000	.....1.....	.....	.....	.....
102 33 1.000	.....0.....	.....	.....	.....
102 33 1.000	.....ON 10	.1.....1.....	.....	.11... .....
102 33 7.000	.....	.....1.....	.....	.....

TAB 2

DELTA T = 1.80	DELTA T = 1.80	DELTA T = 1.82	DELTA T = 1.82
1TSS WARNING	1ZERO RR	1RR SELECT C	1OUTLINK ACTIVTY
2COMP ACTIV	2ENABL RR ERR CT	2RR SELECT B	2ALT RATE SEL
3UPLINK ACTIV	3SPARE	3RR SELECT A	3ALT MOTOR ACT
4TEMP CAUTION	4CRSAL ENABLE	4RADAR ACT	4THRUST DRIVE
5RELEASE	5XERO IMU CDUS	5INHIBIT UPLINK	5SPARE
6EL VERB NOUN	6ICDUERR ENABL	6BLOCK UPLINK	6GYRO ENABLE
7OPERATOR ERR	7SPARE	7DLWOC	7GYRO SELECT B
8SPARE	8DSP LD'G DATA	8ENABLE RHC CTR	8GYRO SELECT A
9TEST CONNECTOR	9+P GMTVMCMD	9STBY RHC READ	9GYRO SIGN NEG
ACAUTION RESET	A-P GIMTVMCMD	ATEST ALARMS	AGYRO ACTIVITY
BSPARE	B+R GIMTRM CMD	BENABLE STDBY	BDRIVE CDU S
CSPARE	C-R GIMTRM CMD	CRESET TRAP 31-A	CDRIVE CDU T
DENGINE ON	DLR REPOS 2 CMD	DRESET TRAP 31-B	DDRIVE CDU Z
EENGINE OFF	ERR ENABLE	ERESET TRAP 32	EDRIVE CDU Y
FSPARE	FTSS DELAY OFF	FENABLE T6RUPT	FDRIVE CDU X
CHANNEL 11	CHANNEL 12	CHANNEL 13	CHANNEL 14
123456789ABCDEF	123456789ABCDEF	123456789ABCDEF	123456789ABCDEF
000000001000100	010001010010000	111000110000000	011001000000000
HR MN SEC STATUS			
102 13 9.000	.....	.....01...	.....
102 34 3.000	1.....	.....1.10...	.....
102 34 7.000	.....	.....01...	.....
102 34 11.000	.....	.....10...	.....
102 34 15.000	.....	.....0101...	.....
102 34 17.000	...1.....	.....10...	.....
102 34 19.000	.....	.....01...	.....
102 34 21.000	.....	.....10.....	.....
102 34 23.000	...0.....	.....0110...	.....
102 34 25.000	.....	.....10.....	.....
102 34 29.000	.....	.....0101...	.....
102 34 31.000	.....	.....10...	.....
102 34 33.000	.....	.....1001...	.....
102 34 35.000	....1.....	.....0110...	.....
102 34 37.000	.....	.....001...	.....
102 34 39.000	.....	.....110...	.....
102 34 43.000	.....	.....1001...	.....
102 34 45.000	.....	.....01.....	.....
102 34 47.000	.....	.....10.....	.....
102 34 49.000	.....	.....10...	.....
102 34 51.000	..1.....	.....0101...	.....
102 34 53.000	....0.....	.....1010...	.....
102 34 55.000	.....	.....01...	.....
102 34 59.000	.....	.....10...	.....
102 35 1.000	.....	.....01.....	.....
102 35 3.000	.....	.....10.....	.....
102 35 5.000	...1.....	.....	.....
102 35 7.000	.....	.....01...	.....
102 35 11.000	.....1.....	.....01.....	.....
102 35 13.000	.....	.....10...	.....
102 35 15.000	...0.....	.....	.....
102 35 19.000	.....	.....10.....	.....
102 35 21.000	.....	.....0101...	.....

APOLLO 11 LM-5 DOWNLINK BILEVELS

TAB 2

HR MN SEC	DELTA T = 1.80	DELTA T = 1.80	DELTA T = 1.82	DELTA T = 1.82
	1ISS WARNING	1ZERO RR	1RR SELECT C	1OUTLINK ACTIVTY
	2COMP ACTIV	2ENABL RR ERR CT	2RR SLECT B	2ALT RATE SEL
	3UPLINK ACTIV	3SPARE	3RR SELECT A	3ALT MOTOR ACT
	4TEMP CAUTION	4CRSAL ENABLE	4RADAR ACT	4THRUST DRIVE
	5RELEASE	5XERO IMU CDUS	5INHIBIT UPLINK	5SPARE
	6EL VERB NOUN	6ICDUERR ENABL	6BLOCK UPLINK	6GYRO ENABLE
	7OPERATOR ERR	7SPARE	7DLBOC	7GYRO SELECT B
	8SPARE	8DSP LD'G DATA	8ENABLE RHC CTR	8GYRO SELECT A
	9TEST CONNECTOR	9+P GMTVMCMD	9STRT RHC READ	9GYRO SIGN NEG
	ACAUTION RESET	A-P GIMTVMCMD	ATEST ALARMS	AGYRO ACTIVITY
	BSPARE	B+R GIMTRM CMD	BENABLE STDBY	BDRIVE CDU S
	CSPARE	C-R GIMTRM CMD	CRESET TRAP 31-A	CDRIVE CDU T
	DENGINE ON	DLR REPOS 2 CMD	DRESET TRAP 31-B	DDRIVE CDU Z
	EENGINE OFF	ERR ENABLE	ERESET TRAP 32	EDRIVE CDU Y
	ESPARE	EISS DELAY OFF	EENABLE T6RUPT	EDRIVE CDU X
STATUS	CHANNEL 11	CHANNEL 12	CHANNEL 13	CHANNEL 14
	12345678 9ABCDEF	12345678 9ABCDEF	12345678 9ABCDEF	12345678 9ABCDEF
	010000001000100	010001010101000	111000110000000	011001000000000
102 35 23.000	.....	.....10...	.....	.....
102 35 25.000	.....	.....1001...	.....	.....
102 35 27.000	.....	.....0110...	.....	.....
102 35 29.000	.....	.....1001...	.....	.....
102 35 31.000	.....	.....01.....	.....	.....
102 35 33.000	.....	.....10...	.....	.....
102 35 37.000	.....	.....01...	.....	.....
102 35 41.000	.....	.....0.....	.....	.....
102 35 43.000	.....	.....1.....	.....	.....
102 35 45.000	.....	.....0110...	.....	.....
102 36 1.000	.....	.....01...	.....	.....
102 36 5.000	....1.....	.....	.....	.....
102 36 9.000	.....	.....0.....	.....	.....
102 36 11.000	.....	.....1.10...	.....	.....
102 36 57.000	....0.....	.....0101...	.....	.....
102 37 17.000	.....	.....1010...	.....	.....
102 37 19.000	.....	.....0101...	.....	.....
102 37 25.000	.....	.....1010...	.....	.....
102 37 37.000	.....	.....01...	.....	.....1....
102 37 49.000	.....	.....10...	.....	.....0....
102 37 51.000	.....	.....01...	.....	.....
102 37 55.000	.....	.....01....	.....	..0.....
102 37 57.000	.....	.....	.....	..1.....1...
102 37 59.000	.....	.....10...	.....	.....0...
102 38 1.000	.....	.....	.....	.....1...
102 38 3.000	.....	.....10.....	.....	.....0...
102 38 5.000	.....	.....0101...	.....	.....1...
102 38 7.000	.....	.....10.....	.....	.....0...
102 38 9.000	....1.....	.....0110...	.....	.....
102 38 11.000	.....	.....00....	.....	...1.....
102 38 13.000	.....	.....1.1....	.....	.....
102 38 15.000	.....	.....0101...	.....	.....
102 38 19.000	.....	.....10...	.....	.....

TAB 2

HR MN SEC	DELTA T = 1.80	DELTA T = 1.80	DELTA T = 1.82	DELTA T = 1.82
	1LSS WARNING	1ZERO RR	1RR SELECT C	1OUTLINK ACTIVTY
	2COMP ACTIV	2ENABL RR ERR CT	2RR SLECT B	2ALT RATE SEL
	3UPLINK ACTIV	3SPARE	3RR SELECT A	3ALT MOTOR ACT
	4TEMP CAUTION	4CRSAL ENABLE	4RADAR ACT	4THRUST DRIVE
	5RELEASE	5XERO IMU CDUS	5INHIBIT UPLINK	5SPARE
	6FL VERB NOUN	6ICDUERR ENABL	6BLOCK UPLINK	6GYRO ENABLE
	7OPERATOR ERR	7SPARE	7DLWOC	7GYRO SELECT B
	8SPARE	8DSP LD'G DATA	8ENABLE RHC CTR	8GYRO SELECT A
	9TEST CONNECTOR	9+P GIMTVMCMD	9STRT RHC READ	9GYRO SIGN NEG
	ACAUTION RESET	A-P GIMTVMCMD	ATEST ALARMS	AGYRO ACTIVITY
	BSPARE	B+R GIMTRM CMD	BENABLE STDBY	BDRIVE CDU S
	CSPARE	C-R GIMTRM CMD	CRESET TRAP 31-A	CDRIVE CDU T
	DENGINE ON	DLR REPOS 2 CMD	DRESET TRAP 31-B	DDRIVE CDU Z
	EENGINE OFF	ERR ENABLE	ERESET TRAP 32	EDRIVE CDU Y
	FSPARE	FLSS DELAY OFF	FENABLE T6RUPT	FDRIVE CDU X
	CHANNEL 11	CHANNEL 12	CHANNEL 13	CHANNEL 14
	123456789ABCDEF	123456789ABCDEF	123456789ABCDEF	123456789ABCDEF
STATUS	010010001000100	010001010110000	111000110000000	011101000000000
102 38 21.000	...0...0.....	.....00....	000....0.....	.0.....
102 38 23.000	.....1.....	.....1..1...	111.....	.....
102 38 25.000	.....	.....01.....	.....	...0.....
102 38 27.000	....1.....	.....	.....	.....
102 38 29.000	.....	.....10...	.....	.....
102 38 31.000	.....	.....10.....	.....1.....	.....
102 38 33.000	.....	.....01...	.....	.....
102 38 35.000	.....	.....0.....	.....	.....
102 38 37.000	.....1.....	.....1.....	.....	..0.....
102 38 39.000	....0.....	.....10...	.....	..11.....
102 38 41.000	.....	.....10.....	.....	...0.....
102 38 43.000	.....	.....01...	.....	.....
102 38 45.000	.....	.....0..0...	.....	...1.....
102 38 47.000	....1.....	.....1.....	00.1.....	.....
102 38 49.000	.....	.....0.1...	1.....	...0.....
102 38 51.000	.....	.....10...	.1.0.....	...1.....1...
102 38 53.000	.....	.....0....	.....	.....0...
102 38 55.000	.....	.....1...	.....	...0.....
102 38 57.000	.....	.....	.....	...1.....
102 38 59.000	.....	.....1.10...	.....	.....
102 39 1.000	....0....0.....	.....0.0....	.....	.1.....
102 39 3.000	.....	.....11....	.....	.....
102 39 5.000	.....	.....01...	0..1.....	.....
102 39 7.000	....1.....	.....10...	1..0.....	...0.....
102 39 9.000	....0....1.....	.....10.....	.0.1.....	...1.....
102 39 11.000	.....	.....0.0....	01.....	.....
102 39 13.000	.....	.....1....	.0.....	...0.....
102 39 15.000	.....	.....101...	1.....	.....
102 39 17.000	....1.....	.....	01.....	.....
102 39 19.000	.....	.....1010...	.0.....	.....
102 39 21.000	.....	.....0.....	11.0.....	.....
102 39 23.000	.....	.....101...	.....	.....
102 39 25.000	.....	.....0.0...	00.1.....	.....

APOLLO 11 LM-5 DOWNLINK BILEVELS

TAB 2

HR MN SEC	DELTA T = 1.*0	DELTA T = 1.*0	DELTA T = 1.*2	DELTA T = 1.*2
	1LSS WARNING	1ZERO RR	1RR SELECT C	1OUTLINK ACTIVTY
	2COMP ACTIV	2ENABL RR ERR CT	2RR SELECT B	2ALT RATE SEL
	3UPLINK ACTIV	3SPARE	3RR SELECT A	3ALT MOTOR ACT
	4TEMP CAUTION	4CRSAL ENABLE	4RADAR ACT	4THRUST DRIVE
	5RELEASE	5XERO IMU CDUS	5INHIBIT UPLINK	5SPARE
	6EL VERB NOUN	6ICDU ERR ENABL	6BLOCK UPLINK	6GYRO ENABLE
	7OPERATOR ERR	7SPARE	7DLWOC	7GYRO SELECT B
	*SPARE	*DSP LD'G DATA	*ENABLE RHC CTR	*GYRO SELECT A
	9TEST CONNECTOR	9+P GMTVMCMD	9STRT RHC READ	9GYRO SIGN NEG
	ACAUTION RESET	A-P GIMTVMCMD	ATEST ALARMS	AGYRO ACTIVITY
	BSPARE	B+R GIMTRM CMD	BENABLE STDBY	BDRIVE CDU S
	CSPARE	C-R GIMTRM CMD	CRESET TRAP 31-A	CDRIVE CDU T
	DENGINE ON	DLR REPOS 2 CMD	DRESET TRAP 31-B	DDRIVE CDU Z
	EENGINE OFF	ERR ENABLE	ERESET TRAP 32	EDRIVE CDU Y
	ESPARE	FLSS DELAY OFF	EENABLE T6RUPT	FDRIVE CDU X
	CHANNEL 11	CHANNEL 12	CHANNEL 13	CHANNEL 14
STATUS	1234567*9ABCDEF	1234567*9ABCDEF	1234567*9ABCDEF	1234567*9ABCDEF
102 39 29.000	010010001100100	010001010000000	001100100000000	011001000000000
102 39 31.000	...0.....	.....1.1....	.1.....	.....
102 39 33.000	.....	.....	.0.0.....	..0.....
102 39 35.000	.....	.....	1.....	.....
102 39 37.000	.....	.....	01.1.....	..1.....
102 39 39.000	.....	.....	.0.....	.....
102 39 41.000	.....	.....0101...	1..0.....	.....
102 39 43.000	...1.....	.....10.....	01.1.....	.....
102 39 45.000	.....	.....01.....	.0.....	.....
102 39 47.000	.....	.....	1.....	.....
102 39 49.000	....0.....	.....0.....	01.....	.....
102 39 51.000	.....	.....10...	.0.....	..0.....
102 39 53.000	.....	.....01...	1..0.....	.....
102 39 55.000	.....	.....1..0...	01.....	..1.....
102 39 57.000	.....	.....0.....	.0.....	..0.....
102 39 59.000	.....	.....1.1....	1..1.....	..1.....
102 40 1.000	.....	.....	01.0.....	..0.....
102 40 3.000	.....	.....	.0.....	..1.....
102 40 5.000	.....	.....0101...	1.....	..0.....
102 40 7.000	.....	.....	01.1.....	..1.....
102 40 9.000	.....	.....	.0.....	.....
102 40 11.000	.....	.....	1.....	.....
102 40 13.000	.....	.....0.0...	01.....	.....
102 40 15.000	.....	.....11....	.0.....	.....
102 40 17.000	.....	.....01...	1.....	.....
102 40 19.000	.....	.....	01.....	.....
102 40 21.000	.....	.....010...	.0.....	.....
102 40 23.000	.....	.....	1.....	.....
102 40 25.000	....1.....	.....1.....	01.....	.....
102 40 27.000	.....	.....0.0....	.0.0.....	..0.....
102 40 29.000	....0.....	.....1.1....	1..1.....	..1.....
102 40 31.000	.....	.....	01.....	.....
102 40 33.000	.....	.....01...	.0.....	.....
		.....	1..0.....	..0.....

APOLLO 11 LM-5 DOWNLINK BILEVELS

TAB 2

DELTA T = 1.80	DELTA T = 1.80	DELTA T = 1.82	DELTA T = 1.82
1LSS WARNING	1ZERO RR	1RR SELECT C	1OUTLINK ACTIVTY
2COMP ACTIV	2ENABL RR ERR CT	2RR SLECT B	2ALT RATE SEL
3UPLINK ACTIV	3SPARE	3RR SELECT A	3ALT MOTOR ACT.
4TEMP CAUTION	4CRSAL ENABLE	4RADAR ACT	4THRUST DRIVE
5RELEASE	5XERO IMU CDUS	5INHIBIT UPLINK	5SPARE
6EL VERB NOUN	6ICDU ERR ENABL	6BLOCK UPLINK	6GYRO ENABLE
7OPERATOR ERR	7SPARE	7DLWOC	7GYRO SELECT B
8SPARE	8DSP LD'G DATA	8ENABLE RHC CTR	8GYRO SELECT A
9TEST CONNECTOR	9+P GMTVMCMD	9STRT RHC READ	9GYRO SIGN NEG
ACAUTION RESET	A-P GIMTVMCMD	ATEST ALARMS	AGYRO ACTIVITY
BSPARE	B+R GIMTRM CMD	BENABLE STDBY	BDRIVE CDUS
CSPARE	C-R GIMTRM CMD	CRESET TRAP 31-A	CDRIVE CDUT
DENGINE ON	DLR REPOS 2 CMD	DRESET TRAP 31-B	DDRIVE CDUZ
EENGINE OFF	ERR ENABLE	ERESET TRAP 32	EDRIVE CDUY
ESPARE	FLSS DELAY OFF	FENABLE T6RUPT	FDRIVE CDUX
CHANNEL 11	CHANNEL 12	CHANNEL 13	CHANNEL 14
1234567890ABCDEF	1234567890ABCDEF	1234567890ABCDEF	1234567890ABCDEF
0100000011001000	0100010110010000	1010001000000000	0100010000000000
..1.....	.....0.....	01.1.....	..1.....
.....	.....1.....	.0.....	.....
....0.....	.....10.....	1.....	.....
.....	.....01.....	01.....	.....
.....	.....10...	.0.....	.....
.....	.....00....	1.....	.....
.....	.....1.....	01.....	.....
.....	.....011....	.0.0.....	..0.....
.....	.....	1..1.....	..1.....
.....	.....1001...	01.0.....	.....
.....	.....10...	.0.1.....	.....
.....	.....0.01...	1.....	.....
.....	.....1.....	01.0.....	..0.....
.....	.....10...	.0.1.....	..1.....
.....	.....	1.....	.....
....1.....	.....01...	01.....	.....
.....	.....	.0.....	.....
.....	.....01.....	1.....	.....
....0.....	.....10...	01.....	.....
.....	.....01...	.0.....	..0.....
.....	.....	1.....	..1.....
.....	.....10...	01.....	.....
.....	.....	.0.....	..0.....
.....	.....0....	1.....	..1.....
.....	.....10.....	01.0.....	..0.....
.....	.....1...	.0.1.....	..1.....
.....	.....	1.....	.....
.....	.....1..	.1.0.....	.....
.....1.....	.....0.....	.....	.....
.....	.....1.....	.....	.....
.....	.....0..0	.....	.....
.....	.....1.1..	.....	.....
.....	.....00..	0..1.....	.....

HR MN SEC	STATUS
102 40 45.000	
102 40 47.000	
102 40 49.000	
102 40 41.000	
102 40 43.000	
102 40 45.000	
102 40 47.000	
102 40 49.000	
102 40 51.000	
102 40 53.000	
102 40 55.000	
102 40 57.000	
102 40 59.000	
102 41 1.000	
102 41 3.000	
102 41 5.000	
102 41 7.000	
102 41 9.000	
102 41 11.000	
102 41 13.000	
102 41 15.000	
102 41 17.000	
102 41 19.000	
102 41 21.000	
102 41 23.000	
102 41 25.000	
102 41 27.000	
102 41 29.000	
102 41 31.000	
102 41 33.000	
102 41 35.000	
102 41 37.000	
102 41 39.000	

APOLLO 11 LM-5 DOWNLINK BILEVELS

TAB 2

HR MN SEC	DELTA T = 1.*0	DELTA T = 1.*0	DELTA T = 1.*2	DELTA T = 1.*2
	1LSS WARNING	1ZERO RR	1RR SELECT C	1OUTLINK ACTIVTY
	2COMP ACTIV	2ENABL RR ERR CT	2RR SLEECT B	2ALT RATE SEL
	3UPLINK ACTIV	3SPARE	3RR SELECT A	3ALT MOTOR ACT.
	4TEMP CAUTION	4CRSAL ENABLE	4RADAR ACT	4THRUST DRIVE
	5RELEASE	5XFRO IMU CDUS	5INHIBIT UPLINK	5SPARE
	6EL VERB NOUN	6ICDUERR ENABL	6BLOCK UPLINK	6GYRO ENABLE
	7OPERATOR ERR	7SPARE	7DLWOC	7GYRO SELECT B
	8SPARE	8DSP LD'G DATA	8ENABLE RHC CTR	8GYRO SELECT A
	9TEST CONNECTOR	9+P GMTVMCMD	9STRT RHC READ	9GYRO SIGN NEG
	ACAUTION RESET	A-P GIMTVMCMD	ATEST ALARMS	AGYRO ACTIVITY
	BSPARE	B+R GIMTRM CMD	BENABLE STDBY	BDRIVE CDU S
	CSPARE	C-R GIMTRM CMD	CRESET TRAP 31-A	CDRIVE CDU T
	DENGINE ON	DLR REPOS 2 CMD	DRESET TRAP 31-B	DDRIVE CDU Z
	EENGINE OFF	ERR ENABLE	ERESET TRAP 32	EDRIVE CDU Y
	FSPARE	FISS DELAY OFF	FENABLE T6RUPT	FDRIVE CDU X
	CHANNEL 11	CHANNEL 12	CHANNEL 13	CHANNEL 14
	1234567890ABCDEF	1234567890ABCDEF	1234567890ABCDEF	1234567890ABCDEF
STATUS	0100010011001 00	0100010101000 00	0111001000000 00	0110010000000 00
102 41 41.000	.....	.....1....	.0.	.....
102 41 45.000	.....	.....01...	.1.....	.....
102 41 47.000	.....	.....1010...	.0.....	.....
102 41 49.000	.....	.....	1.....	.....
102 41 51.000	.....	.....01...	01.....1.....	.....
102 41 53.000	.....	.....0..0...	.0.....	..0.....
102 41 55.000	.....	.....	1.....	..1.....
102 41 57.000	.....	.....	01.....	.....
102 41 59.000	.....	.....	.0.....	.....
102 42 1.000	.....	.....11....	11.0.....	.....
102 42 3.000	.....	.....1001...	.....	.....
102 42 5.000	.....	.....0...	00.1.....	.....
102 42 7.000	.....	.....	11.0.....	.....
102 42 9.000	.....	.....011....	0..1.....	.....
102 42 11.000	.....	.....	1..0.....	.....
102 42 13.000	.....	.....01...	.0.1.....	.....
102 42 15.000	....0...0.....	.....0.0...	01.....0.....	.....
102 42 17.000	.....	.....1.1....	.0.....	.....
102 42 19.000	.....	.....01.....	1..0.....	.....
102 42 21.000	.....1.....	.....01...	01.1.....1	.....
102 42 23.000	.....1.....	.....	1..0.....0	.....
102 42 25.000	.....	.....1010...	.0.1.....	.....
102 42 27.000	.....	.....	.1.0.....	.....
102 42 29.000	.....	.....0101...	.....	.....
102 42 31.000	.....0.....	.....	.0.1.....	.....
102 42 33.000	.....	.....1010...	01.....	.....
102 42 35.000	.....	.....01.....	.0.....	.....
102 42 37.000	.....	.....1001...	1.....	.....
102 42 39.000	.....	.....0110...	.1.0.....	.....
102 42 41.000	.....0.....	.....00....	000.....	..0.....
102 42 43.000	.....	.....	111.....	.....
102 42 45.000	.....	.....1.1...	0..1.....	.....
102 42 47.000	.....1.....	.....1010...	.0.....	.....

TAB 2

	DELTA T = 1.80	DELTA T = 1.80	DELTA T = 1.82	DELTA T = 1.82
	1ISS WARNING	1ZERO RR	1RR SELECT C	1OUTLINK ACTIVTY
	2COMP ACTIV	2ENABL RR ERR CT	2RR SELECT B	2ALT RATE SEL
	3UPLINK ACTIV	3SPARE	3RR SELECT A	3ALT MOTOR ACT.
	4TEMP CAUTION	4CRSAL ENABLE	4RADAR ACT	4THRUST DRIVE
	5RELEASE	5XERO INL CDUS	5INHIBIT UPLINK	5SPARE
	6ST VERB NOUN	6ICDUERR ENABL	6BLOCK UPLINK	6GYRO ENABLE
	7OPERATOR ERR	7SPARE	7DLWOC	7GYRO SELECT B
	8SPARE	8DSP LD'G DATA	8ENABLE RHC CTR	8GYRO SELECT A
	9TEST CONNECTOR	9+P GMTVMCMD	9STRT RHC READ	9GYRO SIGN NEG
	ACAUTION RESET	A-P GIMTVMCMD	ATEST ALARMS	AGYRO ACTIVITY
	BSPARE	B+R GIMTRM CMD	BENABLE STDBY	BDRIVE CDU S
	CSPARE	C-R GIMTRM CMD	CRESET TRAP 31-A	CDRIVE CDU T
	DENGINE ON	DLR REPOS 2 CMD	DRESET TRAP 31-B	DDRIVE CDU Z
	EENGINE OFF	ERR ENABLE	ERESET TRAP 32	EDRIVE CDU Y
	FSPARE	FISS DELAY OFF	FENABLE T6RUPT	FDRIVE CDU X
HR MN SEC	CHANNEL 11	CHANNEL 12	CHANNEL 13	CHANNEL 14
	1234567890ABCDEF	1234567890ABCDEF	1234567890ABCDEF	1234567890ABCDEF
STATUS	0100000011001 00	0100010110100 00	0011001000000 00	0100010000000 00
102 42 49.000	.....	.....	11.0.....	.....
102 42 51.000	.....	.....0101...	0..1.....	.....
102 42 53.000	.....	.....10.....	.0.0.....	.....
102 42 55.000	.....0.....	.....0...	...1.....	.0.....
102 42 57.000	.....1.....	.....1....	1.....	.....
102 42 59.000	.....	.....0101...	01.....	.....
102 43 1.000	.....	.....1010...	.0.....	.....
102 43 3.000	.....	.....01.....	1.....	.....
102 43 5.000	.....	.....10.....	01.....	.....
102 43 7.000	.....	.....	.0.....	.....
102 43 9.000	.....	.....0101...	1.....	.....
102 43 11.000	.....	.....10...	01.....	.....
102 43 13.000	.....	.....00....	.0.0...1.....	.....
102 43 15.000	.....	.....	1..1.....	.....
102 43 17.000	.....	.....	01.....	.....
102 43 19.000	.....	.....	.0.....	.....
102 43 21.000	.....	.....	11.0.....	.....
102 43 47.000	.....	.....	.....	...1.....
102 43 49.000	.....	.....	.....	...0.....
102 44 5.000	.....	.....	.....	...1.....
102 44 9.000	.....	.....	.0.1.....	...0.....
102 44 11.000	.....	.....	.1.0.....	.....
102 44 13.000	.....	.....	1	.....
102 44 15.000	.....	.....	0	.....
102 44 47.000	.....	.....	1	.....
102 44 49.000	.....	.....	0	.....
102 44 57.000	.....	.....	1	.....
102 44 59.000	.....	.....	0..1.....0	.....
102 45 1.000	.....	.....	.0.....	.....
102 45 3.000	.....	.....	1.....	.....
102 45 5.000	.....	.....	01.....1	.....
102 45 7.000	.....	.....	.0.0.....0	.....
102 45 9.000	.....	.....	11.....	.....

TAB 2

HR MN SEC	DELTA T = 1.80	DELTA T = 1.80	DELTA T = 1.82	DELTA T = 1.82
	1LSS WARNING	1ZERO RR	1RR SELECT C	1OUTLINK ACTIVTY
	2COMP ACTIV	2ENABL RR ERR CT	2RR SLECT B	2ALT RATE SEL
	3UPLINK ACTIV	3SPARE	3RR SELECT A	3ALT MOTOR ACT
	4TEMP CAUTION	4CRSAL ENABLE	4RADAR ACT	4THRUST DRIVE
	5RELEASE	5XERO IMU CDUS	5INHIBIT UPLINK	5SPARE
	6FLASHER NOUN	6ICDUERR ENABL	6BLOCK UPLINK	6GYRO ENABLE
	7OPERATOR ERR	7SPARE	7DLWOC	7GYRO SELECT B
	8SPARE	8DSP LD'G DATA	8ENABLE RHC CTR	8GYRO SELECT A
	9TEST CONNECTOR	9+P GMTVMCMD	9STRT RHC READ	9GYRO SIGN NEG
	ACAUTION RESET	A-P GIMTVMCMD	ATEST ALARMS	AGYRO ACTIVITY
	BSPARE	B+R GIMTRM CMD	BENABLE STDBY	BDRIVE CDU S
	CSPARE	C-R GIMTRM CMD	CRESET TRAP 31-A	CDRIVE CDU T
	DENGINE ON	DLR REPOS 2 CMD	DRESET TRAP 31-B	DDRIVE CDU Z
	EENGINE OFF	ERR ENABLE	ERESET TRAP 32	EDRIVE CDU Y
	FSPARE	FLSS DELAY OFF	FENABLE T6RUPT	FDRIVE CDU X
	CHANNEL 11	CHANNEL 12	CHANNEL 13	CHANNEL 14
	123456789ABCDEF	123456789ABCDEF	123456789ABCDEF	123456789ABCDEF
STATUS	010000001100100	010001010000000	111000110000000	000001000000000
102 45 21.000	.....	.....	1	.....
102 45 29.000	.....	.....	0	.....
102 45 31.000	.....	.....	1	.....
102 45 33.000	.....	.....	0	.....
102 45 37.000	.....	.....1.....	.....	.....
102 45 39.000	.....	.....1.....	1	.....
102 45 41.000	.....	.....0.....	0	.....
102 45 43.000	.....	.....0.....	00.1.....	.....
102 45 45.000	.....	.....1.....	1.....	.....
102 45 47.000	.....	.....0.....	.1.0.....	.....
102 47 15.000	....1.....	.....	.0.1.....	.....
102 47 17.000	.....1.....	.....	01.....	.....
102 47 19.000	.....	.....1.....	.0.....	.....
102 47 21.000	.....0.....	.....0.....	1.....	.....
102 47 23.000	.....0.....	.....	...0.....	.....
102 47 29.000	.....	.....1.....	.....	.....
102 47 31.000	.....	.....0.....	.....	.....
102 47 45.000	.....	.....1.....	.....	.....
102 47 47.000	.....	.....0.....	.....	.....
102 47 53.000	.0.:01...0..01.	.0.....0.....	0.0....0.....	.....
102 48 19.000	.1...0	.....	.....	.....
102 48 21.000	.0...1.....	.....	.....	.....
102 49 5.000	....1.....	.....	.....	.....
102 49 20.000	WAS FINAL TIME			

TAB 4

HR MN SEC	DELTA T = .760	DELTA T = .760	DELTA T = .780	DELTA T = .780
	1OLDESFLAG	1SPARE	1NODO FLAG	1DIMOFLAG
	2RIO FLAG	2GUESSW	2CALCMAN2	2D60R9FLG
	3BREEFLAG	3SLOPESW	3CALCMAN3	3VINTFLAG
	4NEEDFLAG	4SPARE	4PREATFLG	4INTYPFLG
	5LOKONSW	5TRACKFLAG	5AVFLAG	5STATEFLG
	6RBBNSW	6NOWPFLAG	6FINALFLG	6ORBWFLAG
	7RNDVZFLG	7UPDATEFLG	7FTP1FLAG,OPTNSW	7CULTFLAG
	8IMUSE	8VEHUPFLAG	8NDELAYFLG	8PREC1FLG
	9P25 FLAG	9SPARE	9IMPUSW	9R04FLG,READRFLG
	ASPARE	AR61FLAG	ACYCLSW	AVFLAG
	BSPARE	BSPARE	BSTEERSW	BNOR29FLAG
	CMOONFLAG	CSPARE	CLOSCMFLG	CLUNAFLAG
	DMIDFLAG	DERADCOMP	DACMODFLG	DREFSMFLG
	EUSWITCH	EDIDFLAG	ESRCHOPTN	EGLOKFAIL
	FSPARE	FNJETSFLG	FDRIFTFLG	FSPARE
HR MN SEC	FLAGWRD0	FLAGWRD1	FLAGWRD2	FLAGWRD3
	123456789ABCDEF	123456789ABCDEF	123456789ABCDEF	123456789ABCDEF
102 17 17.000	001110010001000	000001000100001	001101010000001	000100000010100
102 23 21.000	.....	.....	.....	...0.....
102 24 3.000	.....	.....	1.....	.....1.....
102 24 19.000	.....	.....	.....	..1.....
102 24 37.000	.....	.....	.....	.....0.....
102 25 1.000	.....	.....	0.....	.....
102 25 27.000	.....	.....	.....	..0....1.....
102 25 53.000	.....	.....	.....	..1.....
102 26 19.000	.....	.....	.....	...1...0.....
102 26 21.000	.....	.....	.....	.....1.....
102 26 43.000	.....	.....	.....	.....0.....
102 27 3.000	.....	.....	.....	.....1.....
102 27 25.000	.....	.....	.....	.....0.....
102 27 27.000	.....	.....	.....	.....1.....
102 27 39.000	.....	.....	.....	.....0.....
102 27 45.000	.....	.....	.....	.....1.....
102 28 35.000	.....	.....	.....	.....0.....
102 29 23.000	**********	.....	.....	.....
102 29 25.000	001110010001000	.....	.....	.....
102 29 53.000	.....	.....	.....	**********
102 29 55.000	.....	.....	.....	001100000010100
102 31 35.000	.....	**********	.....	.....
102 31 37.000	.....	000001000100001	.....	.....
102 32 35.000	.....	.....	0	.....
102 33 5.000	.....	.....1.	.....	.....
102 33 9.000	.....	.....	.....1....	.....
102 43 21.000	.....	.....1...	.....	.....
102 47 23.000	.....	.....	1	...01.....
102 47 53.000	.....0.....	.....0.0.	.....	....0.....1...
102 48 27.000	.1.....1.....	.....	.....	.....
102 49 20.000	WAS FINAL TIME			

APOLLO 11 LM-5 DOWNLINK BILEVELS

TAB 4

HR MN SEC	DELTA T = .800	DELTA T = .800	DELTA T = .820	DELTA T = .820
	1NDSPFLAG	1RENDWFLG	1ATTFLG	1TEFSW
	2SPARE	2MGLAFLAG	2AUXFLAG	2V82FMFLG
	3MKOV FLAG	3SOLNSW	3NPARGFLG	3VERIFLAG
	4NBLPTFLG	4NORMMON	4SPARE	4UPLOCKFL
	5NBLPTFLG	5SPARE	5SPARE	5AVEGFLAG
	6PLNBDFLG	6MAXTSFLG	6REDFLAG	6V37FLAG
	7PRONVFLG	7ENGONFLG	7POCTFLAG	7IDLEFLAG
	8NRMNVFLG	8COMPUTER	8MLNFLAG	8V67FLAG
	9MRKNVFLG	9DMENFLG	92PHASFLG	9RVSW
	ANWAITFLAG	ARNGSCFLAG	AGMBDRVSW	ANORMSW
	BMWAITFLG	BR77FLAG	BETRSTFLAG	BSWANDISP
	CPDSPFLAG	CNOTHROTL	C532.1F3B	CASTNFLAG
	DNRMIDFLG	DSNUFFER	D532.1F3A	DINGFLAG
	EPRIODLF	ESPARE	E532.1F2	EMANUFLAG
	EMRKIDFLG	FDSKYFLAG	F532.1F1	FETSWITCH
	FLAGWRD4	FLAGWRD5	FLAGWRD6	FLAGWRD7
	123456789ABCDEF	123456789ABCDEF	123456789ABCDEF	123456789ABCDEF
102 17 17.000	000000000000100	000000000100001	000000010000000	010000100000000
102 20 43.000	.....0..	.....	.....	.....
102 20 45.000	.....1..	.....	.....	.....
102 21 21.000	.....0..	.....	.....	.....
102 21 45.000	1.....1	.....	.....	.....
102 21 47.000	.....1.....	.....	.....	.....
102 24 3.000	0	.....	.....	.....
102 24 55.000	.....	**********	.....	.....
102 25 1.000	1	000000000100001	.....	.....
102 25 23.000	0.....0....0	.....	.....	.....
102 25 25.000	.....1.....	.....	.....	.....
102 25 27.000	.....0.....	.....	.....	.....
102 26 21.000	1.....1....1	.....	.....	.....
102 28 35.000	0.....0....0	.....	.....	.....
102 30 47.000	.....1.....	.....	.....	.....
102 30 49.000	.....0...	.....	.....	.....
102 30 51.000	.....1.....	.....	.....	.....
102 30 55.000	.....0.....	.....	.....	.....
102 32 35.000	.....	.....	.....	....11.....
102 32 47.000	.....	**********	.....	.....
102 32 49.000	.....	000000000100001	.....	.....
102 32 57.000	.....	.....0.....	.....	.....
102 32 59.000	.....1..	.....	.....	.....
102 33 1.000	.....0..	.....	.....	.....1...
102 33 5.000	.....	.....1.....	.1.....	.....0...10...
102 34 17.000	.....1.....	.....	.....	.....
102 34 25.000	.....0.....	.....	.....	.....
102 34 35.000	.....1.....	.....	.....	.....
102 34 55.000	.....0.....	.....	.....	.....
102 35 5.000	.....1.....	.....	.....	.....
102 35 17.000	.....0.....	.....	.....	.....
102 36 5.000	.....1.....	.....	.....	.....
102 36 57.000	.....0.....	.....	.....	.....
102 38 11.000	.....1.....	.....	.....	.....

TABLE 4

HR MN SEC	DELTA T = .800	DELTA T = .800	DELTA T = .820	DELTA T = .820
	1NDSPFLAG	1BENDWFLG	1ATTFLG	1TFFSW
	2SPARE	2MGLVFLAG	2AUXFLAG	2V82FMFLG
	3MKOV FLAG	3SOLNSW	3NTARGFLG	3VERIFLAG
	4NRUPTFLG	4NORRMON	4SPARE	4UPLOCKFL
	5NRUPTFLG	5SPARE	5SPARE	5AVEGFLAG
	6PINBRFLG	6 3AXISFLG	6REDFLAG	6V37FLAG
	7PRONVFLG	7ENGONFLG	7POLTFLAG	7IDLEFLAG
	8NRMNVFLG	8COMPUTER	8MUNFLAG	8V67FLAG
	9MRKNVFLG	9DMENFLG	92PHASFLG	9RVSW
	ANWAITFLAG	ARNGSCFLAG	AGMBDRVSW	ANORMSW
	BMWAITFLG	BR77FLAG	BFIRSTFLAG	BSWANDISP
	CPDSPFLAG	CNOTHROTL	C532.1F3B	CASTNFLAG
	DNRMIDFLG	DSMUFFER	D532.1F3A	DINGFLAG
	EPRIODLE	ESPARE	E532.1F2	EMANUFLAG
	ENRKIDFLG	EDSKYFLAG	F532.1F1	FITSWITCH
HR MN SEC	FLAGWRD4	FLAGWRD5	FLAGWRD6	FLAGWRD7
	123456789ABCDEF	123456789ABCDEF	123456789ABCDEF	123456789ABCDEF
STATUS	000000010000000	000000100000001	010000010000000	010011000010000
102 38 23.000	.....0.....	.....	.....	.....
102 38 29.000	.....1.....	.....	.....	.....
102 38 39.000	.....0.....	.....	.....	.....
102 38 49.000	.....1.....	.....	.....	.....
102 39 1.000	.....0.....	.....	.....	.....
102 39 9.000	.....1.....	.....	.....	.....
102 39 11.000	.....0.....	.....	.....	.....
102 39 17.000	.....1.....	.....	.....	.....
102 39 29.000	.....0.....	.....	.....	.....
102 39 41.000	.....1.....	.....	.....	.....
102 39 47.000	.....0.....	.....	.....	.....
102 40 25.000	.....1.....	.....	.....	.....
102 40 29.000	.....0.....	.....	.....	.....
102 40 35.000	.....1....	.....	.....	.....
102 40 41.000	.....0.....	.....	.....	.....
102 41 5.000	.....1.....	.....	.....	.....
102 41 13.000	.....0.....	.....	.....	.....
102 41 31.000	.....1..	.....	.....	.....
102 42 17.000	.....0..	.....	.....	.....
102 42 25.000	.....1..	.....	.....	.....
PRO → 102 42 33.000	.....0..	.....	.....1.....	.....
102 43 21.000	.....	.....	.....0.....	.....
102 47 15.000	.....1.....	.....	.....	.....
102 47 21.000	.....	.....	.....	....0.....
102 47 23.000	.....	.....	.....0.....	.....0....
102 47 53.000	.....0.....	.....0.....	.....	.....01.....
102 47 55.000	.....1..	.....	.....	.....
102 48 21.000	.....	.....	1.....	.....
102 48 27.000	.....	.....	.....1.....	.....
102 49 20.000	WAS FINAL TIME			

APOLLO 11 LM-5 DOWNLINK BILEVELS

TAB 5

HR MN SEC	DELTA T = .980	DELTA T = 1.60	DELTA T = 1.60	DELTA T = 1.26
	1SPARE	1NO LSS WARN	1LAMP TEST ON	1HRCLRNON
	2SPARE	2LSS DELAY	2SPARE	2HRNDTAOTO
	3SPARE	3LCDU FAIL INH	3SPARE	3HRHIGH
	4NO ATTITUDE	4IMU FAIL INH	4SPARE	4HRNOREAD
	5SPARE	5NO ALARM	5ZERO ON	5LRNOREAD
	6GIMBAL LOCK	6IMU INIT	6NO IMU USE	6LRPOS2
	7SPARE	7LSS INIT REG	7SPARE	7HRCDUOK
	8TRACKER ALARM	8ONE SAMP WAIT	8SPARE	8LRVELFAIL
	9PROG CAUTION	9LSS NOT OPEN	9SPARE	9LRHIGH
	ASPARE	ANO PIPA FAIL	ASPARE	AREQRRDES
	BSPARE	BNO IMU CAGE	BUPLINK OK	BREPRMON
	CSPARE	CNO CDU FAIL	CDOWNLINK OK	CRBANTMODLI
	DSPARE	DNO IMU FAIL	DNO PIPA FAIL	DZERORRCDU
	ESPARE	ENO LSS TN ON	ENO PROCEED	ECHRANTMODE
	FSPARE	FLSS TEMP OUT	FSPARE	FRRCONTDES
HR MN SEC	DAPTAB+11D	IMODES 30	IMODES 33	RADMODES
	123456789ABCDEF	123456789ABCDEF	123456789ABCDEF	123456789ABCDEF
102 17 17.000	000000000000000	100000000111110	000000000011110	**********
102 17 18.000	**********	.....	.....	.....
102 17 19.000	000000000000000	.....	.....	010000101001000
102 17 20.000	**********	.....	.....	.....
102 17 21.000	000000000000000	.....	.....	.....
102 17 22.000	**********	.....	.....	.....
102 17 23.000	000000000000000	.....	.....	.....
102 17 24.000	**********	.....	.....	.....
102 17 25.000	000000000000000	.....	.....	.....
102 17 26.000	**********	.....	.....	.....
102 17 27.000	000000000000000	.....	.....	.....
102 17 28.000	**********	.....	.....	.....
102 17 29.000	000000000000000	.....	.....	.....
102 17 30.000	**********	.....	.....	.....
102 17 31.000	000000000000000	.....	.....	.....
102 17 32.000	**********	.....	.....	.....
102 17 33.000	000000000000000	.....	.....	.....
102 17 34.000	**********	.....	.....	.....
102 17 35.000	000000000000000	.....	.....	.....
102 17 36.000	**********	.....	.....	.....
102 17 37.000	000000000000000	.....	.....	.....
102 17 38.000	**********	.....	.....	.....
102 17 39.000	000000000000000	.....	.....	.....
102 17 40.000	**********	.....	.....	.....
102 17 41.000	000000000000000	.....	.....	.....
102 17 42.000	**********	.....	.....	.....
102 17 43.000	000000000000000	.....	.....	.....
102 17 44.000	**********	.....	.....	.....
102 18 53.000	000000000000000	.....	.....	.....
102 18 54.000	**********	.....	.....	.....
102 18 55.000	000000000000000	.....	.....	.....
102 18 56.000	**********	.....	.....	.....
102 18 57.000	000000000000000	.....	.....	.....
102 18 58.000	**********	.....	.....	.....

TAB 6

HR MN SEC	DELTA T = .040	DELTA T = .040	DELTA T = .060	DELTA T = .060
	1366SW	1AVEMIDSW	1SPARE	1HELSHELG
	2INITALGN	2MIDAVELG	2SPARE	2VELSHELG
	3SPARE	3MIDIFLAG	3SPARE	3SCALBAD
	4COCAFLAG	4SPARE	4SPARE	4GNGEDATA
	5APSESW	5OUTFLAG	5SPARE	5READVEL
	6ORDERSW	6ELZONED	6SPARE	6READER
	7INFINFLG	7SPARE	7REINTFLG	7VELDATA
	8SUREFLAG	8FLAP	8SPARE	8URINH
	9P39.79SW	9LETABORT	9SPARE	9XORFLG
	AELUNDISP	AELRCS	ASPARE	ANOLRREAD
	BLMOONFLG	BELPI	BSPARE	BPSTHIGAT
	CCMOONFLG	CELPC	CSPARE	CVNCNH
	DNEWIFLG	DSPARE	DAPSFLAG	DSPARE
	ESPARE	EELVR	EINTFLAG	ESPARE
	FRPQFLAG	FSPARE	FSPARE	FLRBYPASS
HR MN SEC	FLAGWRD8	FLAGWORD9	FLAGWRD10	FLAGWRD11
	123456789ABCDEF	123456789ABCDEF	123456789ABCDEF	123456789ABCDEF
102 17 17.000	000000000011101	001000000000000	000000000000000	000000000000000
102 24 3.000	.....	.....	.....1.	.....
102 24 37.000	.....	.....	.....0.	.....
102 24 55.000	**********	.....	.....	.....
102 25 1.000	000000000011101	.....	.....	.....
102 25 27.000	.....	.....	.....1.	.....
102 26 19.000	.....	.....	.....0.	.....
102 26 21.000	.....	.....	.....1.	.....
102 26 41.000	.....	.....	.....0.	.....
102 27 1.000	.....	.....	.....1.	.....
102 27 25.000	.....	.....	.....0.	.....
102 27 27.000	.....	.....	.....1.	.....
102 27 39.000	.....	.....	.....0.	.....
102 27 41.000	.....	.....	.....1.	.....
102 28 35.000	.....	.....	.....0.	.....
102 28 45.000	.....	.....	.....	**********
102 28 47.000	.....	.....	.....	000000000000000
102 32 9.000	.....	**********	.....	.....
102 32 11.000	.....	001000000000000	.....	.....
102 32 54.000	.....	.....	.....	.....1.....
102 32 57.000	.....	.....	.....	..1.....
102 33 5.000	.....	.....1.....	.....	.....
102 37 49.000	.....	.....	.....	..0.....
102 38 45.000	.....	.....	.....	.....1.....
102 38 49.000	.....	.....	.....	....1...1.....
102 38 51.000	.....	.....	.....	.....1.....
102 39 1.000	.....	.....	.....	.....0.....
102 39 4.000	.....	.....	.....	.....1.....
102 41 11.000	.....	.....	.....	.....0..11....
102 41 39.000	.....	.....	.....	.....0.....
102 41 41.000	.....	.....	.....	.....1.....
102 42 55.000	.....	.....	.....	.....0.....
102 42 57.000	.....	.....	.....	.....1.....
102 44 9.000	.....	.....	.....	.....0.....

TAB 6

HR MN SEC	DELTA T = .#40	DELTA T = .#40	DELTA T = .#60	DELTA T = .#60
	1#60SW	1AVEMIDSW	1SPARE	1DEL SHELG
	2INITALGN	2MIDAVELG	2SPARE	2VEL SHELG
	3SPARE	3MIDIELAG	3SPARE	3SCALBAD
	4COGAELAG	4SPARE	4SPARE	4RNGEDATA
	5APSESW	5QUITFLAG	5SPARE	5READVEL
	6ORDERSW	6ELZONED	6SPARE	6READER
	7INFEINFLG	7SPARE	7REINTFLG	7VELDATA
	8SURFFLAG	#ELAP	#SPARE	#LRINH
	9P39,79SW	9LETABORT-	9SPARE	9XORFLG
	AFLUNDISP	AELRCS	ASPARE	ANOLRREAD
	BLMOONFLG	BELPI	BSPARE	BPSTHIGAT
	CCMOONFLG	CELPC	CSPARE	CVACNH
	DNEWIFLG	DSPARE	DAPSFLAG	DSPARE
	ESPARE	EELVR	EINTFLAG	ESPARE
	FRPOFLAG	FSPARE	FSPARE	F[illegible]4BYPASS
	FLAGWRD#	FLAGWORD9	FLAGWRD10	F[illegible]AGWRD11
	123456789ABCDEF	123456789ABCDEF	123456789ABCDEF	[illegible]456789ABCDEF
STATUS	000000000011101	001000001000000	000000000000000	6.J011011010000
102 44 25.000	.....	.....	.....	.....1.....
102 44 57.000	.....	.....	.....	.....0.....
102 45 7.000	.....1.....	.....	.....	.....1.....
102 45 27.000	.....	.....	.....	.1.....1...
102 45 29.000	.....	.....	.....	.0.....0...
102 45 33.000	.....	.....	.....	.1.....1...
102 45 37.000	.....	.....	.....	.0.....0...
102 45 41.000	.....	.....	.....	.....0.....
102 47 23.000	.....	.....	.....1.	.....
102 47 53.000	.....1.....	.....0.....	.....10.	....00.00.0...1
102 49 20.000	WAS FINAL TIME			

TAB 7

DELTA T = 1.26

```
                1AUTORATE1
                2AUTORATE2
                3ACCSOKAY
                4DBSELECT
                5AORBSYST
                6ULLAGER
                7GRCSCALE
                8DRIFTBIT
                9LPDPHASE
                AAORBTRAN
                BACC4082X
                COURRCBIT
                DCSMDOCKED
                EUSEORITS
                FPULSES
HR MN SEC       DAPBOOLS
                123456789ABCDEF
102 17 17.000   ***************
102 17 19.000   011000110100011
102 18 55.000   ....1..........
102 20  9.000   ....0..........
102 21 33.000   ....1..........
102 24 15.000   ....0..........
102 26 17.000   ....1..........
102 27 33.000   ....0... ..1...
102 27 15.000   ....1..........
102 27 17.000   ....0......0...
102 29 43.000   ....1..........
102 29 45.000   ***************
102 29 47.000   011010110100001.
102 30 51.000   ..............0
102 31 35.000   ....0..........
102 32 35.000   ***************
102 32 37.000   011000110100010
102 32 59.000   .....1.........
102 33  1.000   ....1..........
102 33  5.000   ....0..0.......
102 33  7.000   ....10........
102 33 11.000   ....0........0.
102 34 13.000   ....1..........
102 34 17.000   ....0..........
102 34 23.000   ....1..........
102 34 29.000   ....0..........
102 34 37.000   ....1..........
102 34 53.000   ....0..........
102 35  1.000   ....1..........
102 35  9.000   ....0..........
102 35 13.000   ....1.....*...
102 35 17.000   ....0..........
102 35 27.000   ....1..........
102 35 31.000   ....0..........
```

TAB 7

DELTA T = 1.26

```
                    1AUTORATE1
                    2AUTORATE2
                    3ACCSOKAY
                    4DBSELECT
                    5AORBSYST
                    6ULLAGER
                    7RHCSCALE
                    8DRIFTBIT
                    9LPDPHASE
                    AAORBTRAN
                    BACC40R2X
                    COURRCBIT
                    DCSSDOCKED
                    EUSEQRITS
                    FPULSES
 HR MN SEC          DAPBOOLS
                    123456789ABCDEF
  STATUS            011000100100000
102 36 11.000       ....1..........
102 36 57.000       ....0..........
102 36 59.000       ....1......1...
102 37  1.000       ....0..........
102 37 17.000       ....1..........
102 37 19.000       ....0..........
102 37 27.000       ....1..........
102 37 51.000       ...0...........
102 38  1.000       ....1..........
102 38  3.000       ....0..........
102 38  5.000       ....1......0...
102 38  7.000       ....0..........
102 38 17.000       ....1..........
102 38 21.000       ....0..........
102 38 23.000       ..0............
102 38 25.000       ..1............
102 38 37.000       ....1..........
102 38 39.000       ....0..........
102 38 43.000       ....1..........
102 38 51.000       ....0...1......
102 38 53.000       ....1..........
102 38 55.000       ....0..........
102 39 25.000       ....1..........
102 39 39.000       ....0..........
102 40 23.000       ....1..........
102 40 33.000       ....0..........
102 40 47.000       ....1..........
102 41 17.000       ....0..........
102 41 51.000       ....1..........
102 41 53.000       ....0..........
102 41 55.000       ..............1..
102 42  3.000       ............0...
102 42 17.000       ....1..........
```

TAB 7

DELTA T = 1.26

HR MN SEC	1AUTORATE1 2AUTORATE2 3ACCSOKAY 4DBSELECT 5AORBSYST 6ULLAGER 7RHCSCALE 8DRIFTBIT 9UPDPHASE AAORBTRAN BACC40R2X COLBRCBIT DCSMDOCKED EUSEORITS FPULSES DAPBOOLS 1234567890ABCDEF 0110101011000000
STATUS	
102 42 21.000	....0.....
102 42 27.000	....1.....
102 42 29.000	....0.....
102 42 41.000	....1.....
102 43 3.000	....0.....
102 43 15.000	.....1...
102 43 19.000	.....0...
102 43 23.000	.....0.....
102 43 31.000	....1.....
102 43 35.000	.....1...
102 43 37.000	.....0...
102 43 43.000	.....1...
102 43 45.000	.....0..
102 43 47.000	.....1...
102 43 49.000	.....0...
102 43 57.000	.....1...
102 43 59.000	.....0...
102 44 7.000	....0.....1...
102 44 11.000	..... 0...
102 44 19.000	.....1...
102 44 21.000	.....0...
102 44 27.000	.....1...
102 44 29.000	.....0...
102 44 31.000	.....1...
102 44 33.000	.....0...
102 44 35.000	.....1...
102 44 37.000	.....0...
102 44 39.000	.....1...
102 44 43.000	.....0...
102 44 45.000	.....1...
102 44 49.000	.....0.
102 44 51.000	..... 1...
102 44 53.000	.....0...

TAB 7

DELTA T = 1.26

```
                    1AUTORATE1
                    2AUTORATE2
                    3ACCSOKAY
                    4DBSELECT
                    5AOR3SYST
                    6ULLAGER
                    7RBCSCALE
                      8LETBIT
                    9LPDPHASE
                    AAORBTRAN
                    BACC40R2X
                    CCURRCBIT
                    DCSMDOCKED
                    ELSEORITS
                    FPULSES
HR MN SEC           DAPBOOLS
                    123456789ABCDEF
  STATUS            011000100100000
102 44 57.000       ...........1...
102 45  1.000       ...........0...
102 45  5.000       ...... ....1...
102 45 11.000       ...........0...
102 45 13.000       ...........1...
102 45 17.000       ...........0...
102 45 19.000       ...........1...
102 45 27.000       ....1.. .......
102 45 33.000       ...........0...
102 45 35.000       ...........1...
102 45 39.000       ....0..........
102 45 41.000       ...........0...
102 45 45.000       ............1.
102 45 47.000       ...........0...
102 47 55.000       ......1.....1.
102 48 27.000       ............1....
102 49 20.000       WAS FINAL TIME
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2

APOLLO 11 LM-5 COMPUTER WORDS

PAGE 11

TIME HR	MIN	SECS	CDU X ACTUAL CDU ANGLE FLEM 41 171 DATA	CDUDX DESIRED INTERMEDIATE CDUX FLEM 191 204 DATA	CDU Y ACTUAL CDU ANGLE FLEM 42 172 DATA	CDUDY DESIRED INTERMEDIATE CDUY FLEM 192 205 DATA	CDU Z ACTUAL CDU ANGLE FLEM 43 173 DATA	CDUDZ DESIRED INTERMEDIATE CDUZ FLEM 193 206 DATA	PIRCDLS OR SHAFT CDU ANGLE FLEM 102 DATA	PIRCDLT RR TRUN CDU ANGLE FLEM 103 174 DATA
[illegible]	[illegible]	15.000	170.3760	170.2771	106.7212	106.9849	356.7700	357.9895		[illegible]
[illegible]	[illegible]	16.000	170.3540	170.2771	106.7432	106.9849	356.7700	357.9895		[illegible]
[illegible]	[illegible]	[illegible]	170.3210	170.2771	106.7651	106.9849	356.7590	357.9895		
[illegible]	[illegible]	[illegible]	170.2991	170.2771	106.7871	106.9849	356.7590	357.9895		[illegible]
[illegible]	[illegible]	[illegible]	170.2771	170.2771	106.7981	106.9849	356.7480	357.9895		[illegible]
[illegible]	[illegible]	[illegible]	170.2551	170.2771	106.8311	106.9849	356.7480	357.9895		[illegible]
[illegible]	[illegible]	[illegible]	170.2332	170.2771	106.8640	106.9849	356.7480	357.9895		[illegible]
[illegible]	[illegible]	[illegible]	170.2002	170.2771	106.8860	106.9849	356.7371	357.9895		[illegible]
[illegible]	[illegible]	[illegible]	170.1782	170.2771	106.9189	106.9849	356.7151	357.9895		[illegible]
[illegible]	[illegible]	[illegible]	170.1453	170.2771	106.9299	106.9849	356.7151	357.9895		[illegible]
[illegible]	[illegible]	[illegible]	170.1233	170.2771	106.9409	106.9849		357.9895		[illegible]
[illegible]	[illegible]	[illegible]	170.1013	170.2771	106.9409	106.9849	356.7480	357.9895		[illegible]
[illegible]	[illegible]	[illegible]	170.0793	170.2771	106.9519	106.9849	356.7590	357.9895		[illegible]
[illegible]	[illegible]	[illegible]	170.0464	170.2771	106.9739	106.9849	356.7810	357.9895		[illegible]
[illegible]	[illegible]	[illegible]	170.0244	170.2771	106.9849	106.9849	356.8030	357.9895		[illegible]
[illegible]	[illegible]	[illegible]	170.0024	170.2771	106.9958	106.9849	356.8140	357.9895		[illegible]
102	[illegible]	11.000	169.9805	170.2771	106.9958	106.9849	356.8250	357.9895		[illegible]
102	[illegible]	12.000	169.9475	170.2771	107.0068	106.9849	356.8359	357.9895		[illegible]
102	30	[illegible]	169.9255	170.2771	107.0178	106.9849	356.8579	357.9895		[illegible]
102	30	14.000	169.9036	170.2771	107.0178	106.9849	356.8689	357.9895		[illegible]
102	30	[illegible].000	169.8926	170.2771	107.0178	106.9849	356.9128	357.9895		[illegible]
102	30	16.000	169.8486	170.2771	107.0398	106.9849	356.9019	357.9895		[illegible]
102	30	17.000	169.8267	170.2771	107.0508	106.9849	356.9128	357.9895		[illegible]
102	30	[illegible].000	169.8486	170.2771	107.0398	106.9849	356.9019	357.9895		185.63
102	30	37.000	169.8267	170.2771	107.0508	106.9849	356.9128	357.9895		
102	30	38.000	169.8486	170.2771	107.0398	106.9849	356.9019	357.9895		
102	30	39.000	169.7827	170.2771	107.0728	106.9849	356.9348	357.9895		185.65
102	30	40.000	169.7607	170.2771	107.0618	106.9849	356.9458	357.9895		
102	30	41.000	189.7278		107.0618		356.9458	357.9895		185.58
102	30	42.000	169.7058	170.2771	107.0837	106.9849	356.9568	357.9895		
102	30	43.000	169.6729	170.2771	107.0947	106.9849	356.9678	357.9895		185.67
102	30	44.000	169.6509	170.2771	107.1167	106.9849	356.9788	357.9895		
102	30	45.000	169.6289	170.2771	107.1277	106.9849	356.9897	357.9895		185.66
[illegible]	30	[illegible].000	169.6069	170.2771	107.1277	106.9849	357.0007	357.9895		
[illegible]	30	47.000	169.5740	170.2771	107.1387	106.9849	357.0117	357.9895		185.58
[illegible]	30	[illegible].000	169.5520	169.5630	107.1497	107.1497	357.0227	357.0227		
[illegible]	30	50.000	169.5300	169.5630	107.1606	107.1497	357.0337	357.0227		185.67
[illegible]	30	51.000	169.5081	169.5630	107.1716	107.1497	357.0447	357.0227		
[illegible]	30	52.000	169.4861	169.5630	107.1826	107.1497	357.0557	357.0227		
[illegible]	30	55.000	169.4641	169.5630	107.1936	107.1497	357.0667	357.0227		
[illegible]	30	[illegible].000	169.4092	169.5630	107.2156	107.1497	357.0886	357.0227		
[illegible]	30	57.000	169.3762	169.5630	107.2266	107.1497	357.0996	357.0227		
[illegible]	[illegible]	[illegible]	169.3542	169.5630	107.2375	107.1497	357.1106	357.0227		
[illegible]	30	59.000	169.3213	169.5630	107.2595	107.1497	357.1436	357.0227		
[illegible]	31	000	[illegible]	169.5630	107.2485	107.1497	357.1545	357.0227		
					107.2925	107.1497	357.1655	357.0227		185.65

TIME HR	MIN	SECS	CDUX ACTUAL CDU ANGLE ELEM 41 171 DATA	CDUDX DESIRED INTERMEDIATE CDUX ELEM 151 204 DATA	CDUY ACTUAL CDU ANGLE ELEM 42 172 DATA	CDUDY DESIRED INTERMEDIATE CDUY ELEM 192 205 DATA	CDUZ ACTUAL CDU ANGLE ELEM 43 173 DATA	CDUDZ DESIRED INTERMEDIATE CDUZ ELEM 193 206 DATA	RRCDUS RR SHAFT CDU ANGLE ELEM 102 DATA	RRCDUT RR TRUN CDU ANGLE ELEM 101 194 DATA
102	31	1.000	169.2664	169.5630	107.3035	107.1497	357.1765	357.0227		
102	31	2.000	169.2444	169.5630	107.3035	107.1497	357.1765	357.0227		185.66
102	31	3.000	169.2224	169.5630	107.3035	107.1497	357.1875	357.0227		
102	31	4.000	169.2004	169.5630	107.3145	107.1497	357.1875	357.0227		
102	31	5.000	169.1785	169.5630	107.3254	107.1497	357.1875	357.0227		185.58
102	31	6.000	169.1675	169.5630	107.3364		357.2095	357.0227		
102	31	7.000	169.1565	169.5630	107.3584	107.1497	357.2424	357.0227		185.65
102	31	8.000	169.1345	169.5630	107.3694	107.1497	357.2424	357.0227		
102	31	13.000	169.0137	169.5630	107.4243	107.1497	357.2534	357.0227		185.66
102	31	14.000	168.9917	169.5630	107.4243	107.1497	357.2534	357.0227		
102	31	15.000	168.9697	169.5630	107.4353	107.1497	357.2644	357.0227		185.66
102	31	16.000	168.9478	169.5630	107.4463	107.1497	357.2644	357.0227		
102	31	17.000	168.9258	169.5630	107.4463	107.1497	357.2644	357.0227		185.58
102	31	18.000	168.9038	169.5630	107.4573	107.1497	357.2754	357.0227		
102	31	19.000	168.8818	169.5630	107.4792	107.1497	357.2754	357.0227		185.65
102	31	20.000	168.8599	169.5630	107.4902	107.1497	357.2864	357.0227		
102	31	21.000	168.8379	169.5630	107.5012	107.1497	357.2864	357.0227		185.66
102	31	22.000	168.8269	169.5630	107.5122	107.1497	357.3084	357.0227		
102	31	27.000	168.7170	169.5630	107.5671	107.1497	357.3193	357.0227		
102	31	28.000	168.6951	169.5630	107.5891	107.1497	357.3103	357.0227		
102	31	29.000	168.6521	169.5630	107.6001	107.1497	357.3103	357.0227		185.58
102	31	30.000	168.6511	169.5630	107.6111	107.1497	357.3413	357.0227		
102	31	31.000	168.6292	169.5630	107.6221	107.1497	357.3523	357.0227		185.65
102	31	32.000	168.6072	169.5630	107.6331	107.1497	357.3523	357.0227		
102	31	33.000	168.5852	169.5630	107.6440	107.1497	357.3523	357.0227		185.66
102	31	34.000	168.6072	169.5630	107.6660	107.1497	357.3633	357.0227		
102	31	35.000	168.6292	169.5630	107.6770	107.1497	357.3633	357.0227		185.58
102	31	36.000	168.6401	169.5630	107.6880	107.1497	357.3523	357.0227		
102	31	37.000	168.6621	169.5630	107.7100	107.1497	357.3523	357.0227		185.65
102	31	38.000	168.6841	169.5630	107.7209	107.1497	357.3523	357.0227		
102	31	41.000	168.7500	169.5630	107.7649	107.1497	357.3523	357.0227		185.66
102	31	42.000	168.7720	169.5630	107.7759	107.1497	357.3523	357.0227		
102	31	43.000	168.7939	169.5630	107.7979	107.1497	357.3633	357.0227		185.65
102	31	44.000	168.8159	169.5630	107.8088	107.1497	357.3633	357.0227		
102	31	45.000	168.8379	169.5630	107.8308	107.1497	357.3633	357.0227		185.66
102	31	46.000	168.8599	169.5630	107.8418	107.1497	357.3743	357.0227		
102	31	47.000	168.8818	169.5630	107.8638	107.1497	357.3853	357.0227		185.58
102	31	48.000	168.9148	169.5630	107.8857	107.1497	357.3853	357.0227		
102	31	49.000	168.9258	169.5630	107.8967	107.1497	357.3853	357.0227		185.65
102	31	50.000	168.9478	169.5630	107.9187	107.1497	357.3853	357.0227		
102	31	51.000	168.9697	169.5630	107.9297	107.1497	357.3853	357.0227		185.66
102	31	52.000	168.9917	169.5630	107.9407	107.1497	357.3853	357.0227		
102	31	53.000	169.0027	169.5630	107.9517	107.1497	357.3743	357.0227		185.58
102	31	54.000	169.0247	169.5630	107.9517	107.1497	357.3743	357.0227		
102	31	55.000	169.0466	169.5630	107.9736	107.1497	357.3743	357.0227		185.65
102	31	56.000	169.0686	169.5630	107.9846	107.1497	357.3743	357.0227		185.66

TIME HR	MIN	SECS	CDU X ACTUAL CDU ANGLE ELEM 41 171 DATA	CDUDX DESIRED INTERMEDIATE CDUX ELEM 191 204 DATA	CDU Y ACTUAL CDU ANGLE ELEM 42 172 DATA	CDUDY DESIRED INTERMEDIATE CDUY ELEM 192 205 DATA	CDU Z ACTUAL CDU ANGLE ELEM 43 173 DATA	CDUDZ DESIRED INTERMEDIATE CDUZ ELEM 193 206 DATA	RICDUS RR SHAFT CDU ANGLE ELEM 102 DATA	RICDUT RR TRUN CDU ANGLE ELEM 101 194 DATA
102	31	57.000	169.0906	169.5630	107.9956	107.1497	357.3744	357.0227		
102	31	58.000	169.1125	169.5630	108.0176	107.1497	357.3743	357.0227		185.58
102	31	59.000	169.1235	169.5630	108.0176	107.1497	357.3633	357.0227		
102	32	.000	169.1455	169.5630	108.0396	107.1497	357.3633	357.0227		185.66
102	32	1.000	169.1675	169.5630	108.0505	107.1497	357.3633	357.0227		
102	32	2.000	169.1895	169.5630	108.0615	107.1497	357.3523	357.0227		185.68
102	32	3.000	169.2114	169.5630	108.0725	107.1497	357.3523	357.0227		
102	32	4.000	169.2334	169.5630	108.0945	107.1497	357.3523	357.0227		185.58
102	32	5.000	169.2554	169.5630	108.1165	107.1497	357.3523	357.0227		
102	32	6.000	169.2773	169.5630	108.1274	107.1497	357.3523	357.0227		185.65
102	32	7.000	169.2993	169.5630	108.1494	107.1497	357.3523	357.0227		
102	32	8.000	169.3103	169.5630	108.1604	107.1497	357.3413	357.0227		185.66
102	32	9.000	169.3323	169.5630	108.1604	107.1497	357.3193	357.0227		
102	32	10.000	169.3542	169.5630	108.1604	107.1497	357.3083	357.0227		185.58
102	32	11.000	169.3872	169.5630	108.1604	107.1497	357.3083	357.0227		
102	32	12.000	169.4092	169.5630	108.1494	107.1497	357.2974	357.0227		185.65
102	32	13.000	169.4312	169.5630	108.1494	107.1497	357.2754	357.0227		
102	32	14.000	169.4421	169.5630	108.1384	107.1497	357.2534	357.0227		185.66
102	32	15.000	169.4641	169.5630	108.1165	107.1497	357.2314	357.0227		
102	32	16.000	169.4861	169.5630	108.1165	107.1497	357.2205	357.0227		185.58
102	32	17.000	169.5081	169.5630	108.1274		357.2095	357.0227		
102	32	18.000	169.5190	169.5630	108.1165	107.1497	357.1875	357.0227		185.65
102	32	19.000	169.5410	169.5630	108.1274	107.1497	357.1765	357.0227		
102	32	20.000	169.5630	169.5630	108.1274	107.1497	357.1436	357.0227		185.66
102	32	21.000	169.5850	169.5630	108.1274	107.1497	357.1436	357.0227		
102	32	22.000	169.6069	169.5630	108.1274	107.1497	357.1216	357.0227		185.58
102	32	23.000	169.6289	169.5630	108.1165	107.1497	357.0996	357.0227		
102	32	24.000	169.6399	169.5630	108.1165	107.1497	357.0776	357.0227		185.65
102	32	25.000	169.6619	169.5630	108.1055	107.1497	357.0667	357.0227		
102	32	26.000	169.6399	169.5630	108.1165	107.1497	357.0776	357.0227		185.65
102	32	27.000	169.7058	169.5630	108.0945	107.1497	357.0227	357.0227		
102	32	28.000	169.7278	169.5630	108.0725	107.1497	357.0007	357.0227		185.58
102	32	29.000	169.7498	169.5630	108.0725	107.1497	356.9897	357.0227		
102	32	30.000	169.7717	169.5630	108.0725	107.1497	356.9678	357.0227		185.65
102	32	31.000	169.7937	169.5630	108.0725	107.1497	356.9568	357.0227		
102	32	32.000	169.8157	169.5630	108.0615	107.1497	356.9348	357.0227		185.68
102	32	33.000	169.8926	169.5630	108.0505	107.1497	356.8909	357.0227		
102	32	34.000	169.9146	169.5630	108.0505	107.1497	356.8799	357.0227		185.65
102	32	35.000	169.9365	169.5630	108.0505	107.1497	356.8469	357.0227		
102	32	36.000	169.9585	169.5630	108.0505	107.1497	356.8359	357.0227		185.68
102	32	37.000	169.9805	169.5630	108.0615	107.1497	356.8140	357.0227		
102	32	38.000	170.0024	169.5630	108.0505	107.1497	356.7920	357.0227		185.58
102	32	39.000	170.0244	169.5630	108.0505	107.1497	356.7700	357.0227		
102	32	40.000	170.0024	169.5630	108.0505	107.1497	356.7920	357.0227		185.58
102	32	41.000	170.0684	169.5630	108.0505	107.1497	356.7261	357.0227		
102	32	42.000	170.0024	169.5630	108.0505	107.1497	356.7920	357.0227		185.58
102	32	43.000								
102	32	44.000								

TIME HR	MIN	SECS	CDU X ACTUAL CDU ANGLE ELEM 41 171 DATA	CDUDX DESIRED INTERMEDIATE CDUX ELEM 191 204 DATA	CDU Y ACTUAL CDU ANGLE ELEM 42 172 DATA	CDUDY DESIRED INTERMEDIATE CDUY ELEM 192 205 DATA	CDU Z ACTUAL CDU ANGLE ELEM 43 173 DATA	CDUDZ DESIRED INTERMEDIATE CDUZ ELEM 193 206 DATA	RRCDLS RR SHAFT CDU ANGLE ELEM 102 DATA	RRCDLT RR TRUN CDU ANGLE ELEM 103 194 DATA
102	32	45.000	170.1233	169.5630	10#.0505	107.1497	356.6931	357.0227		[illegible]
102	32	46.000	170.1453	169.5630	10#.0505	107.1497	356.6711	357.0227		[illegible]
102	32	47.000	170.1672	169.5630	10#.0396	107.1497	356.6492	357.0227		[illegible]
102	32	48.000	170.1892	169.5630	10#.0396	107.1497	356.6272	357.0227		[illegible]
102	32	49.000	170.2112	169.5630	10#.0396	107.1497	356.6052	357.0227		[illegible]
102	32	50.000	170.2332	169.5630	10#.0396	107.1497	356.5942	357.0227		[illegible]
102	32	54.000	170.3540	169.5630	10#.0396	107.1497	356.4734	357.0227		[illegible]
102	32	55.000	170.3760	169.5630	10#.0396	107.1497	356.4624	357.0227		185.66
102	32	57.000	170.4199	169.5630	10#.0505	107.1497	356.4294	357.0227		[illegible]
102	32	58.000	170.4749	169.5630	10#.0835	107.1497	356.4075	357.0227		[illegible]
102	32	59.000	170.5627	169.5630	10#.1494	107.1497	356.3745	357.0227		
102	33	000	170.6396	169.5630	10#.2043	107.1497	356.3635	357.0227		185.65
102	33	1.000	170.6396	169.5630	10#.2812	107.1497	356.3855	357.0227		
102	33	2.000	170.6616	169.5630	10#.3911	107.1497	356.3963	357.0227		[illegible]
102	33	3.000	170.7166	169.5630	10#.5010	107.1497	356.4075	357.0227		
102	33	4.000	170.7385	169.5630	10#.6214	107.1497	356.4719	357.0227		[illegible]
102	33	5.000	170.2881	169.5630	10#.2593	107.1497	357.2314	357.0227		
102	33	6.000	169.8596	169.5630	107.7429	107.1497	357.8247	357.0227		185.65
102	33	7.000	169.4312	169.5630	107.2485	107.1497	358.3191	357.0227		
102	33	8.000	169.0466	169.5630	107.2595	107.1497	358.0174	357.0227		185.66
102	33	9.000	168.6841	169.5630	107.2705	107.1497	357.7148	357.0227		
102	33	10.000	168.5303	169.5630	107.2156	107.1497	357.3953	357.0227		185.58
102	33	11.000	168.5413	169.5630	107.1387	107.1497	357.0337	357.0227		
102	33	12.000	168.5413	169.5630	107.0947	107.1497	356.7041	357.0227		185.65
102	34	3.000	168.3545	169.5630	100.2942	100.0854	359.6924	359.8792		
102	34	4.000	168.3545	169.5630	100.1294	99.9756	359.6814	359.8792		185.58
102	34	5.000	168.3435	169.5630	99.9426	99.8128	359.6594	359.8792		
102	34	6.000	168.3105	169.5630	99.7449	99.6130	359.6155	359.8792		185.65
102	34	7.000	168.2996	169.5630	99.4812	99.3933	359.5825	359.8792		
102	34	8.000	168.2666	169.5630	99.2615	99.1736	359.5166	359.8792		185.68
102	34	9.000	168.2227	169.5630	98.9758	98.9068	359.4507	359.8792		
102	34	10.000	168.1897	169.5630	98.7671	98.8770	359.3408	359.8792		185.58
102	34	11.000	168.1677	169.5630	98.5693	98.7341	359.2310	359.8792		
102	34	12.000	168.1458	169.5630	98.4155	98.5144	359.1431	359.8792		185.66
102	34	13.000	168.1128	169.5630	98.2068	98.3276	359.0881	359.8792		
102	34	14.000	168.0798	169.5630	97.9871	98.2178	359.0552	359.8792		185.68
102	34	15.000	168.0469	169.5630	97.8772	98.1079	359.0662	359.8792		
102	34	16.000	168.0359	169.5630	97.8003	97.9980	359.0991	359.8792		185.58
102	34	17.000	168.0249	169.5630	97.6885	97.8882	359.1760	359.8792		
102	34	18.000	168.0029	169.5630	97.5188	97.7783	359.1208	359.8792		185.65
	34	19.000	167.9700	169.5630	97.4288	97.6685	359.4617	359.8792		
102	34	20.000	167.9488	169.5630	97.2820	97.5586	359.5935	359.8792		185.68
102	34	21.000	167.9370	169.5630	97.1411	97.4487	359.6704	359.8792		
102	34	22.000	167.9370	169.5630	96.9214	97.3389	359.7473	359.8792		185.58
	34	23.000	167.9150	169.5630	96.7346	97.2290	359.7581	359.8792		
102	34	24.000	167.9041	169.5630	96.5259	97.1191	359.7693	359.8792		185.65

TIME HR	MIN	SECS	CDU X ACTUAL CDU ANGLE ELEM 41 171 DATA	CDUDX DESIRED INTERMEDIATE CDUX ELEM 191 204 DATA	CDU Y ACTUAL CDU ANGLE ELEM 42 172 DATA	CDUDY DESIRED INTERMEDIATE CDUY ELEM 192 205 DATA	CDU Z ACTUAL CDU ANGLE ELEM 43 173 DATA	CDUDZ DESIRED INTERMEDIATE CDUZ ELEM 193 206 DATA	RHCDLS RH SHAFT CDU ANGLE ELEM 102 DATA	RHCDLT RH TRUN CDU ANGLE ELEM 101 193 DATA
102	34	25.000	167.8931	169.5630	96.3721	97.0093	359.7471	359.8792		
102	34	26.000	167.9150	169.5630	96.2622	96.8994	359.6924	359.8792		185.66
102	34	29.000	167.8931	169.5630	95.8228	96.5698	359.1518	359.8792		
102	34	30.000	167.8711	169.5630	95.7458	96.4600	359.1079	359.8792		
102	34	31.000	167.8601	169.5630	95.5701	96.3501	359.1148	359.8792		185.66
102	34	32.000	167.8271	169.5630	95.4272	96.2402	359.3079	359.8792		
102	34	33.000	167.7832	169.5630	95.2405	96.1304	359.2719	359.8792		185.66
102	34	34.000	167.7393	169.5630	95.1416	96.0205	359.1760	359.8792		
102	34	35.000	167.8162	169.5630	95.0317	95.9106	359.1321	359.8792		185.58
102	34	36.000	167.9041	169.5630	94.9878	95.8008	359.0881	359.8792		
102	34	37.000	167.9810	169.5630	94.9329	95.6909	359.0881	359.8792		185.65
102	34	38.000	168.0579	169.5630	94.8999	95.5811	359.1321	359.8792		
102	34	39.000	168.1018	169.5630	94.8230	95.5042	359.1650	359.8792		185.66
102	34	40.000	168.1458	169.5630	94.6143	95.5042	359.2529	359.8792		
102	34	41.000	168.1897	169.5630	94.4714	95.4712	359.4727	359.8792		185.58
102	34	42.000	168.2446	169.5630	94.3616	95.3613	359.7691	359.8792		
102	34	43.000	168.2776	169.5630	94.2286	95.2515	.0549	359.8792		185.65
102	34	44.000	168.3325	169.5630	94.2517	95.1416	.2527	359.8792		
102	34	45.000	168.3655	169.5630	94.1748	95.0317	.2197	359.8792		185.66
102	34	46.000	168.3875	169.5630	93.9551	94.9219	359.9561	359.8792		
102	34	47.000	168.3875	169.5630	93.8123	94.7791	359.5715	359.8792		185.58
102	34	48.000	168.4094	169.5630	93.6385	94.5593	359.2969	359.8792		
102	34	49.000	168.3984	169.5630	93.5378	94.3726	359.0771	359.8462		185.66
102	34	50.000	168.3875	169.5630	93.4167	94.2627	358.9453	359.7363		
102	34	51.000	168.3655	169.5630	93.3508	94.1528	358.8684	359.6594		185.66
102	34	52.000	168.3545	169.5630	93.3069	94.0430	358.8574	359.6594		
102	34	53.000	168.3655	169.5630	93.2300	93.9331	358.8904	359.6594		185.58
102	34	54.000	168.3765	169.5630	93.1641	93.8232	358.9893	359.6594		
102	34	55.000	168.3765	169.5630	93.0762	93.7134	359.1211	359.6814		185.66
102	34	56.000	168.3875	169.5630	93.0212	93.6035	359.2529	359.7911		
102	34	57.000	168.3765	169.5630	92.8345	93.4937	359.3628	359.8682		185.66
102	34	58.000	168.3435	169.5630	92.7026	93.3838	359.3958	359.8682		
102	34	59.000	168.3215	169.5630	92.5708	93.2410	359.4067	359.8682		185.58
102	35	000	168.2666	169.5630	92.5269	93.0212	359.3628	359.8682		
102	35	1.000	168.2336	169.5630	92.3511	92.8345	359.3848	359.8682		185.65
102	35	2.000	168.2007	169.5630	92.1643	92.7246	359.4507	359.8682		
102	35	3.000	168.1787	169.5630	91.8896	92.6147	359.5496	359.8682		185.66
102	35	4.000	168.1458	169.5630	91.6919	92.5049	359.6265	359.8682		
102	35	5.000	168.1238	169.5630	91.5491	92.3840	359.7363	359.8682		185.58
102	35	6.000	168.0688	169.5630	91.4282	92.1643	359.8022	359.8682		
102	35	7.000	168.0688	169.5630	91.2964	91.9556	359.8572	359.8682		185.66
102	35	8.000	168.0579	169.5630	91.1646	91.8457	359.8572	359.8682		
102	35	9.000	168.0469	169.5630	91.1206	91.7358	359.8352	359.8682		185.66
102	35	10.000	168.0029	169.5630	91.0657	91.6260	359.7803	359.8682		
102	35	11.000	167.9810	169.5630	91.0767	91.5161	359.7144	359.8682		185.58
102	35	12.000	167.9810	169.5630	91.0767	91.4063	359.6394	359.8682		185.66

TIME HR MIN SECS	CDU X ACTUAL CDU ANGLE ELEM 41 171 DATA	CDUDX DESIRED INTERMEDIATE CDUX ELEM 191 204 DATA	CDU Y ACTUAL CDU ANGLE ELEM 42 172 DATA	CDUDY DESIRED INTERMEDIATE CDUY ELEM 192 205 DATA	CDU Z ACTUAL CDU ANGLE ELEM 43 173 DATA	CDUDZ DESIRED INTERMEDIATE CDUZ ELEM 193 206 DATA	RRCDLS RR SHAFT CDU ANGLE ELEM 102 DATA	RRCDLT RR TRUN CDU ANGLE ELEM 101 194 DATA
102 35 13.000	167.9810	169.5630	91.0876	91.2964	359.6045	359.8682		
102 35 14.000	167.9590	169.5630	90.9558	91.1865	359.5715	359.8682		185.55
102 35 15.000	167.9480	169.5630	90.8450	91.0657	359.5386	359.8682		
102 35 16.000	167.9590	169.5630	90.5931	90.8459	359.5056	359.8682		185.58
102 35 17.000	167.9590	169.5630	90.4065	90.6262	359.4397	359.8682		
102 35 18.000	167.9700	169.5630	90.1318	90.5054	359.4287	359.8682		185.56
102 35 19.000	167.9700	169.5630	89.9670	90.3955	359.4067	359.8682		
102 35 20.000	167.9590	169.5630	89.7913	90.2856	359.4067	359.8682		185.65
102 35 21.000	167.9480	169.5630	89.6594	90.1758	359.3848	359.8682		
102 35 22.000	167.9150	169.5630	89.5276	90.0659	359.3848	359.8682		185.56
102 35 23.000	167.8931	169.5630	89.3518	89.9561	359.3738	359.8682		
102 35 24.000	167.8491	169.5630	89.1980	89.8462	359.4177	359.8682		185.66
102 35 25.000	167.8381	169.5630	89.0332	89.7363	359.4836	359.8682		
102 35 26.000	167.8162	169.5630	88.9233	89.6265	359.5605	359.8682		185.65
102 35 27.000	167.8162	169.5630	88.7146	89.5166	359.6375	359.8682		
102 35 28.000	167.7832	169.5630	88.5608	89.4067	359.7253	359.8682		185.58
102 35 29.000	167.7612	169.5630	88.3630	89.2969	359.7693	359.8682		
102 35 30.000	167.8601	169.5630	88.2971	89.1870	359.7583	359.8682		185.65
102 35 31.000	168.0029	169.5630	88.1873	89.0881	359.7583	359.8682		
102 35 32.000	168.1238	169.5630	88.1763	89.0881	359.7144	359.8682		185.58
102 35 33.000	168.2556	169.5630	88.1763	89.0771	359.7144	359.8682		
102 35 34.000	168.5852	169.5630	88.2312	88.7476	359.6265	359.8682		185.63
102 35 37.000	168.6951	169.5630	88.1982	88.6377	359.6704	359.8682		
102 35 38.000	168.7939	169.5630	88.0994	88.5278	359.6814	359.8682		185.57
102 35 39.000	168.8818	169.5630	88.0005	88.4180	359.7143	359.8682		
102 35 40.000	168.9587	169.5630	87.8577	88.3081	359.7383	359.8682		185.64
102 35 41.000	169.0356	169.5630	87.7917	88.1982	359.7473	359.8682		
102 35 42.000	169.1125	169.5630	87.6270	88.0884	359.7363	359.8682		185.84
102 35 43.000	169.1675	169.5630	87.4951	87.9785	359.6814	359.8682		
102 35 44.000	169.2224	169.5630	87.2644	87.8687	359.6704	359.8682		185.55
102 35 45.000	169.2774	169.5630	87.1655	87.7588	359.6375	359.8682		
102 35 46.000	169.1213	169.5630	86.9568	87.6489	359.6375	359.8682		185.63
102 35 47.000	169.1542	169.5630	86.8250	87.5391	359.6155	359.8682		
102 35 48.000	169.1762	169.5630	86.6492	87.4292	359.6265	359.8682		185.63
102 35 53.000	169.4531	169.5630	86.0559	86.8799	359.2529	359.8682		
102 35 54.000	169.1762	169.5630	86.6492	87.4292	359.6265	359.8682		185.63
102 35 57.000	169.4531	169.5630	86.0559	86.8799	359.2529	359.8682		
102 35 58.000	169.1762	169.5630	86.6492	87.4292	359.6265	359.8682		185.63
102 36 1.000		169.5630	85.7373		359.9121	.0879		
102 36 2.000	169.0906	169.5630	85.6824	86.1108	359.9561	.0879		185.53
102 36 3.000	169.0137	169.5630	85.5945	86.0010	.0439	.0879		
102 36 4.000	168.9258	169.5630	85.4626	85.8911	.0220	.0879		185.62
102 36 5.000	168.8489	169.5630	85.3748	85.7812	.0330	.0879		
102 36 6.000	168.7390	169.5630	85.2100	85.6714	359.9890	.0879		185.60
102 36 7.000	168.6401	169.5630	85.1331	85.5615	359.9890	.0879		
102 36 8.000	168.5520	169.5630	84.9463	85.4517	.0330	.0879		185.51

TIME HR	MIN	SECS	CDU X ACTUAL CDU ANGLE ELEM 41 171 DATA	CDUDX DESIRED INTERMEDIATE CDUX ELEM 191 204 DATA	CDU Y ACTUAL CDU ANGLE ELEM 42 172 DATA	CDUDY DESIRED INTERMEDIATE CDUY ELEM 192 205 DATA	CDU Z ACTUAL CDU ANGLE ELEM 43 173 DATA	CDUDZ DESIRED INTERMEDIATE CDUZ ELEM 193 206 DATA	RRCDUS RR SHAFT CDU ANGLE ELEM 102 DATA	RRCDUT RR TRUN CDU ANGLE ELEM 101 194 DATA
102	36	9.000	168.5193	169.5630	84.8474	85.3308	.0439	.0879		
102	36	10.000	168.4863	169.5630	84.7046	85.1111	.0549	.0879		185.62
102	36	11.000	168.4534	169.5630	84.6057	84.8914	359.9890	.0879		
102	36	12.000	168.4534	169.5630	84.4080	84.7815	359.9670	.0879		185.60
102	36	57.000	156.5771	156.7410	80.3540	80.9143	.1978	.3076		
102	36	58.000	155.8301	155.7642	80.1343	80.9143	.0439	.3076		185.55
102	36	59.000	156.0388	156.0498	79.9695	80.9143	.0769	.3076		
102	37	.000	156.5991	156.5552	79.7058	80.8044	.0439	.3076		185.55
102	37	1.000	156.1487	156.4233	79.7278	80.6946	.2087	.3076		
102	37	2.000	156.5991	156.5552	79.7058	80.8044	.0439	.3076		185.55
102	37	2.000	156.1487	156.4233	79.7278	80.6946	.2087	.3076		
102	37	3.000	156.5991	156.5552	79.7058	80.8044	.0439	.3076		185.55
102	37	5.000	149.3921	149.3591	79.8267	80.6946	.3735	.3076		
102	37	6.000	149.7656	149.7656	79.8157	80.6946	.4065	.3076		185.55
102	37	15.000	137.3181	137.3840	79.7058	80.2551	.1978	.3076		
102	37	16.000	136.4832	136.5161	79.3872	80.1453	.1538	.3076		185.55
102	37	17.000	135.9009	135.9998	79.4641	80.0354	.1868	.3076		
102	37	18.000	134.1870		79.3982	79.9255	.4724	.3076		185.55
102	37	19.000	132.4292	132.5940	79.4092	79.8157	.5164	.3076		
102	37	20.000	129.8032	130.9021	79.3323	79.8157	.7141	.4175		185.47
102	37	25.000	119.3115	119.3335	79.0027	79.3762	.7141	.5273		
102	37	26.000	119.2017	119.2346	78.8049	79.3762	.5823	.5273		185.46
102	37	27.000	119.0039	118.9929	78.7390	79.3652	.6921	.5273		
102	37	28.000	119.2017	119.2346	78.8049	79.3762	.5823	.5273		185.46
102	37	27.000	119.0039	118.9929	78.7390	79.3652	.6921	.5273		
102	37	28.000	119.2017	119.2346	78.8049	79.3762	.5823	.5273		185.46
102	37	31.000	119.0039	118.9929	78.7390	79.3652	.6921	.5273		
102	37	32.000	119.2017	119.2346	78.8049	79.3762	.5823	.5273		185.46
102	37	47.000	97.6685	98.4155	78.0029	78.7170	1.0547	.7471		
102	37	48.000	92.1204	92.5159	78.0029	78.7170	.8789	.7471		185.44
102	37	49.000	37.0239	37.3096	79.0576	78.9368	.9119	.5273		
102	37	50.000	33.3215	33.5742	79.1455	78.8269	.5273	.5273		185.42
102	37	51.000	29.3225	29.6191	79.0906	78.7170	.5054	.5273		
102	37	52.000	25.6750	25.9387	78.9478	78.6072	.1648	.5273		185.51
102	37	53.000	21.6431	21.9177	79.0137	78.4973	359.8682	.5273		
102	37	54.000	17.9297	18.2373	78.6072	78.3875	359.9561	.4175		185.51
102	37	55.000	13.9417	14.2053	78.5852	78.2776	359.7803	.3076		
102	37	56.000	10.1184	10.4150	78.2776	78.2776	.2966	.3075		185.49
102	37	57.000	6.2143	6.4709	78.0908	78.2776	.3955	.3076		
102	37	58.000	2.2522	2.5378	78.0798	78.1787	.7581	.3076		185.47
102	37	59.000	1.3403	1.3293	77.7942	78.0688	1.1426	.3076		
[illegible]	[illegible]	.000	1.1646	1.1536	77.9919	78.0688	1.0437	.3076		185.49
[illegible]	[illegible]	1.000	2.7026	2.6147	77.8821	78.0688	1.3733	.3076		
[illegible]	[illegible]	2.000	4.1199	3.9990	78.0249	78.0688	.8569	.3076		185.51
[illegible]	[illegible]	3.000	4.0100	4.4714	78.1128	78.0688	.5933	.3076		
[illegible]	[illegible]	4.000	3.7573	4.4714	77.9370	78.0688	359.9561	.1978		185.49

TIME HR	MIN	SECS	CDU X ACTUAL CDU ANGLE ELEM 41 171 DATA	CDUDX DESIRED INTERMEDIATE CDUX ELEM 191 204 DATA	CDU Y ACTUAL CDU ANGLE ELEM 42 172 DATA	CDUDY DESIRED INTERMEDIATE CDUY ELEM 192 205 DATA	CDU Z ACTUAL CDU ANGLE ELEM 43 173 DATA	CDUDZ DESIRED INTERMEDIATE CDUZ ELEM 193 206 DATA	RRCDLS RR SHAFT CDU ANGLE ELEM 102 DATA	RRCDLE RR TRUN CDU ANGLE ELEM 101 104 DATA
102	3H	5.000	3.8232	4.4714	78.0579	78.0688	359.1760	.0879		
102	3H	6.000	4.3835	4.4714	77.9500	77.9590	359.0771	359.9781		185.49
102	3H	7.000	4.3616	4.4714	78.0029	77.8491	358.5937	359.8682		
102	3H	8.000	4.9329	4.4714	77.6074	77.8491	359.2310	359.8682		185.22
102	3H	9.000	4.9438	4.4714	77.2229	77.8491	359.4836	359.8682		
102	3H	10.000	5.2075	4.4714	77.5195	77.7502	359.9121	359.9670		185.48
102	3H	11.000	4.7461	4.4714	77.6953	77.6404	.6921	.0769		
102	3H	12.000	4.2847	4.4714	78.0029	77.6184	.8679	.1868		185.39
102	3H	13.000	4.0210	4.4714	77.9700	77.6184	1.5161	.2966		
102	3H	14.000	3.4277	4.4714	77.3987	77.6184	1.1536	.3296		185.38
102	3H	15.000	4.1528	4.4714	77.2778	77.6184	.9338	.4396		
102	3H	16.000	4.3726	4.4714	77.2998	77.5415	.8569	.2527		185.37
102	3H	17.000	5.0208	4.4714	77.5305	77.4316	.4285	.1428		
102	3H	18.000	5.3503	4.4714	77.5964	77.3877	.9868	.0989		185.38
102	3H	19.000	5.2075	4.4714	77.3877	77.3877	1.0327	.0329		
102	3H	20.000	4.8120	4.4714	77.4207	77.3218	.8569	.0110		185.37
102	3H	21.000	4.2407	4.4714	77.1350	77.2119	.1408	359.9231		
102	3H	22.000	3.8782	4.0100	77.0361	77.1650	359.9783	359.8617		185.37
102	3H	23.000	3.2739	4.0100	77.1240	77.0581	359.8245	359.4617		
102	3H	24.000	2.9993	4.0100	77.0361	76.9482	359.4290	359.3617		184.19
102	3H	25.000	2.8345	4.0100	77.0471	76.8384	359.1980	359.4617		
102	3H	26.000	3.0762	4.0100	76.8384	76.7285	.3955	359.5605		185.46
102	3H	27.000	3.0652	4.0100	76.4539	76.6187	.6592	359.6704		
102	3H	28.000	3.1970	4.0100	76.3220	76.5987	1.1096	359.7803		185.47
102	3H	29.000	3.2300	4.0100	76.4758	76.5967	.6042	359.8901		
102	3H	30.000	3.1641	4.0100	77.1130	76.5967	.4285	.0000		185.46
102	3H	31.000	3.2410	4.0100	76.9702	76.5967	.0549	.1099		
102	3H	32.000	3.0542	4.0100	76.8823	76.4868	359.4617	.1099		185.46
102	3H	33.000	3.2080	4.0100	77.0801	76.3770	.0000	.1099		
102	3H	34.000	3.0103	4.0100	76.6946	76.1572	.2417	.1099		185.37
102	3H	35.000	3.1531	4.0100	76.4099	75.9375	.7251	.1099		
102	3H	36.000	3.0212	4.0100	75.2893	75.7178	.9229	.1099		185.46
102	3H	37.000	2.9773	4.0100	74.4424	75.4980	.6042	.1099		
102	3H	38.000	3.0322	4.0100	74.7839	75.2783	.7031	.1099		185.46
102	3H	39.000	2.9004	4.0100	74.8828	75.0586	.0989	.1099		
102	3H	40.000	3.0432	4.0100	75.7837	75.0146	359.9561	.1099		185.37
102	3H	41.000	2.8564	4.0100	76.3220	75.0146	.0220	.1099		
102	3H	42.000	2.9771	4.0100	75.4761	74.9048	359.5056	.1099		185.46
102	3H	43.000	2.8674	4.0100	74.5862	74.7949	359.8022	.1099		
102	3H	44.000	2.8894	4.0100	73.4216	74.5752	.0439	.1099		185.46
102	3H	45.000	2.9333	4.0100	73.8831	74.3555	1.2744	.1099		
102	3H	46.000	2.8674	4.0100	74.5862	74.1357	2.1094	.1099		185.37
102	3H	47.000	2.8455	4.0100	73.6414	73.9160	.8899	.1099		
102	3H	48.000	2.6917	4.0100	73.3118	73.6084	.2747	.1099		185.46
102	3H	49.000	2.7576	4.0100	72.5208	73.2788	359.6045	.1099		
102	3H	50.000	2.6257	2.4280	72.4988	72.9492	359.4397	.1099		185.44

TIME HR	MIN	SECS	CDU X ACTUAL CDU ANGLE ELEM 41 171 DATA	CDUDX DESIRED INTERMEDIATE CDUX ELEM 191 204 DATA	CDU Y ACTUAL CDU ANGLE ELEM 42 172 DATA	CDUDY DESIRED INTERMEDIATE CDUY ELEM 192 205 DATA	CDU Z ACTUAL CDU ANGLE ELEM 43 173 DATA	CDUDZ DESIRED INTERMEDIATE CDUZ ELEM 193 206 DATA	HRCDLS HR SHAFT CDU ANGLE ELEM 102 DATA	HRCDLT HR TRUN CDU ANGLE ELEM 101 103 DATA
102	38	51.000	1.9006	.4504	72.7515	72.6196	359.7691	.1099		
102	38	52.000	359.8362	359.7253	72.8394	72.3560	359.7034	.1099		185.17
102	38	53.000	358.6816	359.8352	73.5864	72.1362	.0989	.1099		
102	38	54.000	358.8135	359.8901	72.8723	71.9165	359.7253	.1099		185.36
102	38	55.000	359.0002	359.8901	72.4329	71.6968	359.5935	.1099		
102	38	56.000	359.2529	359.8901	71.9714	71.4771	.0659	.1099		185.36
102	38	57.000	359.3828	359.8901	70.7959	71.2573	.2417	.1099		
102	38	58.000	359.6484	359.8901	70.4114	71.0376	.9338	.1099		185.37
102	38	59.000	359.7474	359.8901	69.8730	70.8179	1.0107	.1099		
102	39	.000	359.9451	359.8901	70.1367	70.5981	.8679	.1099		185.36
102	39	1.000	.0220	359.9670	70.9277	70.6860	.9338	.9009		
102	39	2.000	.1099	359.9670	71.3782	70.5103	.5273	.8130		185.43
102	39	3.000	.2417	359.9670	71.5649	70.0708	.5603	.5933		
102	39	4.000	.2637	359.9670	70.2686	69.6751	.2087	.4614		185.37
102	39	5.000	.3955	359.9670	69.3237	69.3457	359.9670	.4614		
102	39	6.000	.3735	359.9670	69.0381	69.0181	.2856	.4614		185.44
102	39	7.000	.4614	359.9670	68.5767	68.6865	.3298	.4614		
102	39	8.000	.4395	359.9670	69.0271	68.6316	.8020	.4504		185.46
102	39	9.000	.4614	359.9670	69.2468	68.6316	.9009	.4504		
102	39	10.000	.4395	359.9670	68.9392	68.3679	.2417	.4504		185.37
102	39	11.000	.3735	359.9670	68.7524	68.0383	359.6924	.4504		
102	39	12.000	.3296	359.9670	67.8076	67.7986	359.4188	.4504		185.44
102	39	13.000	.2637	359.9670	68.1042	67.5769	.2747	.4504		
102	39	14.000	.2747	359.9670	68.2031	67.4670	1.1975	.4504		185.46
102	39	15.000	.1318	359.9670	67.0605	67.3572	.9119	.4504		
102	39	16.000	.0879	359.9670	66.8101	67.1375	.9229	.4504		185.37
102	39	17.000	359.9341	359.9670	65.8191	66.9177	.5713	.4504		
102	39	18.000	359.8352	359.9670	65.7642	66.9177	.5823	.4504		185.44
102	39	19.000	359.6814	359.9670	66.2366	66.9177	.9009	.4504		
102	39	20.000	359.4617	359.9670	66.4783	66.9177	.9448	.4504		185.46
102	39	21.000	359.3298	359.9670	67.4121	66.9177	1.2085	.4504		
102	39	22.000	359.0222	359.9670	67.0496	67.0056	.3625	.4504		185.37
102	39	23.000	358.9563	359.9670	66.8408	67.1155	359.6814	.4504		
102	39	24.000	358.9343	359.9670	67.6208	67.1484	.0989	.4504		185.46
102	39	25.000	359.0002	359.9670	67.9614	67.1484	.6042	.4504		
102	39	26.000	358.9783	359.9670	68.3130	67.1484	.9668	.3735		185.39
102	39	29.000	358.9783	359.9670	66.7969	66.9617	359.8352	.2307		
102	39	30.000	359.0222	359.9670	66.1707	66.7529	359.5276	.2307		185.46
102	39	31.000	359.0222	359.9670	66.7090	66.5442	359.7253	.2307		
102	39	32.000	359.0002	359.9670	66.5991	66.4343	359.3848	.2307		185.46
102	39	33.000	359.0442	359.9670	67.3022	66.3245	359.7803	.2417		
102	39	34.000	358.9783	359.9670	66.9507	66.2146	.0439	.2416		185.37
102	39	35.000	359.0222	359.9670	67.2383	66.0937	.6372	[illegible]		
102	39	36.000	358.9343	359.9670	66.5442	65.8740	.3076	[illegible]		185.44
102	39	37.000	359.0112	359.9670	66.1267	65.6543	359.9341	.6702		
102	39	38.000	359.0332	359.9670	65.7312	65.4346	359.6045	.6702		185.46

TIME HR	MIN	SECS	CDU X ACTUAL CDU ANGLE ELEM 41 171 DATA	CDUDX DESIRED INTERMEDIATE CDUX ELEM 191 204 DATA	CDU Y ACTUAL CDU ANGLE ELEM 42 172 DATA	CDUDY DESIRED INTERMEDIATE CDUY ELEM 192 205 DATA	CDU Z ACTUAL CDU ANGLE ELEM 43 173 DATA	CDUDZ DESIRED INTERMEDIATE CDUZ ELEM 193 206 DATA	RRCDES RR SHAFT CDU ANGLE ELEM 102 DATA	RRCDEL RR TRUN CDU ANGLE ELEM 101 194 DATA
102	39	39.000	359.0552	359.9670	65.5774	65.1929	359.5166	.6702		
102	39	40.000	359.1541	359.9670	65.6104	64.7534	.4724	.6702		185.37
102	39	41.000	359.1541	359.9670	65.2368	64.3359	1.0107	.6702		
102	39	42.000	359.2529	359.9670	64.9701	64.1162	1.4612	.6702		185.33
102	39	43.000	359.1980	359.9670	63.7207	63.8965	.7361	.6702		
102	39	44.000	359.2310	359.9670	63.3252	63.6768	.5273	.6702		185.46
102	39	45.000	359.1980	359.9670	62.6440	63.4570	359.9890	.6702		
102	39	46.000	359.1650	359.9670	63.5120	63.2373	.6702	.6702		185.37
102	39	47.000	359.1980	359.9670	63.8086	63.0176	1.0217	.6702		
102	39	48.000	359.1101	359.9670	64.3689	62.8967	1.4282	.6702		185.46
102	39	49.000	359.0991	359.9670	63.7097	62.7869	.9438	.6702		
102	39	50.000	359.0332	.0769	63.3582	62.6770	.4175	.6702		185.44
102	39	51.000	359.1650	.1758	62.7869	62.5562	359.9561	.6702		
102	39	52.000	359.3628	.1758	62.4463	62.3364	359.5915	.6702		185.37
102	39	53.000	359.5056	.1758	62.2925	62.1277	359.7913	.6702		
102	39	54.000	359.7034	.1758	62.0398	62.0178	359.8901	.6702		185.44
102	39	55.000	359.8462	.1758	62.1936	61.8970	.5273	.6812		
102	39	56.000	.0439	.1758	61.9299	61.6772	.8130	.7910		185.46
102	39	57.000	.1428	.1758	62.1936	61.4575	1.5381	.9009		
102	39	58.000	.2747	.1758	61.3257	61.2378	1.2984	1.0107		185.37
102	39	59.000	.3735	.1758	61.0950	61.0291	1.4063	1.1096		
102	40	000	.4175	.1758	60.2380	60.9192	1.0327	1.1096		185.44
102	40	1.000	.5273	.1758	60.3040	60.8093	.9778	1.0986		
102	40	2.000	.5383	.1758	59.9854	60.6995	.7141	.9888		185.46
102	40	3.000	.6042	.1758	60.3369	60.6006	.5164	.8899		
102	40	4.000	.6372	.1758	60.5127	60.6006	.4944	.8899		185.37
102	40	5.000	.6262	.1758	60.9412	60.6006	.2307	.8899		
102	40	6.000	.6592	.1758	61.2817	60.6006	.4834	.8899		185.46
102	40	7.000	.6262	.1758	61.2598	60.6006	.2527	.8899		
102	40	8.000	.6482	.1758	61.4026	60.6006	.8130	.8899		185.46
102	40	9.000	.6152	.1758	60.8643	60.5786	.7141	.8899		
102	40	10.000	.5823	.1758	60.8203	60.3589	1.4612	.8899		185.37
102	40	11.000	.5933	.1758	59.9084	60.1392	1.6150	.8899		
102	40	12.000	.4944	.1758	59.7546	59.9194	2.3181	.8899		185.44
102	40	13.000	.4834	.1758	58.9526	59.6997	1.6809	.8899		
102	40	14.000	.3076	.1758	59.1614	59.5898	1.0437	.8899		185.46
102	40	15.000	.1868	.1758	58.8208	59.4800	.3625	.8899		
102	40	16.000	.0439	.1758	59.4800	59.3701	.2637	.8899		185.37
102	40	17.000	359.9011	.1758	59.8865	59.2712	.8020	.8899		
102	40	18.000	359.7693	.1758	60.5676	59.2712	1.1975	.8899		185.44
102	40	19.000	359.5496	.1868	60.0403	59.2603	1.2854	.8899		
102	40	20.000	359.4177	.2966	59.4250	59.1504	.5933	.8899		185.46
102	40	21.000	359.2969	.3955	58.8977	59.0295	.5603	.8899		
102	40	22.000	359.3738	.3955	58.3813	58.8098	359.9780	.8899		185.37
102	40	23.000	359.4287	.3955	58.4363	58.6011	.3076	.8899		
102	40	24.000	359.4617	.3955	58.1836	58.4912	.2197	.8899		185.44

TIME HR	MIN	SECS	CDU X ACTUAL CDU ANGLE ELEM 41 171 DATA	CDUDX DESIRED INTERMEDIATE CDUX ELEM 191 204 DATA	CDU Y ACTUAL CDU ANGLE ELEM 42 172 DATA	CDUDY DESIRED INTERMEDIATE CDUY ELEM 192 205 DATA	CDU Z ACTUAL CDU ANGLE ELEM 43 173 DATA	CDUDZ DESIRED INTERMEDIATE CDUZ ELEM 193 206 DATA	RRCDUS RR SHAFT CDU ANGLE ELEM 102 DATA	RRCDUT RR TRUN CDU ANGLE ELEM 101 194 DATA
102	40	25.000	359.5386	.3955	58.6780	58.1921	.8569	.9009		
102	40	26.000	359.5386	.3955	58.6780	58.1921	1.1426	1.0103		185.46
102	40	27.000	359.5605	.3955	59.4250	58.1913	1.8127	1.1096		
102	40	28.000	359.5605	.3955	58.5352	58.2715	1.5161	1.1096		185.47
102	40	29.000	359.5276	.3955	58.4251	58.1616	1.1316	1.1096		
102	40	30.000	359.4838	.3955	57.5464	58.0518	.9558	1.1096		185.44
102	40	31.000	359.4177	.3955	57.5684	57.9419	.6152	1.1096		
102	40	32.000	359.4507	.3955	57.1289	57.8320	.9318	1.1096		185.46
102	40	33.000	359.5056	.3955	57.3378	57.7332	.8240	1.1096		
102	40	34.000	359.5715	.3955	57.3157	57.7332	1.4392	1.1096		185.47
102	40	35.000	359.6265	.3955	57.4015	57.7332	1.3743	1.1096		
102	40	36.000	359.6265	.3955	57.9199	57.7332	1.9226	1.1096		185.46
102	40	37.000	359.6704	.3955	58.1726	57.7332	1.6370	1.1096		
102	40	38.000	359.6155	.3955	58.3318	57.7332	1.6589	1.1096		185.38
102	40	39.000	359.6155	.3955	58.3484	57.7332	.7041	1.1096		
102	40	40.000	359.5605	.3955	58.1044	57.7332	.5493	1.1096		185.37
102	40	41.000	359.5496	.3955	57.0520	57.7332	.6042	1.1096		
102	40	42.000	359.5386	.3955	56.9312	57.7332	.9338	1.1096		185.44
102	40	43.000	359.4727	.3955	56.3269	57.7332	1.3316	1.1096		
102	40	44.000	359.4287	.3955	57.4585	57.7332	.6921	1.1096		185.46
102	40	45.000	359.3518	.3955	57.7002	57.7332	.5493	1.1096		
102	40	46.000	359.5166	.5054	58.3923	57.5134	.2637	1.1096		185.37
102	40	47.000	359.6704	.6042	57.3486	57.3047	1.2415	1.1096		
102	40	48.000	359.8572	.6042	56.5576	57.1948	1.5381	1.1096		185.44
102	40	49.000	359.9670	.6042	55.7446	57.0850	2.0325	1.1096		
102	40	50.000	.0659	.6042	55.8984	56.9751	1.0437	1.2195		185.46
102	40	51.000	.1208	.6042	56.1841	56.8652	.7581	1.3184		
102	40	52.000	.1978	.6042	56.5137	56.7554	.0989	1.3184		185.37
102	40	53.000	.2856	.6042	56.8872	56.6455	1.0986	1.3184		
102	40	54.000	.3735	.6042	56.6675	56.6455	1.7022	1.3184		185.44
102	40	55.000	.4614	.6042	56.6785	56.6455	2.5818	1.3184		
102	40	56.000	.5054	.6042	56.3379	56.6455	1.8347	1.3184		182.58
102	40	57.000	.5054	.6042	56.6345	56.6455	.9558	1.3184		
102	40	58.000	.5054	.6042	56.4478	56.6455	.0000	1.3184		182.63
102	40	59.000	.5383	.6042	57.0190	56.6455	.3296	1.3184		
102	41	.000	.5713	.6042	56.7334	56.6455	1.0876	1.2085		182.63
102	41	1.000	.5933	.6042	56.8652	56.6455	1.7358	1.1096		
102	41	2.000	.6042	.6042	56.4807	56.6455	2.2852	1.1096		182.54
102	41	3.000	.5823	.6042	58.9641	56.6455	1.7578	1.1096		
102	41	4.000	.5054	.6042	57.0959	56.6455	1.3733	1.1096		182.62
102	41	5.000	.4504	.6042	57.3926	56.6345	.4175	1.0986		
102	41	6.000	.3955	.6042	56.8433	56.5247	.5603	.9888		182.63
102	41	7.000	.3516	.5933	56.2939	56.4148	.1868	.8789		
102	41	8.000	.2637	.4834	55.8215	56.3049	.4065	.7690		182.54
102	41	9.000	.2087	.3845	55.5249	56.2061	.0659	.6702		
102	41	10.000	.0879	.3845	55.7556	56.2061	.2307	.6702		182.62

TIME HR MIN SECS	CDU X ACTUAL CDU ANGLE ELEM 41 171 DATA	CDUDX DESIRED INTERMEDIATE CDUX ELEM 191 204 DATA	CDU Y ACTUAL CDU ANGLE ELEM 42 172 DATA	CDUDY DESIRED INTERMEDIATE CDUY ELEM 192 205 DATA	CDU Z ACTUAL CDU ANGLE ELEM 43 173 DATA	CDUDZ DESIRED INTERMEDIATE CDUZ ELEM 193 206 DATA	RRCDLS RR SHAFT CDU ANGLE ELEM 102 DATA	RRCDLT RR TRUN CDU ANGLE ELEM 101 194 DATA
102 41 11.000	359.8890	.3845	55.8215	56.2061	.0549	.6702		
102 41 12.000	359.8682	.3845	56.5027	56.2061	.1208	.6702		182.53
102 41 13.000	359.7583	.3845	56.6895	56.2061	.2527	.6702		
102 41 14.000	359.6375	.4834	57.2058	56.2061	.6372	.9668		182.54
102 41 15.000	359.6265	.5933	56.6785	56.2061	1.7578	1.2744		
102 41 16.000	359.8462	.7031	56.6455	56.2061	2.4390	1.3843		182.53
102 41 17.000	.0000	.8130	55.9204	56.2061	2.8145	1.4941		
102 41 18.000	.1978	.8130	56.1511	56.0962	2.0125	1.4941		182.62
102 41 19.000	.2417	.8130	56.0303	55.9973	1.7578	1.4832		
102 41 20.000	.4065	.8130	56.2061	55.9973	1.0657	1.3733		182.55
102 41 21.000	.4614	.8130	56.1731	55.9863	1.1096	1.2634		
102 41 22.000	.5823	.8130	56.1511	55.8765	.8679	1.1536		182.61
102 41 23.000	.6702	.8130	56.1951	55.7776	1.0437	1.0547		
102 41 24.000	.7141	.8130	55.8435	55.7776	.9998	1.0547		182.62
102 41 25.000	.8240	.8130	55.8875	55.7666	1.0107	1.0547		
102 41 26.000	.8450	.8130	55.2612	55.6567	1.0876	1.0547		182.53
102 41 27.000	.9009	.8130	55.3052	55.5579	.8459	1.0547		
102 41 28.000	.9119	.8130	54.6460	55.5579	.9558	1.0547		182.61
102 41 29.000	.9448	.8130	54.9866	55.5888	.5164	1.0547		
102 41 30.000	.9229	.8130	54.8328	55.6787	.8592	1.0547		182.62
102 41 31.000	.9229	.8130	55.4260	54.8657	.3516	1.0547		
102 41 32.000	.9778	.8130	54.1736	51.8994	1.4061	1.0547		182.53
102 41 33.000	1.0107	.8130	51.5259	49.6252	1.3293	1.0547		
102 41 34.000	1.0767	.8130	48.5925	48.9661	1.7798	1.0547		182.62
102 41 35.000	1.0657	.8130	47.3950	48.3069	.7800	1.0547		
102 41 36.000	.9668	.8130	47.0984	47.6477	.1428	1.0547		182.62
102 41 37.000	.9229	.8130	47.0125	47.0874	359.6484	1.0876		
102 41 38.000	.8789	.8130	47.2412	46.7578	.5383	1.1975		182.53
102 41 39.000	.8899	.7800	46.3733	46.4282	1.4941	1.2744		
102 41 40.000	.8459	.6702	46.3623	46.0985	2.3071	1.2744		182.62
102 41 41.000	.8130	.5713	45.3406	45.7800	2.3840	1.2744		
102 41 42.000	.7361	.5713	45.7361	45.5603	1.5491	1.2744		182.62
102 41 45.000	.3516	.5713	44.8462	44.9011	1.0217	1.2744		
102 41 46.000	.2856	.5713	44.0222	44.5715	1.5051	1.2744		182.50
102 41 47.000	.2087	.5713	43.6267	44.2419	2.3730	1.2744		
102 41 48.000	.0439	.6812	43.3740	43.9124	2.1423	1.2744		182.60
102 41 49.000	359.8682	.7910	44.0888	43.5828	1.9006	1.2744		
102 41 50.000	359.7693	.7910	43.9783	43.2532	1.4832	1.1646		182.51
102 41 51.000	359.8242	.7910	44.4507	42.9235	1.0107	1.0547		
102 41 52.000	359.9451	.9009	43.4839	42.5940	1.1865	.9448		182.59
102 41 53.000	.0439	.0439	42.5830	42.6050	1.1865	1.1206		
102 41 54.000	.2307	.2197	42.5171	42.5610	1.0762	1.3623		182.60
102 41 55.000	.3076	.3076	42.9346	42.8687	3.7024	1.6919		
102 41 56.000	.2747	.2747	43.1433	43.2532	2.0384	2.8015		182.51
102 41 57.000	.2527	.2527	42.6929	42.7039	.0000	.0549		
102 41 58.000	.2856	.2856	42.9126	42.9346	359.3628	359.3628		182.60

TIME HR	MIN	SECS	CDU X ACTUAL CDU ANGLE ELEM 41 171 DATA	CDUDX DESIRED INTERMEDIATE CDUX ELEM 191 204 DATA	CDU Y ACTUAL CDU ANGLE ELEM 42 172 DATA	CDUDY DESIRED INTERMEDIATE CDUY ELEM 192 205 DATA	CDU Z ACTUAL CDU ANGLE ELEM 43 173 DATA	CDUDZ DESIRED INTERMEDIATE CDUZ ELEM 193 206 DATA	RRCDLS RR SHAFT CDL ANGLE ELEM 102 DATA	RRCDLT RR TRUN CDL ANGLE ELEM 101 194 DATA
102	41	59.000	.3186	.3076	40.5615	42.5860	359.3803	359.3844		
102	42	.000	.4195	.4065	39.6347	39.5618	359.6045	359.7803		182.60
102	42	1.000	.4285	.4065	39.0784	39.5618	359.6475	359.7803		
102	42	2.000	.5273	.8459	38.9905	39.1224	359.6265	359.8682		182.51
102	42	3.000	.5603	1.3953	38.8367	38.5730	359.2749	359.9780		
102	42	4.000	.5054	1.5051	38.2874	38.1116	359.4617	.0879		182.60
102	42	5.000	.6262	1.5051	38.2324	37.6721	359.2200	.1978		
102	42	6.000	.5713	1.5051	36.9470	37.2327	359.8462	.3076		182.60
102	42	7.000	.6372	1.5051	36.2988	36.7912	.3406	.4175		
102	42	8.000	.7251	1.5051	35.4199	36.5845	.6372	.4504		182.51
102	42	9.000	.6262	1.5051	35.1672	36.4748	.8679	.4504		
102	42	10.000	.6921	1.5051	35.7605	36.3647	.4175	.4504		182.60
102	42	11.000	.6152	1.5051	35.8923	36.2549	.2966	.4504		
102	42	12.000	.5383	1.5051	36.6614	36.0681	.1868	.5273		182.60
102	42	13.000	.6042	1.5051	36.5515	35.8484	.2856	.6372		
102	42	14.000	.5054	1.5051	36.0242	35.6287	1.2085	.7471		182.51
102	42	15.000	.6152	1.5051	35.8044	35.4089	1.5601	.8569		
102	42	16.000	.7251	.6812	34.9346	35.4389	2.0215	1.7029		182.53
102	42	17.000	.7031	.6812	34.6619	35.4389	2.2081	1.7029		
102	42	18.000	.8240	.9888	34.0027	34.8926	1.8457	1.3953		182.60
102	42	19.000	.8459	1.4282	33.4094	34.1235	1.6260	.9558		
102	42	20.000	.8679	1.8677	33.4394	33.3545	.6042	.5164		182.50
102	42	21.000	1.3843	2.3071	32.6843	32.5854	359.5825	.0769		
102	42	22.000	1.7888	2.2302	32.4316	32.5745	358.6157	359.9890		182.55
102	42	23.000	2.3071	2.0105	32.4426	32.7942	358.4839	359.9890		
102	42	24.000	2.8564	2.0215	32.2998	32.4756	359.2749	359.9890		182.58
102	42	25.000	1.1641	2.1313	32.8491	31.9263	359.8572	359.9890		
102	42	26.000	3.3198	2.2412	32.5525	31.3770	.0549	359.9890		182.49
102	42	27.000	3.4497	2.3511	32.2229	30.8276	.1076	359.9890		
102	42	28.000	3.2959	2.3071	31.5088	30.4321	359.6375	359.9890		182.51
102	42	29.000	3.1201	2.1973	29.8349	30.1025	359.2969	359.9890		
102	42	30.000	2.9004	2.1423	28.1357	29.7180	359.3188	.0439		182.58
102	42	31.000	2.6477	2.1423	28.3777	29.2786	359.3518	.1538		
102	42	32.000	2.4829	2.1423	27.7844	28.8391	359.9451	.2637		182.49
102	42	33.000	2.2852	2.1423	27.9602	28.3997	.3296	.3735		
102	42	34.000	2.0105	2.1204	27.4988	28.2678	.3845	.4175		182.58
102	42	35.000	1.8127	2.1204	27.4768	28.2678	.7141	.4175		
102	42	36.000	1.5820	2.1204	27.7405	28.1140	.6262	.4175		182.58
102	42	37.000	1.2524	2.1204	27.4219	27.8943	.5933	.4175		
102	42	38.000	1.1646	2.1204	27.7734	28.8281	.8130	.3406		182.55
102	42	39.000	1.2305	2.1204	28.5974	30.2563	.1868	.2307		
102	42	40.000	1.1646	2.1204	29.9497	30.0386	.1428	.2307		182.57
102	42	41.000	1.3293	2.1204	30.7837	28.1689	.1978	.3406		
102	42	42.000	1.3843	1.4502	28.3887	29.1138	.0220	.0879		182.51
102	42	43.000	1.3293	1.6699	26.0596	27.5757	.3516	.1978		
102	42	44.000	1.4612	1.8457	24.5874	26.2793	.1648	.3076		182.46

TIME HR MIN SECS	CDU X ACTUAL CDU ANGLE ELEM 41 171 DATA	CDUDX DESIRED INTERMEDIATE CDUX ELEM 191 204 DATA	CDU Y ACTUAL CDU ANGLE ELEM 42 172 DATA	CDUDY DESIRED INTERMEDIATE CDUY ELEM 192 205 DATA	CDU Z ACTUAL CDU ANGLE ELEM 43 173 DATA	CDUDZ DESIRED INTERMEDIATE CDUZ ELEM 193 206 DATA	RRCDUS RR SHAFT CDU ANGLE ELEM 102 DATA	RRCDUT RR TRUN CDU ANGLE ELEM 101 194 DATA
102 42 45.000	1.5271	1.8457	24.5874	25.9497	.2087	.4175		
102 42 46.000	1.4612	1.8457	25.0049	25.6201	.7581	.5273		182.49
102 42 47.000	1.5930	1.8457	25.6421	25.2905	.9778	.6372		
102 42 48.000	1.6370	1.8457	26.2154	24.8840	1.1646	.6702		182.53
102 42 49.000	1.5051	1.8457	26.1584	24.4446	1.0217	.6702		
102 42 50.000	1.6040	1.8457	25.7959	24.0051	.5493	.6702		182.43
102 42 51.000	1.5930	1.8457	25.0269	23.5657	.5713	.6702		
102 42 52.000	1.4612	1.8457	24.3237	23.0493	.9448	.6702		182.51
102 42 53.000	1.5491	1.8457	23.5217	22.5000	.9998	.6702		
102 42 54.000	1.5381	1.8457	22.6758	22.8208	1.1316	.6702		182.52
102 42 55.000	1.4063	1.4832	22.0166	22.4011	1.2854	1.2305		
102 42 56.000	1.4172	1.6370	21.4993	21.6323	1.0217	1.0547		182.43
A 102 42 57.000	1.3953	1.8567	21.1157	20.5334	.9119	.8350		
102 42 58.000	1.2085	1.8787	20.9070	19.8303	.6482	.7251		182.51
102 42 59.000	1.1755	1.8787	20.4675	19.1711	.1648	.6152		
102 43 .000	1.1426	1.8787	19.8741	18.8635	.1868	.5054		182.51
102 43 1.000	.9558	1.8787	19.4897	18.6438	.2747	.3955		
102 43 2.000	1.0547	1.9666	19.0283	18.4241	.1099	.2858		182.42
102 43 3.000	1.2744	2.0764	18.7427	18.2043	.0659	.1758		
102 43 4.000	1.3733	2.0984	18.6108	17.9846	359.9451	.1648		182.51
102 43 5.000	1.5820	2.0984	18.2483	17.7649	359.6704	.1648		
102 43 6.000	1.8018	2.0984	17.9846	17.5452	359.7693	.1648		182.51
102 43 7.000	1.9116	2.0984	17.7359	17.3254	359.9011	.1648		
102 43 8.000	2.0544	2.0984	17.3474	17.1057	359.8462	.1648		182.50
102 43 9.000	2.2852	2.0984	17.1716	16.8860	.1648	.1648		
102 43 10.000	2.3730	2.0984	17.0837	16.6663	.5493	.1648		190.87
102 43 11.000	2.4939	2.0984	16.7212	16.4465	.6592	.1648		
102 43 12.000	2.6587	2.0984	16.5564	16.0510	.9119	.2637		190.87
102 43 13.000	2.7905	2.7795	16.3257	15.6116	1.0767	.3735		
102 43 14.000	2.9114	2.8894	12.5244	13.0188	.7141	.7581		190.78
102 43 15.000	3.1091	3.0762	11.2390	11.6235	.7910	.7800		
102 43 16.000	3.3069	3.2959	7.0093	7.7124	.4944	.5493		190.87
102 43 17.000	3.4387	3.4167	4.7351	4.6582	.1758	.1978		
102 43 18.000	3.6584	3.4167	5.1196	4.6582	.1978	.1978		190.87
102 43 19.000	3.8123	3.4167	5.0427	4.6582	.2307	.1978		
102 43 20.000	3.9771	3.4167	5.4602	4.6582	.0439	.1978		188.06
102 43 21.000	4.1199	4.0979	6.1194	6.0864	.1428	.0000		
102 43 22.000	4.3396	4.2188	5.6140	5.9546	.4395	.4395		187.97
102 43 23.000	4.4934	4.2188	5.5701	5.9546	.3406	.4395		
102 43 24.000	4.6472	4.2188	5.8667	5.9546	.3735	.4395		188.05
102 43 25.000	4.8010	4.2188	5.6030	5.9546	.4285	.4395		
102 43 26.000	4.9548	4.2188	5.6689	5.9546	.3076	.4395		188.06
102 43 27.000	5.0647	4.2188	6.0535	5.9546	.4076	.4395		
102 43 28.000	5.1965	4.2188	5.8447	5.9546	.3406	.4395		187.97
102 43 29.000	5.1965	4.2188	5.9216	5.9546	.2417	.4395		
102 43 30.000	5.1086	4.2188	6.3391	5.9546	.1868	.4395		188.05

TIME HR MIN SECS	CDU X ACTUAL CDU ANGLE ELEM 41 171 DATA	CDUDX DESIRED INTERMEDIATE CDUX ELEM 191 204 DATA	CDU Y ACTUAL CDU ANGLE ELEM 42 172 DATA	CDUDY DESIRED INTERMEDIATE CDUY ELEM 192 205 DATA	CDU Z ACTUAL CDU ANGLE ELEM 43 173 DATA	CDUDZ DESIRED INTERMEDIATE CDUZ ELEM 193 206 DATA	RRCDUS RR SHAFT CDU ANGLE ELEM 102 DATA	RRCDUT RR TRUN CDU ANGLE ELEM 101 194 DATA
102 43 31.000	5.0317	4.2188	6.2402	5.9546	.1648	.4395		
102 43 32.000	4.9658	4.2188	6.1293	5.9546	359.9890	.4395		188.06
102 43 33.000	4.8779	4.8999	6.6907	6.5698	359.8232	359.8572		
102 43 34.000	4.7461	4.7791	6.8774	6.8774	359.8924	359.7363		187.97
102 43 35.000	4.6692	4.6802	6.8884	6.8445	359.3958	359.4727		
102 43 36.000	4.5813	4.6802	7.4597	6.8445	359.0552	359.4727		188.07
102 43 37.000	4.4385	4.4604	7.8223	7.8772	358.6416	358.6926		
102 43 38.000	4.3066	4.4495	7.3718	7.8331	358.6157	358.6926		188.06
102 43 39.000	4.2407	4.4495	7.2729	7.8331	358.4949	358.6926		
102 43 40.000	4.0979	4.1199	7.2070	7.2839	358.3850	358.3521		187.97
102 43 41.000	3.9771	3.9771	7.0642	6.8774	358.4839	358.4619		
102 43 42.000	3.9661	3.9661	9.7009	9.2505	358.6816	358.6707		188.05
102 43 43.000	3.9441	3.9551	11.3379	11.3269	358.7915	358.7805		
102 43 44.000	3.8013	3.9551	11.4587	11.3269	358.9341	358.7805		188.06
102 43 45.000	3.7463	3.7573	12.2058	11.6345	359.0332	359.0002		
102 43 46.000	3.6804	3.6914	12.3267	12.2827	359.0332	359.0332		187.97
102 43 47.000	3.6035	3.6145	14.6338	14.4031	359.4177	359.1628		
102 43 48.000	3.5266	3.5815	14.8315	14.8425	359.5276	359.4617		188.05
102 43 49.000	3.4607	3.4717	15.0403	14.9744	359.6155	359.5825		
102 43 50.000	3.3728	3.4717	15.3040	14.9744	359.8352	359.5825		188.06
102 43 51.000	3.2410	3.4717	15.3589	14.9744	.0330	359.5825		
102 43 52.000	3.1641	3.4717	15.4797	14.9744	.1318	359.5825		187.97
102 43 53.000	3.0542	3.4717	15.8093	14.9744	.3296	359.5825		
102 43 54.000	2.9004	3.4717	15.7104	14.9744	.3735	359.5825		188.05
102 43 55.000	2.7576	3.4717	15.6006	14.9744	.3735	359.5825		
102 43 56.000	2.6477	2.6917	15.6445	15.6226	.3845	.3625		188.06
102 43 57.000	2.4829	2.6917	15.6006	15.6226	.4834	.3625		
102 43 58.000	2.3071	2.3950	15.4248	15.5017	.5603	.5273		187.97
102 43 59.000	2.1643	2.1973	15.4468	15.4248	.6152	.5933		
102 44 .000	2.0105	2.1973	15.5127	15.4248	.7471	.5933		188.05
102 44 1.000	1.8237	2.1973	15.4797	15.4248	.8569	.5933		
102 44 2.000	1.6479	2.1973	15.5566	15.4248	.9338	.5933		188.06
102 44 3.000	1.4722	2.1973	15.7324	15.4248	1.0767	[illegible]		
102 44 4.000	1.2634	2.1973	15.7654	15.4248	1.2634	.59[illegible]		187.97
102 44 5.000	1.1755	2.1973	15.7874	15.4248	1.3843	.5933		
102 44 6.000	1.2305	1.2085	12.6672	14.0295	1.3293	1.3843		188.05
102 44 7.000	1.2524	1.2524	10.4370	10.5579	1.2524	1.2415		
102 44 8.000	1.3513	1.3403	8.0530	8.5144	1.2085	1.2305		188.06
102 44 9.000	1.4502	1.4392	4.7571	4.7351	.9888	.9998		
102 44 10.000	1.5381	1.4502	5.6909	4.8230	1.0437	.9888		187.97
102 44 11.000	1.6040	1.4502	6.3281	4.8230	1.1426	.9888		
102 44 12.000	1.6589	1.4502	6.3831	4.8230	.9119	.9888		188.05
102 44 13.000	1.7358	1.4502	6.5698	4.8230	.8899	.9888		
102 44 14.000	1.7908	1.7798	6.4490	6.6138	1.0107	1.0107		188.06
102 44 15.000	1.8787	1.8018	5.8777	6.2183	1.0547	1.0217		
102 44 16.000	1.9338	1.8018	5.7678	6.2183	1.1096	1.0217		187.97

SUB GROUP NO. - 2

APOLLO 11 LM-5 COMPUTER WORDS

TIME HR MIN SECS	CDU X ACTUAL CDU ANGLE ELEM 41 171 DATA	CDUDX DESIRED INTERMEDIATE CDUX ELEM 191 204 DATA	CDU Y ACTUAL CDU ANGLE ELEM 42 172 DATA	CDUDY DESIRED INTERMEDIATE CDUY ELEM 192 205 DATA	CDU Z ACTUAL CDU ANGLE ELEM 43 173 DATA	CDUDZ DESIRED INTERMEDIATE CDUZ ELEM 194 206 DATA	RRCDUS RR SHAFT CDU ANGLE ELEM 102 DATA	RRCDUT RR TRUN CDU ANGLE ELEM 101 194 DATA
102 44 17.000	1.9995	1.8018	5.8008	6.2183	1.2195	1.0217		
102 44 18.000	2.0544	2.0435	5.2405	5.3174	1.3403	1.3403		188.05
102 44 19.000	2.0984	2.0544	5.1526	5.2515	1.2854	1.3403		
102 44 20.000	2.1423	2.0544	5.3394	5.2515	1.2634	1.3403		188.06
102 44 21.000	2.1643	2.0544	5.4492	5.2515	1.2415	1.3403		
102 44 22.000	2.1973	2.0544	5.3284	5.2515	1.1646	1.3403		187.97
102 44 23.000	2.2192	2.0544	5.4053	5.2515	1.0986	1.3403		
102 44 24.000	2.2412	2.0544	5.6360	5.2515	1.0657	1.3403		188.05
102 44 25.000	2.2412	2.0544	5.6140	5.2515	.9998	1.3403		
102 44 26.000	2.2852	2.2742	3.9771	4.4824	.8020	.8459		188.08
102 44 27.000	2.3401	2.3401	.7910	.7690	.5713	.5713		
102 44 28.000	2.4060	2.3950	.7581	.7800	.6372	.5713		187.97
102 44 29.000	2.4500	2.4500	359.0771	359.0771	.5713	.5713		
102 44 30.000	2.5928	2.5708	359.6265	359.5825	1.8127	1.7688		188.08
102 44 31.000	2.7466	2.7246	359.6814	359.7034	2.7576	2.5049		
102 44 32.000	2.8455	2.7795	359.0442	359.5386	2.8744	2.9004		188.06
102 44 33.000	2.9333	2.9333	358.8464	358.6377	3.0103	2.9663		
102 44 34.000	2.9773	2.9553	.1868	.1868	3.1641	3.1641		187.97
102 44 35.000	3.0872	2.9553	359.8792	.1868	3.2080	3.1641		
102 44 36.000	3.1201	3.0981	359.5496	359.8022	2.6477	3.1311		188.06
102 44 37.000	3.1421	3.1421	359.9011	359.7693	1.0547	1.2634		
102 44 38.000	3.2190	3.1860	359.9670	.0220	.7310	.8569		188.06
102 44 39.000	3.2959	3.2849	359.8792	359.7583	.4944	.5164		
102 44 40.000	3.3618	3.3508	2.3401	1.8787	.6262	.5713		187.97
102 44 41.000	3.5156	3.4607	3.6804	3.9880	.8020	.8020		
102 44 42.000	3.6365	3.5376	2.9224	3.5156	.6482	.7910		188.06
102 44 43.000	3.7573	3.5376	2.5049	3.5156	.4395	.7910		
102 44 44.000	3.8892	3.8782	3.3069	3.3618	.5823	.5823		188.06
102 44 45.000	4.0100	3.9990	2.9663	3.1201	359.8572	.3955		
102 44 46.000	4.1199	4.1089	3.1970	3.0542	359.0881	359.3408		187.97
102 44 47.000	4.1748	4.1748	3.3289	3.4277	357.1765	357.5720		
102 44 48.000	4.2517	4.2188	2.7026	2.6477	356.7590	356.7590		188.05
102 44 49.000	4.5264	4.4714	4.1968	3.7134	356.8359	356.8030		
102 44 50.000	4.7571	4.7021	5.2954	5.4183	356.8140	356.8689		188.08
102 44 51.000	4.8889	4.7791	4.9219	5.2405	356.8140	356.8030		
102 44 52.000	5.0647	4.7791	4.6582	5.2405	356.8140	356.8030		187.94
102 44 53.000	5.2405	4.7791	4.5703	5.2405	356.5723	356.8030		
102 44 54.000	5.3503	4.7791	4.3286	5.2405	356.3965	356.8030		187.66
102 44 55.000	5.4822	5.4602	4.0869	5.2405	356.3196	356.8030		
102 44 56.000	5.3503	4.7791	4.3286	5.2405	356.3965	356.8030		187.66
102 44 57.000	5.9985	5.9656	6.1414	5.9985	356.3745	356.3745		
102 44 58.000	6.2292	6.1853	6.0315	6.0535	358.1213	357.8027		186.39
102 44 59.000	6.4819	6.4380	6.1084	6.0095	358.4180	358.3521		
102 45 .000	6.7126	6.5808	6.3501	6.1963	358.5498	358.4619		185.75
102 45 1.000	6.8994	6.5808	6.4050	6.1963	358.7585	358.4619		
102 45 2.000	7.0972	7.0532	6.3501	6.3611	359.3518	359.0771		185.14

TIME HR	MIN	SECS	CDU X ACTUAL CDU ANGLE ELEM 41 171 DATA	CDUDX DESIRED INTERMEDIATE CDUX ELEM 191 204 DATA	CDU Y ACTUAL CDU ANGLE ELEM 42 172 DATA	CDUDY DESIRED INTERMEDIATE CDUY ELEM 192 205 DATA	CDU Z ACTUAL CDU ANGLE ELEM 43 173 DATA	CDUDZ DESIRED INTERMEDIATE CDUZ ELEM 193 206 DATA	RRCDUS RR SHAFT CDU ANGLE ELEM 102 DATA	RRCDUT RR TRUN CDU ANGLE ELEM 101 194 DATA
102	45	3.000	7.4377	7.4048	6.3611	6.3171	.9229	.9110		
102	45	4.000	7.7234	7.6575	6.3171	6.3611	1.6589	1.6260		183.85
102	45	5.000	7.9211	7.6575	6.1084	6.3611	1.9666	1.6260		
102	45	6.000	8.1738	8.1299	6.0315	6.3611	2.2522	1.6260		183.21
102	45	7.000	8.4924	8.4595	4.6912	4.6802	1.8347	1.8347		
102	45	8.000	8.7891	8.7561	2.2412	2.6807	1.6260	1.6699		182.71
102	45	9.000	9.1187	9.0888	356.1438	358.0664	.6482	1.0547		
102	45	10.000	9.4812	9.0888	355.3198	358.0664	.4065	1.0547		182.08
102	45	11.000	9.8547	9.0888	355.8142	358.0664	.7910	1.0547		
102	45	12.000	10.1843	10.1514	355.8032	355.7593	2.4500	2.4280		181.16
102	45	13.000	10.5139	10.4700	356.4624	355.2593	2.7576	2.4280		
102	45	14.000	10.8545	10.8105	357.2754	355.7593	3.1021	2.4280		180.15
102	45	15.000	11.1621	11.1182	357.4292	357.3083	3.4167	3.1311		
102	45	16.000	11.4258	11.2939	357.7478	357.5061	3.7463	3.5706		179.63
102	45	17.000	11.6785	11.6565	358.7256	358.5937	3.0981	3.2449		
102	45	18.000	11.9751	11.9531	358.8684	358.8464	1.7029	2.1204		158.70
102	45	19.000	12.2388	12.1199	358.7036	358.7585	1.1536	1.1536		
102	45	20.000	12.5793	12.5354	359.8792	359.4067	1.3184	1.2085		156.11
102	45	21.000	12.9529	12.9199	1.6040	1.4612	.7910	.9229		
102	45	22.000	13.2935	13.2715	1.7029	1.6150	.3955	.5603		155.50
102	45	23.000	13.6560	13.6121	2.3071	2.2302	359.6375	359.9341		
102	45	24.000	14.0625	14.0186	2.9224	2.8784	358.2422	358.4619		155.14
102	45	25.000	14.1943	14.1614	3.1201	3.1421	357.2864	357.2644		
102	45	26.000	14.2493	14.2383	2.9333	3.0212	357.4841	357.3962		155.07
102	45	27.000	14.2822	14.2712	3.2410	3.1421	355.7153	355.9790		
102	45	28.000	14.4141	14.4031	3.9331	3.5046	355.6714	355.5286		155.35
102	45	29.000	14.5349	14.5129	4.7351	4.7461	355.9790	355.9880		
102	45	30.000	14.6558	14.6228	5.2405	5.1636	356.1218	356.1108		155.12
102	45	31.000	14.7876	14.6228	5.4932	5.1636	356.2097	356.1108		
102	45	32.000	14.8315	14.8315	5.4272	5.1636	356.4294	356.1108		154.83
102	45	33.000	14.8096	14.8096	4.9219	5.4053	356.4624	356.4404		
102	45	34.000	14.8315	14.8315	4.7131	4.8120	356.8469	356.4734		154.56
102	45	35.000	15.0183	14.9963	3.9441	4.0100	359.4946	359.2859		
102	45	36.000	15.2380	15.1941	2.2742	2.4609	.2087	.2747		153.18
102	45	37.000	15.8423	15.8533	.6812	.8459	2.0215	1.8896		
102	45	38.000	15.3259	15.4028	.8240	.6921	2.6038	2.9114		152.62
102	45	39.000	13.2825	14.3042	4.3286	4.1309	.2637	.8789		
102	45	40.000	13.0078	14.3042	4.4934	4.1309	.0989	.8789		155.36
102	45	41.000	12.9858	12.9968	4.3726	4.4275	.3296	.2417		
102	45	42.000	12.9858	12.9968	4.3726	4.4275	.3296	.2417		155.28
102	45	43.000	12.9858	12.9968	4.3726	4.4275	.3296	.2417		
102	45	44.000	12.9858	12.9858	4.3726	4.3616	.3296	.2417		
102	45	45.000	12.9858	12.9858	4.3726	4.3616	.3186	.3406		155.20
102	45	46.000	12.9968	12.9858	4.3726	4.3616	.3296	.3406		
102	45	47.000	12.9968	12.9858	4.3726	4.3616	.3296	.3406		155.13
102	45	48.000	12.9968	12.9858	4.3726	4.3616	.3296	.3406		
			12.9968	12.9858	4.3726	4.3616	.3296	.3406		155.07

TAB 1

HR MN SEC	DELTA T = 1.84	DELTA T = 1.84	DELTA T = 1.86	DELTA T = 1.86
	1ABORT	1RHC +Q	1JET 2+4 FAIL	1SPARE
	2DF STG ATTCD	2RHC -Q	2JET 5+8 FAIL	2RR ON LGC
	3ENG ARMED	3RHC +P	3JET 1+3 FAIL	3RR LOW SCALE
	4ABORT STAGE	4RHC -P	4JET 6+7 FAIL	4RR DATA GOOD
	5DPS THRTL ENBL	5RHC +R	5JET 14+16 FAIL	5LR DATA GOOD
	6DSPLAY INT DATA	6RHC -R	6JET 13+15 FAIL	6LR POS 1
	7RR CDU FAIL	7THC +X TRANS	7JET 9+12 FAIL	7LR POS 2
	8SPARE	8THC -X TRANS	8JET 10+11 FAIL	8LR DATA GOOD
	9IMU OPERATE	9THC +Y TRANS	9GIMBAL OFF	9LR LOW SCALE
	APGNCS XTROLSC	ATHC -Y TRANS	AAPP GIMBAL FAIL	ABLOCK UPLINK
	BIMU CAGE	BTHC +Z TRANS	BSPARE	BUPLINK FAST
	CIMU CDU FAIL	CTHC -Z TRANS	CSPARE	CDNLNK TO FAST
	DIMU FAIL	DATTITUDE HOLD	DSPARE	DPIPA FAIL
	EISS ON REG	EAUTO STAB	EPROCEED KEY	EWARNING
	FTEMP IN LIMIT	FATT CONT OUTDET	FSPARE	FOSC ALARM
HR MN SEC	CHANNEL 30	CHANNEL 31	CHANNEL 32	CHANNEL 33
	123456789ABCDEF	123456789ABCDEF	123456789ABCDEF	123456789ABCDEF
102 17 18.070	010011101100001	000000000000010	000000000000000	000100000000000
102 17 46.070	**********	1.11.1..1111..1	111111111111111	111.11111111111
102 18 52.070	010011101100001	0.00.0..0000..0	000000000000000	000.00000000000
102 20 54.070	.....	.....	.....	.....1.....
102 21 36.070	**********	**********	**********	**********
102 21 38.070	010011101100001	000000000000010	.....	000101000000000
102 21 40.070	..1..001..11110	.1.1.....1.1101	110100110000000	11.010111.1111.
102 21 48.070	..0..110..00001	.0.0.....0.0010	00.0..00.....	00.101000.0000.
102 21 50.070	**********	**********	**********	**********
102 21 52.070	001110111111111	001110010011111	000011111111111	100011000010111
102 21 56.070	...00.000000000	....0..011..0..	**********	**********
-0 -0 .000	1101.....	1..01.1100. 1..	001000000000000	101000100111011
-0 -0 .000	0..0111.11...1	0.0.0.00..000.0	..0.....	0.01.10..000.00
102 23 34.070	1.11...1..1111.	111111111111.1	111111111111111	1.1..0..1..1...
102 23 38.070	0.00...0..0000.	0000000000000.0	000000000000000	0.0..1..0..0...
102 24 56.070	**********	**********	**********	**********
102 25 2.070	010011101100001	000000000000010	000000000000000	000101000000000
102 25 8.070	.....0...1.11.	....1...111.1.1	.....	..1.1...1.1..
102 25 12.070	.....1...0.00.	....0...000.0.0	.....	..0.0.0...0.0..
102 26 46.070	0..000.00....0	..11111...1.10.	.....	...0....1.1....
102 26 48.070	.1..111.11....1	..00000...0.01.	.....	...1....0.0....
102 27 30.070	.....	...1.....1	.....	.....
102 27 32.070	.....	...0.....	.....	.....
102 27 34.070	.....	...1.....	.....	.....
102 27 36.070	.....	...0.....0	.....	.....
102 27 56.070	.....	.....	.....	.....1...1...
102 28 .070	.....	.....	.....	.....0....0...
102 28 2.070	**********	**********	**********	**********
102 28 30.070	010011101100001	000100000000011	000000000000000	.....
-0 -0 .000	.....	.....	.....	000101000000000
102 28 34.070	.....	...0.....0	.....	.....
102 30 8.070	.....	.....	.....	**********
102 30 10.070	.....	.....	.....	000101000000000
102 32 52.070	..1.....	.....	.....	.....

TAB 1

HR MN SEC	DELTA T = 1.04	DELTA T = 1.04	DELTA T = 1.06	DELTA T = 1.06
	1ABORT	1RHC +Q	1JET 2+4 FAIL	1SPARE
	2DF STG ATTCD	2RHC -Q	2JET 5+8 FAIL	2RR ON LGC
	3ENG ARMED	3RHC +P	3JET 1+3 FAIL	3RR LOW SCALE
	4ABORT STAGE	4RHC -P	4JET 6+7 FAIL	4RR DATA GOOD
	5DPS THRTL ENBL	5RHC +R	5JET 14+16 FAIL	5LR DATA GOOD
	6DSPLAY INT DATA	6RHC -R	6JET 13+15 FAIL	6LR POS 1
	7RR CDU FAIL	7THC +X TRANS	7JET 9+12 FAIL	7LR POS 2
	8SPARE	8THC -X TRANS	8JET 10+11 FAIL	8LR DATA GOOD
	9IMU OPERATE	9THC +Y TRANS	9GIMBAL OFF	9LR LOW SCALE
	APGNCS XTROL SC	ATHC -Y TRANS	AAPP GIMBAL FAIL	ABLOCK UPLINK
	BIMU CAGE	BTHC +Z TRANS	BSPARE	BUPLINK FAST
	CIMU CDU FAIL	CTHC -Z TRANS	CSPARE	CDNLNK LO FAST
	DIMU FAIL	DATTITUDE HOLD	DSPARE	DPIPA FAIL
	EISS ON REG	EAUTO STAB	EPROCEED KEY	EWARNING
	FTEMP IN LIMIT	FATT CONT OUTDET	FSPARE	FOSC ALARM
	CHANNEL 30	CHANNEL 31	CHANNEL 32	CHANNEL 33
	1234567890ABCDEF	1234567890ABCDEF	1234567890ABCDEF	1234567890ABCDEF
STATUS	011011101100001	000000000000010	000000000000000	000101000000000
102 33 14.070	10010.01.011.10	1...11.11....0.	.1.111111.1....	111.1.111111111
102 34 2.070	01101.10.100.01	0...00.00....1.	.0.000000.0....	000.0.000000000
102 35 32.070	.....	.....	.....	..10.....
102 36 16.070	.....	**********	.....	.....
102 36 18.070	.....	000000000000010	.....	.....
-0 -0 .000	...1....0.1111.	.111111111111.1	**********	**********
-0 -0 .000	**********	**********	.....	.....
-0 -0 .000	.....	.....	100011001110111	000101011111001
-0 -0 .000	.....	000000000000010	0...00..000.000	..10..00000..0
-0 -0 .000	011011101100001	**********	.....	.....
-0 -0 .000	**********	.....	**********	**********
102 36 54.070	011011101100001	000100000000011	000000000000000	001001000000000
102 37 2.070	**********	.....	**********	**********
102 37 6.070	011011101100001	.....	000000000000000	001001000000000
-0 -0 .000	**********	.....	**********	.....
-0 -0 .000	011011101100001	.....	000000000000000	.....
102 37 24.070	.00.000.00....0	.1.0.11.....00	**********	**********
102 37 26.070	.11.111.11....1	.0.1.00.....11	000000000000000	001001000000000
102 37 28.070	**********	**********	**********	**********
-0 -0 .000	011011101100001	000100000000011	000000000000000	001001000000000
102 37 38.070	.....	.....1.....	.....	.....
102 37 40.070	**********	**********	**********	**********
102 37 42.070	000000000000000	.....	000111110100000	111000011010011
102 37 50.070	.11.111.11....1	000101000000011	...00000.0.....	00..11..0.0..00
102 37 58.070	.....	...0.0.....	.....	.....
102 38 .070	.....	..1.....	.....	.....
102 38 2.070	.....	..0.....0	.....	.....
102 38 38.070	.....	.....	.....1.	.....
102 38 40.070	.....	.....	.....0.	.....
102 39 10.070	.....	.....	.....1.	.....
102 39 12.070	.....	.....	.....0.	.....
102 40 56.070	**********	**********	**********	**********
102 40 58.070	011011101100001	000000000000010	000000000000000	001011010000000