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CORONA "J" FLIGHT  
DATA BOOK : 1040-2

[REDACTED]

Declassified and Released by the NRO

In Accordance with E. O. 12958

on NOV 26 1997

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4 PAGES  
(NOT INCLUDING PES)

~~CORONA J-FLIGHT DATA BOOK~~

SYSTEM NO. J-35

~~VEHICLE NO. 1636~~

MISSION NO. 1040-2

CAMERA NOS. 196/197

DATE 84-10-67

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SYSTEM NO. J-35  
VEHICLE NO. 1636  
MISSION NO. 1848-2  
CAMERA NOS. 196/197

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SYSTEM NO. J-35  
VEHICLE NO. 1636  
MISSION NO. 1848-2  
CAMERA NOS. 196/197

~~GENERAL FLIGHT DATA~~

~~MASTER CAMERA SERIAL NO. 196~~

~~SLAVE CAMERA SERIAL NO. 197~~

~~S/I -1 SERIAL NO. 978/95/96~~

~~S/I -2 SERIAL NO. 092/79/110~~

~~LAUNCH DATE 83-32-67~~

~~REACTIVATION DATE N/A~~

~~REACTIVATION ORBIT N/A~~

~~ORBITAL PARAMETERS (REV. 118)~~

~~PERIOD 90.921 MIN ECCENTRICITY 0.81529~~

~~PERIGEE 186.083 NM PERIGEE LAT. 45.391~~

~~APOGEE 215.451 NM INCL. ANGLE 85.654~~

~~RECOVERY ORBIT NO. 145~~

~~RECOVERY DATE 84-08-67~~

SYSTEM NO. J-35  
VEHICLE NO. 1636  
MISSION NO. 1848-2  
CAMERA NOS. 196/197

CYCLE PERIOD DATA

v/h LEVEL	RAMP AMPLITUDE	SETTING RAMP-SEC	TIME UP		CALIBRATED		IN-FLIGHT	
			---	---	---	---	---	---
			---	---	---	---	---	---
			MASTER	SLAVE	MASTER	SLAVE	MASTER	SLAVE
6	5	1781	2.212	2.236	2.225	2.235	2.225	2.235
6	5	1999	2.289	2.224	2.225	2.235	2.225	2.235
6	5	2854	2.211	2.234	2.225	2.235	2.225	2.235

NOTE

A \* OR -# INDICATES NO DATA AVAILABLE.

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A. 1844-2

B. DRY

C. PERFORMANCE ESTIMATE - PART ONE

**OPERATIONS SUMMARY**

FWD PAN CAMERA NUMBER 197

OPN NO	FRA	Q	LAT	LONG	HEIGHT	RANGE	DA	H	M	S	LTIM	S-
71 4 5	5 ON	2	41 26	68 53E	618832	648528	4	5	45	44	1821	28
	OFF	2	48 38	68 57E	616728	639168	4	5	45	56	1821	28
72 6 8	4 ON	1	31 43	119 48W	1877448	1117536	4	6	49	27	2258	24
	OFF	1	33 7	119 36W	1874768	1118688	4	6	49	58	2251	24
72 7 1	28 ON	2	80 48	21 16E	752488	779968	4	7	6	1	831	25
	OFF	2	77 13	38 25E	735848	761952	4	7	6	59	9 8	25
72 7 2	64 ON	2	72 31	38 16E	765184	738968	4	7	8	43	941	25
	OFF	2	59 39	43 14E	664168	688488	4	7	11	26	18 4	25
72 7 7	19 ON	2	32 59	46 52E	627584	629688	4	7	17	59	1825	26
	OFF	2	29 54	47 3E	685888	627848	4	7	18	44	1826	26
73 9 2	14 ON	2	56 16	21 25E	652544	676336	4	8	42	28	18 8	31
	OFF	2	53 51	21 55E	645344	668864	4	8	43	4	1818	31
73 9 6	59 ON	2	5 45	25 16E	633768	656848	4	8	54	49	1835	32
	OFF	3	4 2	25 31E	665856	698144	4	8	57	13	1839	32
74 1 6	24 ON	2	24 58	2 8E	625664	627696	4	18	28	21	1828	37
	OFF	2	29 55	2 9E	627824	629936	4	18	21	18	1829	37
77 2 8	28 ON	3	18 21	64 48W	735776	762784	4	15	1	27	1842	54
	OFF	3	23 43	64 28W	766816	794896	4	15	2	46	1944	54
79 3 8	9 ON	2	41 36	112 27W	615552	637952	4	17	47	9	1817	64
	OFF	2	42 4	112 12W	613376	635696	4	17	47	31	1818	64
81 5 8	4 ON	2	62 6	168 45W	658368	682384	4	28	42	51	959	74
	OFF	2	58 34	162 28W	653632	677472	4	28	43	15	18 1	74
83 3 1	56 ON	2	73 14	146 44E	764448	738192	4	23	39	57	926	85
	OFF	2	63 51	152 42E	669288	693616	4	23	42	19	953	85
84 6 6	47 ON	3	12 34	136 32E	722648	728328	5	1	38	42	1836	8
	OFF	3	19 11	136 48E	747128	774488	5	1	32	49	1848	8
85 7 2	11 ON	2	73 21	161 19E	782888	728488	5	2	48	15	925	9
	OFF	2	71 19	183 13E	694724	728896	5	2	48	46	933	9
85 7 4	18 ON	2	52 27	112 41E	629872	652816	5	2	45	57	18 8	9
	OFF	2	47 27	111 8E	623632	646336	5	2	46	41	1811	14
86 3 2	32 ON	2	64 24	84 32E	658624	693824	5	4	12	48	958	15
	OFF	2	59 12	86 14E	652144	675928	5	4	13	57	958	15
86 3 4	163 ON	2	53 58	87 26E	637712	668944	5	4	15	15	18 5	15
	OFF	2	22 38	93 2E	625968	628816	5	4	21	27	1821	15
87 4 2	84 ON	2	76 28	52 11E	713184	739264	5	5	39	47	9 8	28
	OFF	2	65 25	61 26E	671288	695696	5	5	42	34	948	28
87 4 5	14 ON	2	52 31	65 3E	633664	656736	5	5	45	45	18 5	28
	OFF	2	52 18	65 26E	628368	651264	5	5	46	28	18 8	28
87 4 6	10 ON	2	32 34	67 5E	616336	628384	5	5	56	37	1819	21
	OFF	2	29 32	67 19E	625984	628832	5	5	51	22	1828	21
88 4 2	24 ON	2	59 25	42 54E	651392	675136	5	7	14	12	957	26
	OFF	2	55 27	41 51E	648432	663776	5	7	15	11	18 2	26
89 5 6	41 ON	2	5 37	22 53E	643248	666688	5	8	57	38	1829	32

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		OFF	3	1	14	23	3E	666728	691848	5	8	59	11	1831	3		
98	8	1	28	ON	2	88	29	25	42W	728272	754928	5	18	9	5	826	3
		OFF	2	75	52	15	8W	787632	733584	5	18	18	21	918	3		
98	8	8	22	ON	2	8	17	8	18E	636288	659392	5	18	27	8	1827	3
		OFF	2	4	34	8	16E	647136	678728	5	18	27	55	1829	3		
92	618	28	ON	3	19	53	44	19W	758912	786728	5	13	34	11	1836	4	
		OFF	3	23	51	44	18W	782896	818784	5	13	35	18	1838	4		
98	1	1	57	ON	2	71	16	168	52E	681184	785968	5	22	12	34	928	7
		OFF	2	61	48	173	46E	658576	674384	5	22	14	56	958	8		
108	1	4	15	ON	2	44	38	131	58E	613488	635888	6	1	19	26	18	6
		OFF	2	41	59	132	5E	618656	632888	6	1	26	3	18	8		
108	1	6	24	ON	3	3	2	134	4E	681984	786888	6	1	31	3	1827	
		OFF	3	7	16	134	18E	788576	726176	6	1	32	5	1828			
108	1	7	63	ON	3	18	26	134	15E	715776	741952	6	1	32	52	1829	
		OFF	3	22	29	134	39E	781848	818528	6	1	35	58	1834			
101	3	2	38	ON	2	73	15	99	9E	685368	718488	6	2	42	25	919	
		OFF	2	67	2	183	42E	663952	688176	6	2	44	8	938			
101	3	4	76	ON	2	64	52	184	42E	657344	681328	6	2	44	32	943	
		OFF	2	52	41	188	3E	626488	649296	6	2	47	33	959	1		
101	3	6	77	ON	2	58	12	188	28E	621744	644384	6	2	48	9	18	2
		OFF	2	38	14	189	47E	687524	629688	6	2	51	5	1818	1		
101	3	7	38	ON	2	36	5	189	56E	686512	628576	6	2	51	37	1811	1
		OFF	2	32	5	118	19E	686568	628624	6	2	53	5	1814	1		
102	3	1	39	ON	2	74	1	75	41E	687152	712256	6	4	12	28	915	1
		OFF	2	67	38	88	44E	665128	689392	6	4	13	57	936	1		
102	3	2	79	ON	2	64	9	82	21E	654488	678272	6	4	14	49	944	1
		OFF	2	51	31	85	37E	623728	646432	6	4	17	56	18	8	1	
102	3	6	22	ON	2	43	3	86	43E	611248	633488	6	4	28	1	18	6
		OFF	2	39	37	87	2E	688248	638368	6	4	28	51	18	9	1	
102	3	8	36	ON	2	33	52	87	27E	686888	628848	6	4	22	16	1812	1
		OFF	2	28	12	87	47E	687456	629552	6	4	23	39	1814	1		
103	3	4	24	ON	2	58	13	61	37E	637768	668992	6	5	46	24	952	2
		OFF	2	54	26	62	27E	629848	651952	6	5	47	28	957	2		
103	3	7	74	ON	2	47	14	63	36E	616248	638672	6	5	49	6	18	3
		OFF	2	35	41	64	42E	686288	628352	6	5	51	56	1818	2		
104	4	6	42	ON	2	18	31	42	55E	619264	641888	6	7	26	13	1817	2
		OFF	2	12	8	43	8E	633328	656488	6	7	27	48	1828	2		
104	4	8	38	ON	2	5	25	43	18E	652656	676448	6	7	29	25	1822	2
		OFF	3	1	4	43	29E	676576	781288	6	7	31	8	1824	2		
105	2	4	23	ON	2	23	18	28	6E	612488	634768	6	8	55	9	1815	3
		OFF	2	19	34	28	15E	617856	648352	6	8	56	4	1817	3		
106	4	5	29	ON	2	13	35	2	13E	638488	653368	6	18	27	37	1818	3
		OFF	2	8	58	2	2W	643136	666576	6	18	28	47	1828	3		
109	2	9	41	ON	3	36	38	68	18W	881328	913824	6	15	18	16	1837	5
		OFF	3	45	42	67	28W	943888	977952	6	15	12	32	1842	5		
111	3	8	17	ON	2	35	8	116	18W	686288	628336	6	17	52	52	18	7
		OFF	2	32	14	116	7W	686752	628832	6	17	53	32	18	9	6	
115	3	2	46	ON	2	66	11	147	17E	658688	674328	6	23	45	38	934	8
		OFF	2	58	51	149	53E	632488	655448	6	23	47	19	946	8		
116	2	1	17	ON	2	53	7	128	31E	628816	643488	7	1	18	49	952	
		OFF	2	58	26	128	58E	616656	639184	7	1	19	29	955			

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116	2	2	13	ON	2	43	55	129	48E	689488	631584	7	1	21	4	18	8	4
				OFF	2	41	51	138	8E	687982	638864	7	1	21	34	18	1	4
116	2	4	62	ON	3	16	18	132	28E	768288	788864	7	1	35	46	1825	5	
				OFF	3	28	29	132	48E	834728	865424	7	1	38	49	1838	5	
117	4	2	13	ON	2	73	2	97	17E	669664	694112	7	2	43	55	913	9	
				OFF	2	78	46	99	15E	662496	686672	7	2	44	38	921	9	
117	4	5	162	ON	2	35	34	187	53E	686368	628416	7	2	53	18	18	4	18
				OFF	2	18	3	189	8E	645768	669296	7	2	59	24	1815	18	
118	4	5	34	ON	2	53	47	83	8E	621128	643728	7	4	18	47	951	15	
				OFF	2	48	24	84	1E	613392	635712	7	4	28	6	956	15	
118	4	7	86	ON	2	32	36	85	27E	687288	629296	7	4	23	58	18	5	15
				OFF	2	19	5	86	5E	623568	646272	7	4	27	16	1811	16	
119	8	2	31	ON	2	75	37	48	56E	676464	781168	7	5	43	23	859	28	
				OFF	2	78	31	54	11E	668832	684112	7	5	44	42	921	28	
119	8	6	45	ON	2	49	19	61	16E	614176	636528	7	5	49	57	955	28	
				OFF	2	42	15	62	6E	627744	629856	7	5	51	41	18	8	21
119	8	8	37	ON	2	32	18	62	51E	687456	629552	7	5	54	6	18	5	21
				OFF	2	26	31	63	9E	612288	634488	7	5	55	31	18	8	21
128	4	1	57	ON	2	71	2	31	18E	668816	684912	7	7	14	37	919	26	
				OFF	2	61	53	35	52E	636336	659528	7	7	16	54	948	26	
128	4	2	33	ON	2	59	35	36	33E	631248	654248	7	7	17	28	943	26	
				OFF	2	54	25	37	46E	621376	644888	7	7	18	44	949	26	
128	4	3	56	ON	2	51	27	38	18E	616728	639168	7	7	19	29	952	26	
				OFF	2	42	48	39	25E	687936	638848	7	7	21	36	959	26	
128	4	7	58	ON	2	7	32	41	12E	655392	679288	7	7	38	12	1915	27	
				OFF	3	2	38	41	27E	694576	719952	7	7	32	48	1818	27	
124	1	7	29	ON	3	16	18	48	38W	768672	796848	7	13	36	17	1821	48	
				OFF	3	22	5	48	26W	882832	832328	7	13	37	43	1823	48	
125	7	8	28	ON	3	7	12	71	31W	721184	747568	7	15	4	5	1818	54	
				OFF	3	11	2	71	25W	748736	767856	7	15	5	1	1819	54	
127	3	8	17	ON	2	35	12	118	17W	687568	629688	7	17	53	49	18	8	64
				OFF	2	32	25	118	7W	689856	631216	7	17	54	29	18	2	64
131	3	1	9	ON	2	73	6	148	31E	658288	682288	7	23	44	35	9	6	85
				OFF	2	71	38	141	53E	653984	677824	7	23	44	58	912	85	
131	3	2	34	ON	2	69	52	143	13E	649216	672888	7	23	45	25	918	85	
				OFF	2	64	26	146	7E	635968	659136	7	23	46	47	931	85	
131	3	5	17	ON	2	61	31	147	18E	629848	652784	7	23	47	38	936	85	
				OFF	2	58	47	147	58E	624672	647424	7	23	48	11	948	85	
132	7	3	36	ON	2	71	41	119	13E	653448	677264	8	1	14	59	911	4	
				OFF	2	65	54	122	51E	638736	662816	8	1	16	26	927	4	
133	8	3	69	ON	2	68	53	182	8E	627696	658568	8	2	47	42	936	18	
				OFF	2	58	9	184	28E	612128	634488	8	2	58	21	948	18	
133	8	6	117	ON	2	27	36	186	27E	615448	637848	8	2	55	51	18	1	18
				OFF	2	8	42	187	8E	668592	684688	8	3	8	28	18	9	18
134	4	4	35	ON	2	53	34	81	17E	615696	638896	8	4	19	32	944	15	
				OFF	2	43	5	82	9E	618128	632328	8	4	28	53	949	15	
134	4	7	44	ON	2	38	23	83	41E	612352	634648	8	4	25	12	959	15	
				OFF	2	23	24	84	1E	622488	645856	8	4	26	54	18	3	18
135	4	2	15	ON	2	74	36	48	24E	659528	683584	8	5	44	19	857	28	
				OFF	2	72	7	51	8E	652464	676256	8	5	44	57	9	9	28
135	4	4	65	ON	2	64	13	55	44E	633376	656448	8	5	46	56	929	28	

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135	4	7	18	ON	2	46	58	59	41E	689288	631376	8	5	49	26	943	2	
				OFF	2	44	34	59	57E	688888	638128	8	5	51	45	951	2	
136	4	1	24	ON	2	71	2	29	18E	648888	672544	8	7	15	14	912	2	
				OFF	2	67	8	31	48E	639248	662544	8	7	16	13	923	2	
136	4	2	32	ON	2	59	12	34	47E	623368	646848	8	7	18	11	937	2	
				OFF	2	54	5	35	57E	615792	638288	8	7	19	27	943	2	
136	4	3	32	ON	2	51	7	36	29E	612448	634736	8	7	28	18	946	2	
				OFF	2	46	8	37	18E	688648	638784	8	7	21	23	958	2	
137	4	6	25	ON	3	3	36	16	59E	714888	748112	8	9	3	34	1811	3	
				OFF	3	8	24	17	7E	737768	764768	8	9	4	45	1813	3	
137	4	8	38	ON	3	26	25	17	43E	842888	873888	8	9	9	12	1828	3	
				OFF	3	34	38	18	18E	896416	929488	8	9	11	15	1823	3	
138	2	4	63	ON	2	38	29	6	45W	613216	635536	8	18	25	15	958	3	
				OFF	2	28	19	6	17W	638328	653288	8	18	27	44	18	2	3
143	3	8	16	ON	2	35	15	128	6W	689824	632816	8	17	54	7	953	6	
				OFF	2	32	27	119	55W	612272	634568	8	17	54	48	955	6	

OPERATIONS SUMMARY

AFT PAN CAMERA NUMBER 196																		
OPN NO	FRA	Q	LAT	LONG	HEIGHT	RANGE	DA	H	M	S	LTIM	S						
71	4	5	6	ON	2	41	27	68	49E	616544	638992	4	5	45	57	1821	2	
				OFF	2	48	38	68	54E	615296	637696	4	5	46	9	1821	2	
72	8	8	4	ON	1	31	8	119	48W	1873376	1113312	4	6	49	48	2258	2	
				OFF	1	32	26	119	44W	1866656	1186328	4	6	58	3	2258	2	
72	7	1	28	ON	2	88	51	28	31E	748328	775728	4	7	6	14	828	2	
				OFF	2	77	23	38	2E	731184	757872	4	7	7	12	9	7	2
72	7	2	65	ON	2	78	38	38	6E	781568	727288	4	7	8	56	941	2	
				OFF	2	59	43	43	18E	661288	685312	4	7	11	39	18	4	2
72	7	7	28	ON	2	32	58	46	58E	686888	628968	4	7	18	12	1825	2	
				OFF	2	29	53	47	1E	685536	627568	4	7	18	57	1826	2	
73	9	2	15	ON	2	56	19	21	22E	649888	673584	4	8	42	41	18	7	3
				OFF	2	53	53	21	51E	642848	666272	4	8	43	17	1818	3	
73	9	6	62	ON	2	5	46	25	12E	636248	659424	4	8	55	2	1835	3	
				OFF	3	3	58	25	27E	669392	693824	4	8	57	26	1839	3	
74	1	6	24	ON	2	24	49	1	56E	685984	628816	4	18	28	34	1828	3	
				OFF	2	28	54	2	6E	688568	638784	4	18	21	31	1829	3	
77	2	6	28	ON	3	18	18	64	45W	748672	767792	4	15	1	48	1842	5	
				OFF	3	23	29	64	32W	771312	799688	4	15	2	59	1844	5	
79	3	8	9	ON	2	41	35	112	24W	614224	636576	4	17	47	22	1817	6	
				OFF	2	42	4	112	15W	612224	634496	4	17	47	44	1818	6	
81	4	8	4	ON	2	62	9	162	49W	655568	679472	4	28	43	4	959	7	
				OFF	2	52	37	162	23W	658928	674656	4	28	43	28	18	1	7
83	3	1	57	ON	2	73	21	146	32E	788928	726544	4	23	48	18	926	8	
				OFF	2	63	56	152	35E	666176	698488	4	23	42	32	952	8	
84	6	6	47	ON	3	12	25	136	27E	786976	732832	5	1	38	55	1836		
				OFF	3	18	58	136	43E	752168	779712	5	1	33	2	1839		
85	7	2	11	ON	2	73	28	181	7E	699312	724864	5	2	48	28	924		
				OFF	2	71	26	183	1E	691328	716576	5	2	48	59	932		
85	7	4	19	ON	2	58	28	112	38E	627984	658768	5	2	46	18	18	8	

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		OFF	2	47	27	111	3E	621872	644512	5	2	46	54	1818	18			
86	3	2	32	ON	2	64	29	84	25E	665632	689928	5	4	12	53	958	15	
		OFF	2	59	15	86	11E	649584	673184	5	4	14	18	958	15			
86	3	4	166	ON	2	53	59	87	23E	635488	658648	5	4	15	28	18	4	15
		OFF	2	28	37	89	58E	686128	628176	5	4	21	48	1821	15			
87	4	2	67	ON	2	76	28	51	53E	789552	735488	5	5	48	8	9	7	28
		OFF	2	65	29	61	28E	668288	692592	5	5	42	47	947	28			
87	4	5	15	ON	2	52	32	65	8E	631552	654568	5	5	45	58	18	5	28
		OFF	2	58	11	65	22E	626496	649312	5	5	46	33	18	7	28		
87	4	8	28	ON	2	32	37	67	5E	686112	628168	5	5	58	58	1819	21	
		OFF	2	29	31	67	16E	686888	628128	5	5	51	35	1828	21			
88	4	2	25	ON	2	59	28	48	58E	648816	672464	5	7	14	25	957	26	
		OFF	2	55	29	41	48E	638144	661392	5	7	15	24	18	2	26		
89	9	6	41	ON	2	5	48	22	49E	646888	669632	5	8	57	43	1828	32	
		OFF	3	1	9	22	59E	678256	694728	5	8	59	24	1831	32			
98	8	1	28	ON	2	88	38	26	18W	724528	751848	5	18	9	18	823	36	
		OFF	2	75	59	15	17W	784112	729856	5	18	18	34	9	9	36		
98	8	8	22	ON	2	8	19	8	6E	638728	662888	5	18	27	13	1827	37	
		OFF	2	4	37	8	12E	658848	673744	5	18	28	8	1828	37			
92	618	24	ON	3	19	39	44	24W	764832	792848	5	13	34	24	1836	48		
		OFF	3	23	35	44	15W	767472	816368	5	13	35	23	1838	48			
98	1	1	58	ON	2	71	22	168	43E	677984	762736	5	22	12	47	927	79	
		OFF	2	61	51	173	42E	648864	671696	5	22	15	9	949	88			
108	1	4	16	ON	2	44	38	131	46E	612384	634672	6	1	19	39	18	6	4
		OFF	2	41	58	132	1E	689768	631936	6	1	28	16	18	8	4		
108	1	6	24	ON	3	2	56	133	59E	685728	718768	6	1	31	16	1827	5	
		OFF	3	7	8	134	6E	784816	738576	6	1	32	18	1828	5			
108	1	7	64	ON	3	18	16	134	11E	728288	746648	6	1	33	5	1829	5	
		OFF	3	22	13	134	34E	787232	816128	6	1	36	3	1834	5			
101	3	2	33	ON	2	73	21	98	59E	682288	767128	6	2	42	38	918	9	
		OFF	2	57	4	183	35E	651152	685264	6	2	44	13	938	9			
101	3	4	78	ON	2	64	56	184	37E	654784	678576	6	2	44	45	943	9	
		OFF	2	52	42	186	8E	624672	647488	6	2	47	46	959	18			
101	3	6	73	ON	2	54	12	188	24E	626288	642784	6	2	48	22	18	1	18
		OFF	2	38	13	189	44E	687856	629136	6	2	51	18	1818	18			
101	3	7	39	ON	2	35	4	189	54E	686288	628352	6	2	51	58	1811	18	
		OFF	2	39	4	118	16E	686912	628992	6	2	53	18	1814	18			
102	3	1	39	ON	2	74	7	75	32E	683968	728944	6	4	12	33	914	15	
		OFF	2	67	42	88	38E	662328	686488	6	4	14	18	936	15			
102	3	2	87	ON	2	64	12	82	17E	651776	675536	6	4	15	2	943	15	
		OFF	2	51	32	85	34E	622864	644784	6	4	18	9	18	8	15		
102	3	6	22	ON	2	43	3	86	39E	618328	632528	6	4	28	14	18	6	15
		OFF	2	39	36	85	58E	687632	629744	6	4	21	4	18	8	15		
102	3	8	35	ON	2	33	58	87	25E	626888	628848	6	4	22	29	1811	15	
		OFF	2	25	12	87	43E	628832	638168	6	4	23	52	1814	15			
103	3	4	28	ON	2	58	15	61	34E	635568	658728	6	5	46	37	952	28	
		OFF	2	54	26	62	25E	627184	658816	6	5	47	33	957	28			
103	3	7	75	ON	2	47	14	63	32E	614944	637328	6	5	49	19	18	3	28
		OFF	2	35	48	64	39E	686896	628144	6	5	52	9	1818	21			
104	4	6	41	ON	2	18	32	42	51E	628896	643584	6	7	26	26	1817	26	
		OFF	2	12	2	43	4E	635696	658848	6	7	28	1	1828	26			

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184	4	8	38	ON	2	5	29	43	14E	655688	679688	6	7	29	38	1822	28	
				OFF	3	8	58	43	24E	688288	755128	6	7	31	13	1824	27	
185	2	4	23	ON	2	23	18	28	3E	613632	635968	6	8	55	22	1815	32	
				OFF	2	19	34	28	11E	619824	641984	6	8	56	17	1816	31	
186	4	5	29	ON	2	13	37	2	14W	632624	655664	6	18	27	58	1818	37	
				OFF	2	8	52	2	6W	645888	669448	6	18	29	8	1822	37	
189	2	9	41	ON	3	36	13	68	24W	887296	928816	6	15	18	29	1836	54	
				OFF	3	45	12	67	36W	949184	984288	6	15	12	45	1842	54	
111	3	8	17	ON	2	34	59	116	27W	686328	628368	6	17	53	5	18	7	64
				OFF	2	32	13	116	18W	687184	629184	6	17	53	45	18	8	64
115	3	2	46	ON	2	66	14	147	11E	648192	671824	6	23	45	43	934	85	
				OFF	2	53	52	149	58E	638448	653488	6	23	47	32	946	85	
116	2	1	17	ON	2	53	8	128	28E	619344	641888	7	1	19	2	952	4	
				OFF	2	58	26	128	55E	615392	637792	7	1	19	42	955	4	
116	2	2	13	ON	2	43	55	129	44E	688784	638848	7	1	21	17	18	8	4
				OFF	2	41	58	129	57E	687456	629568	7	1	21	47	18	1	4
116	2	4	61	ON	3	15	57	132	15E	765344	793392	7	1	35	59	1824	5	
				OFF	3	28	9	132	43E	848464	871392	7	1	39	2	1829	5	
117	4	2	14	ON	2	73	5	97	8E	666848	691184	7	2	44	8	912	9	
				OFF	2	78	59	99	9E	659824	683984	7	2	44	43	921	9	
117	4	5	162	ON	2	35	33	187	51E	686496	628568	7	2	53	23	18	4	1
				OFF	2	18	6	188	56E	648528	672176	7	2	59	37	1815	1	
118	4	5	35	ON	2	53	48	83	6E	619632	642192	7	4	19	8	951	18	
				OFF	2	45	23	83	57E	612352	634648	7	4	28	19	955	18	
118	4	7	07	ON	2	32	35	85	24E	627648	629768	7	4	24	11	18	5	18
				OFF	2	19	6	86	2E	625488	648176	7	4	27	29	1811	18	
119	8	2	32	ON	2	75	42	48	45E	673584	698176	7	5	43	36	858	21	
				OFF	2	78	35	54	5E	657424	681488	7	5	44	55	921	21	
119	8	6	45	ON	2	49	19	61	12E	613128	635424	7	5	58	18	954	21	
				OFF	2	42	14	62	2E	687296	629392	7	5	51	54	959	21	
119	8	8	37	ON	2	32	18	62	48E	687936	638848	7	5	54	19	18	5	21
				OFF	2	26	38	63	7E	613312	635632	7	5	55	44	18	7	21
128	4	1	58	ON	2	71	6	31	4E	658176	682176	7	7	14	58	918	26	
				OFF	2	61	54	35	49E	634384	657488	7	7	17	7	948	26	
128	4	2	33	ON	2	59	36	36	31E	629376	652288	7	7	17	41	943	26	
				OFF	2	54	25	37	44E	619672	642432	7	7	18	57	949	26	
128	4	3	56	ON	2	51	27	38	16E	615456	637856	7	7	19	42	952	26	
				OFF	2	42	47	39	21E	687456	629552	7	7	21	49	959	26	
128	4	7	59	ON	2	7	36	41	8E	658488	682496	7	7	38	25	1814	27	
				OFF	3	2	23	41	23E	698624	724144	7	7	32	53	1818	27	
124	1	7	29	ON	3	16	4	48	43W	773856	882248	7	13	36	38	1821	48	
				OFF	3	21	48	46	31W	848328	838816	7	13	37	56	1823	48	
125	7	3	27	ON	3	7	2	71	36W	725696	752256	7	15	4	18	1817	54	
				OFF	3	12	52	71	32W	745488	772784	7	15	5	14	1819	54	
127	3	8	17	ON	2	35	9	115	27W	687968	638896	7	17	54	2	18	8	64
				OFF	2	32	24	116	5W	629712	631888	7	17	54	42	18	1	64
131	3	1	9	ON	2	73	16	142	24E	655696	679688	7	23	44	48	9	6	85
				OFF	2	71	41	141	46E	651688	675368	7	23	45	11	912	85	
131	3	2	54	ON	2	69	55	143	7E	646912	678496	7	23	45	38	917	85	
				OFF	2	64	27	146	3E	634832	657128	7	23	47	8	931	85	
131	3	5	17	ON	2	61	32	147	7E	628896	658976	7	23	47	43	935	85	

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132	7	3	37	ON	2	58	48	147	55E	623128	645888	7	23	48	24	939	85
				OFF	2	71	44	118	6E	651848	674784	8	1	15	12	911	4
				OFF	2	65	56	122	47E	636784	659984	8	1	16	39	927	4
133	8	3	78	ON	2	68	54	182	5E	625984	648784	8	2	47	55	936	18
				OFF	2	58	9	184	25E	611296	633536	8	2	58	34	948	18
133	8	6	117	ON	2	27	36	186	23E	616784	639152	8	2	56	4	18	1
				OFF	2	8	46	187	3E	663728	687936	8	3	8	41	18	8
134	4	4	31	ON	2	53	33	81	14E	614624	636992	8	4	19	45	944	15
				OFF	2	48	4	82	6E	689536	631712	8	4	21	6	949	15
134	4	7	38	ON	2	38	23	83	38E	613344	638664	8	4	25	25	959	15
				OFF	2	23	24	83	57E	624888	646888	8	4	27	7	18	2
135	4	2	17	ON	2	74	48	48	15E	657888	688976	8	5	44	32	857	24
				OFF	2	72	18	58	53E	658112	673824	8	5	45	18	9	8
135	4	4	73	ON	2	64	14	55	41E	631584	654512	8	5	47	9	929	28
				OFF	2	54	5	58	31E	614968	637344	8	5	49	39	943	28
135	4	7	18	ON	2	46	54	59	38E	688784	638848	8	5	51	24	949	21
				OFF	2	44	34	59	55E	687712	629824	8	5	51	58	951	21
136	4	1	24	ON	2	71	4	29	12E	646628	678176	8	7	15	27	912	26
				OFF	2	67	18	31	43E	637232	668448	8	7	16	26	923	26
136	4	2	33	ON	2	59	13	34	44E	621872	644512	8	7	18	24	937	26
				OFF	2	54	5	35	55E	614688	637856	8	7	19	48	943	26
136	4	3	32	ON	2	51	7	36	26E	611584	633848	8	7	28	23	945	26
				OFF	2	46	7	37	7E	688168	638288	8	7	21	36	949	26
137	4	6	25	ON	3	3	27	16	55E	718328	744592	8	9	3	47	1811	32
				OFF	3	8	13	17	2E	742416	769688	8	9	4	58	1812	32
137	4	8	34	ON	3	26	4	17	38E	848488	879712	8	9	9	25	1819	32
				OFF	3	34	12	18	4E	982336	935632	8	9	11	28	1823	33
138	2	4	64	ON	2	32	28	6	48E	614256	636688	8	18	25	28	958	37
				OFF	2	24	28	6	21E	632368	655488	8	18	27	57	18	2
143	3	8	16	ON	2	35	14	128	8E	618528	632736	8	17	54	28	953	64
				OFF	2	32	27	119	59E	613248	635568	8	17	55	1	954	64

PHOTOGRAPHIC SUMMARY

OP. NO	FRA	FEET	ET	S-EL	S-DIR	EV	FULL	INT	PRI	
71	4	5	13.2 ON	293	47.4	-32.5	12.84	12.42	11.82	11.22
			OFF	293	48.1	-33.8	12.85	12.42	11.82	11.22
72	1	8	13.6 ON	168	-49.1	326.2	11.25	8.8	8.8	8.8
			OFF	168	-47.9	327.1	11.25	8.8	8.8	8.8
72	7	1	52.9 ON	238	11.8	-27.8	11.75	11.58	18.98	18.38
			OFF	245	14.6	-21.2	11.79	11.79	11.19	18.59
72	7	2	54 159.4 ON	257	21.1	-22.7	11.86	12.18	11.58	18.98
			OFF	274	31.3	-25.2	11.95	12.31	11.71	11.11
72	7	7	58.3 ON	296	54.3	-38.8	12.86	12.42	11.82	11.22
			OFF	295	55.7	-41.8	12.86	12.42	11.82	11.22
73	9	2	57.2 ON	279	34.3	-26.3	11.98	12.34	11.74	11.14
			OFF	282	36.5	-27.1	11.99	12.36	11.76	11.16
73	9	6	58 156.1 ON	283	68.3	-85.4	12.88	12.42	11.82	11.22
			OFF	278	67.2	-129.4	11.93	12.42	11.82	11.22
74	1	8	63.5 ON	296	68.2	-48.8	12.86	12.42	11.82	11.22

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				OFF	294	62.7	-53.6	12.85	12.42	11.82	11.22
77	2	8	28	ON	246	59.8	-133.4	11.79	12.42	11.82	11.22
				OFF	236	55.1	-139.2	11.74	12.42	11.82	11.22
79	3	8	9	ON	293	47.1	-33.6	12.85	12.42	11.82	11.22
				OFF	294	48.3	-34.6	12.85	12.42	11.82	11.22
81	8	4	4	ON	168	38.8	-26.1	11.25	12.31	11.71	11.11
				OFF	168	32.2	-26.6	11.25	12.32	11.72	11.12
83	3	1	56	ON	256	18.6	-23.4	11.85	12.88	11.48	18.88
				OFF	271	27.3	-25.4	11.94	12.25	11.65	11.85
84	6	6	47	ON	257	63.1	-121.3	11.86	12.42	11.82	11.22
				OFF	242	57.8	-133.5	11.77	12.42	11.82	11.22
85	7	2	11	ON	257	18.5	-23.6	11.86	12.88	11.48	18.88
				OFF	268	28.4	-24.8	11.88	12.88	11.48	18.88
85	7	4	16	ON	288	39.4	-38.8	12.82	12.38	11.78	11.18
				OFF	298	42.8	-31.4	12.83	12.48	11.88	11.28
86	3	2	32	ON	271	26.8	-25.7	11.93	12.25	11.65	11.85
				OFF	278	31.6	-27.1	11.97	12.31	11.71	11.11
86	3	4	163	ON	264	36.2	-28.8	12.88	12.36	11.76	11.16
				OFF	295	56.9	-45.5	12.86	12.42	11.82	11.22
87	4	2	64	ON	252	15.6	-23.1	11.83	11.85	11.25	18.65
				OFF	278	25.9	-25.5	11.93	12.23	11.63	11.83
87	4	5	14	ON	266	37.5	-29.5	12.81	12.37	11.77	11.17
				OFF	298	39.6	-38.4	12.82	12.38	11.78	11.18
87	4	8	19	ON	296	53.9	-41.6	12.86	12.42	11.82	11.22
				OFF	295	56.2	-44.7	12.86	12.42	11.82	11.22
88	4	2	27	ON	278	31.3	-27.2	11.97	12.31	11.71	11.11
				OFF	283	34.9	-28.5	12.88	12.35	11.75	11.15
89	9	6	41	ON	278	66.7	-86.8	11.97	12.42	11.82	11.22
				OFF	269	56.1	-102.6	11.92	12.42	11.82	11.22
92	8	1	28	ON	245	11.4	-22.8	11.79	11.54	18.94	18.34
				OFF	254	16.1	-23.6	11.84	11.88	11.28	18.68
94	8	8	22	ON	281	66.3	-84.7	11.99	12.42	11.82	11.22
				OFF	276	66.6	-89.3	11.96	12.42	11.82	11.22
92	5	16	21	ON	236	56.7	-133.3	11.74	12.42	11.82	11.22
				OFF	238	53.8	-137.4	11.78	12.42	11.82	11.22
98	1	1	57	ON	255	24.5	-25.5	11.98	12.88	11.48	18.88
				OFF	278	29.1	-27.8	11.97	12.28	11.68	11.88
100	1	4	18	ON	294	44.1	-35.8	12.85	12.41	11.81	11.21
				OFF	295	46.1	-36.5	12.85	12.42	11.82	11.22
100	1	6	21	ON	252	64.5	-106.2	11.89	12.42	11.82	11.22
				OFF	255	63.1	-114.3	11.85	12.42	11.82	11.22
102	1	7	68	ON	258	61.6	-119.7	11.82	12.42	11.82	11.22
				OFF	229	54.2	-135.1	11.69	12.42	11.82	11.22
101	3	2	30	ON	265	18.6	-25.4	11.98	12.88	11.48	18.88
				OFF	275	24.4	-26.8	11.95	12.19	11.59	18.99
101	3	4	70	ON	277	26.3	-27.3	11.97	12.24	11.64	11.84
				OFF	291	37.1	-31.2	12.84	12.37	11.77	11.17
101	3	6	77	ON	293	39.3	-32.3	12.85	12.38	11.78	11.18
				OFF	298	49.1	-39.2	12.87	12.42	11.82	11.22
101	3	7	30	ON	298	52.7	-48.9	12.87	12.42	11.82	11.22
				OFF	297	55.1	-46.4	12.87	12.42	11.82	11.22

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102 3 1	39	183.2	ON	264	17.9	-25.3	11.98	11.97	11.37	18.77
			OFF	274	23.8	-26.8	11.95	12.18	11.58	18.98
102 3 2	79	289.8	ON	279	27.8	-27.6	11.98	12.25	11.65	11.85
			OFF	292	38.1	-31.8	12.84	12.37	11.77	11.17
102 3 6	22	58.2	ON	297	45.2	-36.1	12.87	12.41	11.81	11.21
			OFF	298	47.9	-38.3	12.87	12.42	11.82	11.22
102 3 8	36	95.2	ON	298	52.3	-42.9	12.87	12.42	11.82	11.22
			OFF	296	56.3	-48.6	12.86	12.42	11.82	11.22
103 3 4	24	63.5	ON	286	32.3	-29.5	12.81	12.32	11.72	11.12
			OFF	298	35.6	-38.8	12.83	12.35	11.75	11.15
103 3 7	74	195.7	ON	295	41.7	-33.9	12.86	12.48	11.88	11.28
			OFF	298	58.9	-41.5	12.87	12.42	11.82	11.22
104 4 6	48	185.8	ON	298	61.7	-62.3	12.83	12.42	11.82	11.22
			OFF	284	64.2	-74.3	12.88	12.42	11.82	11.22
104 4 8	38	188.5	ON	275	65.2	-88.1	11.96	12.42	11.82	11.22
			OFF	266	64.6	-122.9	11.91	12.42	11.82	11.22
105 2 4	23	68.8	ON	294	59.1	-55.2	12.85	12.42	11.82	11.22
			OFF	291	61.1	-68.8	12.84	12.42	11.82	11.22
106 4 5	29	76.7	ON	285	63.5	-71.4	12.81	12.42	11.82	11.22
			OFF	268	64.7	-81.8	11.98	12.42	11.82	11.22
109 2 9	41	168.4	ON	289	42.6	-144.5	11.56	12.48	11.88	11.28
			OFF	198	35.8	-148.6	11.48	12.35	11.75	11.15
111 3 8	17	45.8	ON	298	51.1	-43.3	12.87	12.42	11.82	11.22
			OFF	297	53.2	-45.8	12.87	12.42	11.82	11.22
115 5 2	45	121.7	ON	288	25.1	-25.6	11.98	12.21	11.61	11.81
			OFF	268	31.6	-32.8	12.82	12.31	11.71	11.11
116 2 1	17	45.8	ON	293	36.5	-33.9	12.85	12.36	11.76	11.16
			OFF	295	38.7	-34.2	12.86	12.38	11.78	11.18
116 2 2	13	34.4	ON	298	44.6	-37.6	12.87	12.41	11.81	11.21
			OFF	292	45.7	-39.9	12.87	12.41	11.81	11.21
116 2 4	62	164.2	ON	235	57.2	-126.4	11.73	12.42	11.82	11.22
			OFF	218	49.6	-138.5	11.62	12.42	11.82	11.22
117 4 2	10	34.4	ON	271	18.9	-27.2	11.93	12.81	11.41	18.81
			OFF	274	28.9	-27.8	11.95	12.18	11.58	18.98
117 4 5	162	428.5	ON	298	58.4	-43.7	12.87	12.42	11.82	11.22
			OFF	278	63.4	-79.5	11.97	12.42	11.82	11.22
118 4 5	34	39.9	ON	293	35.9	-33.8	12.85	12.36	11.76	11.16
			OFF	296	48.4	-35.4	12.86	12.39	11.79	11.19
118 4 7	25	227.5	ON	297	52.4	-46.5	12.87	12.42	11.82	11.22
			OFF	288	63.3	-63.4	12.82	12.42	11.82	11.22
119 6 2	31	62.8	ON	269	16.4	-25.8	11.92	11.98	11.38	18.78
			OFF	276	21.2	-28.8	11.96	12.18	11.58	18.98
119 6 6	45	119.8	ON	297	39.6	-35.1	12.87	12.38	11.78	11.18
			OFF	299	45.3	-39.8	12.88	12.41	11.81	11.21
119 6 8	57	97.9	ON	298	52.6	-46.9	12.87	12.42	11.82	11.22
			OFF	295	55.3	-53.2	12.86	12.42	11.82	11.22
120 4 1	57	152.5	ON	276	28.7	-28.8	11.96	12.89	11.49	18.89
			OFF	288	28.9	-38.4	12.82	12.28	11.68	11.88
120 4 2	33	57.3	ON	298	38.9	-31.1	12.83	12.31	11.71	11.11
			OFF	294	35.3	-33.8	12.85	12.35	11.75	11.15
120 4 3	53	142.1	ON	296	37.8	-34.2	12.86	12.37	11.77	11.17

~~SECRET~~

**SECRET**

128	4	7	58	153.4	OFF	299	44.8	-38.8	12.88	12.41	11.81	11.21
					ON	274	63.4	-84.7	11.95	12.42	11.82	11.22
					OFF	258	62.6	-184.6	11.87	12.42	11.82	11.22
124	1	7	29	76.7	ON	233	56.2	-125.7	11.72	12.42	11.82	11.22
					OFF	225	52.5	-132.1	11.67	12.42	11.82	11.22
125	7	8	28	52.9	ON	248	68.6	-112.7	11.81	12.42	11.82	11.22
					OFF	241	58.9	-118.6	11.77	12.42	11.82	11.22
127	3	8	17	45.8	ON	298	58.2	-45.5	12.87	12.42	11.82	11.22
					OFF	297	52.1	-48.8	12.87	12.42	11.82	11.22
131	3	1	9	23.8	ON	276	18.8	-28.8	11.96	12.81	11.41	18.81
					OFF	279	28.1	-29.1	11.97	12.87	11.47	18.87
131	3	2	34	89.9	ON	281	21.7	-29.6	11.99	12.12	11.52	18.92
					OFF	287	26.5	-31.8	12.82	12.24	11.64	11.84
131	3	5	17	45.8	ON	298	29.1	-31.8	12.83	12.28	11.68	11.88
					OFF	293	31.4	-32.7	12.85	12.31	11.71	11.11
132	7	3	35	95.2	ON	279	28.1	-29.2	11.98	12.87	11.47	18.87
					OFF	286	25.2	-38.7	12.81	12.21	11.61	11.81
133	6	3	69	182.5	ON	269	29.6	-32.3	12.83	12.29	11.69	11.89
					OFF	296	38.5	-36.5	12.86	12.38	11.78	11.18
133	8	6	117	349.5	ON	292	54.8	-54.8	12.84	12.42	11.82	11.22
					OFF	278	62.6	-83.3	11.93	12.42	11.82	11.22
134	4	4	35	92.6	ON	295	35.7	-35.1	12.86	12.36	11.76	11.16
					OFF	297	42.2	-37.7	12.87	12.39	11.79	11.19
134	4	7	44	116.4	ON	293	53.8	-51.1	12.85	12.42	11.82	11.22
					OFF	288	57.6	-59.4	12.82	12.42	11.82	11.22
135	4	2	18	39.7	ON	274	17.4	-28.9	11.95	11.95	11.35	18.75
					OFF	277	19.7	-29.5	11.97	12.85	11.45	18.85
135	4	4	65	171.9	ON	287	26.7	-31.5	12.82	12.24	11.64	11.84
					OFF	295	35.3	-35.8	12.86	12.35	11.75	11.15
135	4	7	18	39.7	ON	297	41.1	-38.5	12.87	12.39	11.79	11.19
					OFF	297	42.9	-39.8	12.87	12.48	11.88	11.28
136	4	1	24	63.5	ON	279	28.7	-29.8	11.98	12.89	11.49	18.89
					OFF	284	24.1	-38.8	12.88	12.19	11.59	18.99
136	4	2	32	84.6	ON	291	31.8	-33.2	12.84	12.31	11.71	11.11
					OFF	295	35.3	-35.1	12.86	12.35	11.75	11.15
136	4	5	32	84.6	ON	296	37.7	-35.5	12.86	12.37	11.77	11.17
					OFF	297	41.7	-39.8	12.87	12.48	11.88	11.28
137	4	6	25	68.1	ON	248	68.5	-185.1	11.81	12.42	11.82	11.22
					OFF	242	58.9	-113.9	11.76	12.42	11.82	11.22
137	4	8	31	128.5	ON	214	48.5	-134.5	11.59	12.42	11.82	11.22
					OFF	223	42.4	-148.2	11.52	12.48	11.88	11.28
138	2	4	68	188.8	ON	253	52.7	-51.6	12.85	12.42	11.82	11.22
					OFF	264	58.2	-64.2	12.88	12.42	11.82	11.22
138	3	8	18	42.3	ON	255	49.4	-47.8	12.86	12.42	11.82	11.22
					OFF	293	51.2	-58.3	12.85	12.42	11.82	11.22

PHOTOGRAPHIC SUMMARY

AFT PAN CAMERA NO 136 E.1752 SLIT W/21 FILTER 3484 FILM  
 SPAN NO FRM FEET ET S-EL S-DIR EV FULL INT PRI  
 /1 4 5 15.8 382 47.4 -32.7 12.43 12.75 12.15 11.55

**SECRET**

72 8 8	4	18.6	ON	318	-49.6	325.5	11.62	8.8	8.8	8.8
			OFF	218	-48.4	326.4	11.62	8.8	8.8	8.8
72 7 1	28	52.9	ON	318	18.8	-23.7	12.13	11.81	11.21	18.61
			OFF	319	14.4	-23.2	12.17	12.18	11.58	18.98
72 7 2	65	171.9	ON	335	21.8	-23.5	12.24	12.43	11.83	11.23
			OFF	358	31.2	-25.5	12.33	12.64	12.84	11.44
72 7 7	28	52.9	ON	385	54.3	-39.8	12.44	12.75	12.15	11.55
			OFF	385	56.7	-41.9	12.44	12.75	12.15	11.55
73 9 2	15	39.7	ON	364	34.3	-26.6	12.36	12.67	12.87	11.47
			OFF	368	36.5	-27.4	12.38	12.69	12.89	11.49
73 9 6	62	158.7	ON	369	68.3	-85.3	12.38	12.75	12.15	11.55
			OFF	353	67.8	-189.2	12.31	12.75	12.15	11.55
74 1 6	24	63.5	ON	385	68.2	-48.1	12.44	12.75	12.15	11.55
			OFF	384	62.6	-53.7	12.44	12.75	12.15	11.55
77 2 8	28	74.1	ON	328	59.1	-133.2	12.17	12.75	12.15	11.55
			OFF	327	55.2	-138.8	12.12	12.75	12.15	11.55
79 3 8	8	23.8	ON	383	47.1	-33.8	12.43	12.75	12.15	11.55
			OFF	384	49.3	-34.8	12.44	12.75	12.15	11.55
81 8 8	4	18.5	ON	218	38.7	-26.5	11.62	12.63	12.83	11.43
			OFF	218	32.1	-26.9	11.62	12.65	12.85	11.45
83 8 1	57	152.3	ON	334	18.4	-24.5	12.24	12.33	11.73	11.13
			OFF	354	27.3	-25.9	12.32	12.58	11.98	11.38
84 8 6	47	124.3	ON	335	63.1	-121.8	12.24	12.75	12.15	11.55
			OFF	315	57.9	-133.2	12.15	12.75	12.15	11.55
85 7 2	11	29.1	ON	335	13.3	-24.7	12.24	12.32	11.72	11.12
			OFF	348	29.3	-24.9	12.26	12.48	11.88	11.28
85 7 4	19	36.3	ON	376	39.3	-38.2	12.41	12.71	12.11	11.51
			OFF	379	41.9	-31.6	12.42	12.73	12.13	11.53
86 8 2	32	64.6	ON	356	25.7	-26.1	12.33	12.57	11.97	11.37
			OFF	355	31.5	-27.4	12.37	12.64	12.84	11.44
86 8 4	182	439.1	ON	374	36.2	-29.8	12.48	12.69	12.89	11.49
			OFF	357	56.9	-45.6	12.45	12.75	12.15	11.55
87 4 2	67	177.2	ON	338	15.4	-24.8	12.22	12.17	11.57	18.97
			OFF	355	25.8	-26.8	12.32	12.56	11.96	11.36
87 4 5	18	39.7	ON	376	37.5	-29.7	12.41	12.78	12.18	11.58
			OFF	379	39.5	-38.6	12.42	12.71	12.11	11.51
87 4 8	21	52.9	ON	387	53.9	-41.9	12.45	12.75	12.15	11.55
			OFF	357	56.2	-44.8	12.45	12.75	12.15	11.55
88 4 2	28	68.1	ON	386	31.3	-27.6	12.37	12.64	12.84	11.44
			OFF	372	34.8	-28.7	12.39	12.68	12.88	11.48
89 9 6	41	136.4	ON	365	66.6	-86.7	12.37	12.75	12.15	11.55
			OFF	353	66.1	-182.4	12.32	12.75	12.15	11.55
90 8 1	28	74.1	ON	321	11.2	-25.5	12.18	11.85	11.25	18.65
			OFF	333	15.9	-25.1	12.23	12.28	11.68	11.88
90 8 8	22	58.2	ON	389	65.3	-88.7	12.33	12.75	12.15	11.55
			OFF	363	66.6	-89.2	12.36	12.75	12.15	11.55
92 0 8	21	52.9	ON	312	56.8	-133.8	12.13	12.75	12.15	11.55
			OFF	341	54.8	-137.8	12.89	12.75	12.15	11.55
98 1 1	50	153.4	ON	347	23.4	-26.3	12.29	12.48	11.88	11.28
			OFF	356	29.1	-28.1	12.37	12.61	12.81	11.41



100 1 4	10	421.0 ON	350	44.9 -35.2	12.45	12.74	12.14	11.54
		OFF	356	46.1 -36.7	12.45	12.75	12.15	11.54
100 1 6	24	63.5 ON	344	64.5-185.9	12.28	12.75	12.15	11.55
		OFF	335	63.1-113.9	12.24	12.75	12.15	11.55
100 1 7	64	169.3 ON	328	61.6-119.3	12.21	12.75	12.15	11.55
		OFF	381	54.3-134.7	12.88	12.75	12.15	11.55
101 3 2	36	188.5 ON	343	18.5 -26.5	12.27	12.33	11.73	11.10
		OFF	355	24.3 -27.3	12.33	12.52	11.92	11.30
101 3 4	78	286.3 ON	359	26.3 -27.8	12.34	12.56	11.96	11.30
		OFF	377	37.1 -31.4	12.41	12.78	12.18	11.58
101 3 6	78	286.3 ON	379	39.2 -32.5	12.42	12.71	12.11	11.51
		OFF	384	49.2 -39.3	12.44	12.75	12.15	11.55
101 3 7	39	133.2 ON	384	58.7 -41.8	12.44	12.75	12.15	11.55
		OFF	384	55.1 -46.5	12.44	12.75	12.15	11.55
102 3 1	39	103.2 ON	342	17.8 -26.5	12.27	12.38	11.78	11.18
		OFF	355	23.7 -27.3	12.32	12.51	11.91	11.31
102 3 2	81	211.6 ON	361	26.9 -28.1	12.35	12.58	11.98	11.38
		OFF	378	38.1 -32.8	12.42	12.78	12.18	11.58
102 3 6	22	58.2 ON	384	45.2 -36.3	12.44	12.74	12.14	11.54
		OFF	384	47.9 -38.5	12.44	12.75	12.15	11.55
102 3 8	38	95.2 ON	384	52.3 -43.8	12.44	12.75	12.15	11.55
		OFF	383	56.3 -48.7	12.43	12.75	12.15	11.55
103 3 4	24	63.5 ON	378	32.2 -29.8	12.38	12.65	12.85	11.45
		OFF	375	35.5 -31.8	12.42	12.68	12.88	11.48
103 3 7	70	198.4 ON	382	41.7 -34.1	12.43	12.73	12.13	11.53
		OFF	384	53.9 -41.6	12.44	12.75	12.15	11.55
104 4 6	41	108.4 ON	376	61.7 -62.4	12.41	12.75	12.15	11.55
		OFF	367	64.1 -74.3	12.37	12.75	12.15	11.55
104 4 8	30	108.5 ON	356	65.1 -88.8	12.33	12.75	12.15	11.55
		OFF	344	64.6-181.8	12.28	12.75	12.15	11.55
105 2 4	28	68.6 ON	381	59.1 -55.3	12.42	12.75	12.15	11.55
		OFF	377	61.1 -68.9	12.41	12.75	12.15	11.55
106 4 5	29	76.7 ON	369	63.4 -71.4	12.38	12.75	12.15	11.55
		OFF	362	64.6 -82.9	12.35	12.75	12.15	11.55
109 2 9	41	168.4 ON	278	42.9-144.1	11.93	12.73	12.13	11.53
		OFF	255	35.4-146.2	11.85	12.68	12.88	11.48
111 3 8	17	45.2 ON	364	51.1 -43.4	12.44	12.75	12.15	11.55
		OFF	384	53.8 -45.9	12.44	12.75	12.15	11.55
115 3 2	48	121.7 ON	363	25.6 -29.1	12.35	12.54	11.94	11.34
		OFF	374	31.5 -31.8	12.48	12.64	12.84	11.44
116 2 1	17	45.2 ON	358	36.4 -33.2	12.42	12.69	12.89	11.49
		OFF	383	35.7 -34.4	12.43	12.71	12.11	11.51
116 2 2	10	64.4 ON	384	44.2 -37.8	12.44	12.74	12.14	11.54
		OFF	384	45.7 -39.8	12.44	12.74	12.14	11.54
116 2 4	61	101.3 ON	384	57.2-126.8	12.18	12.75	12.15	11.55
		OFF	282	48.8-138.1	11.99	12.75	12.15	11.55
117 4 2	14	37.7 ON	351	18.6 -28.2	12.31	12.34	11.74	11.14
		OFF	355	28.9 -28.5	12.32	12.42	11.82	11.22
117 4 5	162	426.5 ON	384	58.4 -43.8	12.44	12.75	12.15	11.55
		OFF	388	63.3 -79.4	12.34	12.75	12.15	11.55
118 4 5	35	92.5 ON	384	35.0 -33.2	12.42	12.69	12.89	11.49

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				OFF	384	48.3	-35.6	12.44	12.72	12.12	11.52
118	4	7	87	238.1 ON	384	52.4	-46.6	12.44	12.75	12.15	11.55
				OFF	373	68.3	-63.5	12.48	12.75	12.15	11.55
119	8	2	32	84.6 ON	346	16.3	-28.3	12.29	12.22	11.62	11.82
				OFF	357	21.1	-28.8	12.33	12.43	11.83	11.23
119	8	6	46	121.7 ON	384	39.6	-35.3	12.44	12.71	12.11	11.51
				OFF	384	45.2	-39.2	12.44	12.74	12.14	11.54
119	8	8	37	97.9 ON	384	52.6	-47.1	12.44	12.75	12.15	11.55
				OFF	381	56.3	-53.3	12.42	12.75	12.15	11.55
128	4	1	58	153.4 ON	356	28.6	-28.8	12.33	12.41	11.81	11.21
				OFF	371	28.8	-38.8	12.39	12.61	12.81	11.41
128	4	2	33	87.3 ON	374	38.8	-31.8	12.48	12.64	12.84	11.44
				OFF	388	35.3	-33.2	12.42	12.68	12.88	11.48
128	4	3	56	148.1 ON	382	37.8	-34.8	12.43	12.78	12.18	11.58
				OFF	384	44.8	-39.8	12.44	12.74	12.14	11.54
128	4	7	59	156.1 ON	354	63.3	-84.6	12.32	12.75	12.15	11.55
				OFF	333	62.5	-184.3	12.23	12.75	12.15	11.55
124	1	7	25	76.7 ON	388	56.2	-125.3	12.88	12.75	12.15	11.55
				OFF	289	52.6	-131.6	12.83	12.75	12.15	11.55
125	7	8	24	52.9 ON	328	68.6	-112.3	12.17	12.75	12.15	11.55
				OFF	311	58.9	-118.2	12.13	12.75	12.15	11.55
127	3	8	17	45.4 ON	384	52.2	-45.7	12.44	12.75	12.15	11.55
				OFF	384	52.1	-48.1	12.44	12.75	12.15	11.55
131	3	1	9	23.8 ON	357	18.7	-29.8	12.33	12.34	11.74	11.14
				OFF	359	28.1	-39.8	12.34	12.39	11.79	11.19
131	3	2	34	39.9 ON	362	21.7	-32.3	12.35	12.45	11.85	11.25
				OFF	371	26.5	-31.4	12.39	12.57	11.97	11.37
131	3	5	17	45.7 ON	375	29.8	-32.2	12.48	12.61	12.81	11.41
				OFF	378	31.4	-33.8	12.41	12.64	12.84	11.44
132	7	3	37	97.9 ON	368	22.8	-32.1	12.34	12.39	11.79	11.19
				OFF	369	25.2	-31.2	12.38	12.54	11.94	11.34
133	2	3	71	185.1 ON	377	29.6	-32.6	12.41	12.62	12.82	11.42
				OFF	385	38.5	-36.7	12.44	12.71	12.11	11.51
133	2	6	117	329.5 ON	358	54.8	-54.1	12.42	12.75	12.15	11.55
				OFF	352	61.9	-83.2	12.31	12.75	12.15	11.55
134	4	4	31	82.2 ON	385	25.7	-35.3	12.44	12.69	12.89	11.49
				OFF	366	42.2	-37.9	12.44	12.72	12.12	11.52
134	4	7	38	132.5 ON	383	53.8	-51.2	12.43	12.75	12.15	11.55
				OFF	375	57.8	-59.5	12.48	12.75	12.15	11.55
135	4	2	17	45.1 ON	357	17.4	-36.1	12.33	12.28	11.68	11.88
				OFF	362	19.7	-36.4	12.35	12.38	11.78	11.18
135	4	4	70	193.1 ON	374	26.7	-31.9	12.48	12.57	11.97	11.37
				OFF	364	35.3	-35.3	12.44	12.68	12.88	11.48
135	4	7	26	42.3 ON	386	41.1	-38.7	12.44	12.72	12.12	11.52
				OFF	386	42.9	-44.8	12.44	12.73	12.13	11.53
136	4	1	24	53.5 ON	364	22.6	-38.6	12.36	12.41	11.81	11.21
				OFF	37P	24.1	-31.4	12.38	12.52	11.92	11.32
136	4	2	33	57.3 ON	362	31.4	-33.5	12.42	12.64	12.84	11.44
				OFF	365	35.2	-35.4	12.44	12.68	12.88	11.48
136	4	3	32	34.6 ON	385	37.7	-36.7	12.44	12.78	12.18	11.58
				OFF	366	41.7	-39.2	12.44	12.73	12.13	11.53

~~SECRET~~

**SECRET**

137 4 6	25	66.1	ON	323	68.5-185.8	12.19	12.75	12.15	11.55
			OFF	312	58.9-113.8	12.14	12.75	12.15	11.55
137 4 8	38	188.5	ON	278	48.7-134.1	11.97	12.75	12.15	11.55
			OFF	264	42.7-139.8	11.98	12.73	12.13	11.53
138 2 4	64	169.3	ON	382	52.7 -51.7	12.43	12.75	12.15	11.55
			OFF	378	58.1 -64.3	12.38	12.75	12.15	11.55
143 3 8	16	42.3	ON	385	49.3 -47.9	12.44	12.75	12.15	11.55
			OFF	383	51.2 -58.4	12.43	12.75	12.15	11.55

STELLAR-INDEX SUMMARY

CAMERA DATA ET FILM FILTER GRID ASSEMBLY NO 0 92  
 STELLAR 2.8 4481 NONE 79  
 INDEX 1/588 4488 W/21 118  
 PERFORMANCE SUMMARY

OPN NO	FR	STEL FEET	INDX FEET	H	M	S	Q	LAT	LONG	Q	LAT	LONG	SEC
71 4 5	1	8.16	8.24	5	45	44	2	41	68E	2	48	68E	25
72 7 1	3	8.38	8.59	7	6	1	2	88	21E	2	77	38E	71
72 7 2	14	8.99	1.98	7	8	43	2	78	38E	2	59	43E	176
72 7 7	3	8.38	8.59	7	17	59	2	32	46E	2	29	47E	58
73 9 2	3	8.38	8.59	8	42	28	2	56	21E	2	53	21E	49
73 9 6	9	8.89	1.78	8	54	49	2	5	25E	3	4	25E	157
74 1 6	4	8.48	8.79	18	22	21	2	24	2E	2	28	2E	78
77 2 6	5	8.49	8.99	15	1	27	3	18	64W	3	23	64W	92
79 3 2	5	8.28	8.48	17	47	9	2	41	112W	2	48	112W	35
83 3 1	9	8.89	1.78	23	39	57	2	73	146E	2	63	152E	155
84 6 6	7	8.69	1.39	1	38	42	3	18	136E	3	19	136E	148
85 7 2	2	8.28	8.48	2	48	15	2	73	181E	2	71	183E	44
85 7 4	3	8.38	8.59	2	45	57	2	58	118E	2	47	111E	57
86 3 2	5	8.49	8.99	4	12	46	2	64	84E	2	59	86E	98
86 3 4	24	2.38	4.75	4	15	15	2	53	87E	2	28	98E	385
87 4 2	18	8.99	1.98	5	39	47	2	76	52E	2	65	61E	188
87 4 5	3	8.38	8.59	5	45	45	2	52	65E	2	58	65E	48
87 4 8	3	8.38	8.59	5	56	37	2	32	67E	2	29	67E	58
88 4 2	4	8.48	8.79	7	14	12	2	59	48E	2	55	41E	72
89 9 6	7	8.69	1.39	8	57	38	2	5	22E	3	1	23E	114
92 8 1	5	8.49	8.99	18	9	5	2	88	25W	2	75	15W	89
92 8 8	4	8.48	8.79	18	27	8	2	8	8E	2	4	8E	68
92 8 13	3	2.38	8.59	13	34	11	3	19	44W	3	23	44W	72
92 1 1	9	8.89	1.78	22	12	34	2	71	168E	2	61	173E	155
1.2 1 4	4	8.38	8.59	1	19	26	2	44	131E	2	41	132E	58
1.2 1 6	4	8.48	8.79	1	31	3	3	3	134E	3	7	134E	75
1.2 1 7	12	8.99	1.98	1	32	52	3	18	134E	3	22	134E	191
1.1 3 2	6	8.59	1.19	2	42	25	2	73	99E	2	67	183E	188
1.1 3 4	12	1.19	2.38	2	44	32	2	64	184E	2	52	188E	194
1.1 3 6	12	1.19	2.38	2	48	9	2	58	188E	2	38	189E	189
1.1 3 7	3	8.59	1.19	2	51	37	2	36	189E	2	38	118E	181
1.2 3 1	6	8.59	1.19	4	12	28	2	74	75E	2	67	88E	118
1.2 3 2	12	1.19	2.38	4	14	49	2	64	82E	2	51	85E	288
1.2 3 6	4	8.48	8.79	4	28	1	2	43	86E	2	39	87E	63

**SECRET**

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182	3	8	6	8.59	1.19	4	22	16	2	33	87E	2	28	87E	96
183	3	4	4	8.88	8.79	5	46	24	2	58	61E	2	54	62E	69
183	3	7	11	1.89	2.18	5	49	6	2	47	63E	2	35	64E	183
184	4	6	6	8.59	1.19	7	26	13	2	18	42E	2	12	43E	188
184	4	8	6	8.59	1.19	7	29	25	2	5	43E	3	1	43E	188
185	2	4	4	8.48	8.79	8	55	9	2	23	28E	2	19	28E	68
186	4	5	5	8.49	8.99	18	27	37	2	13	2W	2	8	2W	83
189	2	9	6	8.59	1.19	15	18	16	3	36	68W	3	45	67W	149
111	3	8	3	8.38	8.59	17	52	52	2	35	116W	2	32	116W	53
115	3	2	7	8.69	1.39	23	45	38	2	66	147E	2	58	149E	122
116	2	1	3	8.38	8.59	1	18	49	2	53	128E	2	58	128E	53
116	2	2	3	8.38	8.59	1	21	4	2	43	129E	2	41	138E	43
116	2	4	9	8.89	1.78	1	35	46	3	16	132E	3	28	132E	196
117	4	2	3	8.38	8.59	2	43	55	2	73	97E	2	78	99E	48
117	4	5	24	2.38	4.75	2	53	18	2	35	187E	2	18	189E	387
118	4	5	6	8.59	1.19	4	18	47	2	53	83E	2	48	84E	92
118	4	7	13	1.29	2.57	4	23	58	2	32	85E	2	19	86E	211
119	8	2	5	8.49	8.99	5	43	23	2	75	48E	2	78	54E	92
119	8	6	7	8.69	1.39	5	49	57	2	49	61E	2	42	62E	117
119	8	8	6	8.59	1.19	5	54	6	2	32	62E	2	26	63E	98
122	4	1	9	8.89	1.78	7	14	37	2	71	31E	2	61	35E	158
122	4	2	6	8.59	1.19	7	17	28	2	59	36E	2	54	37E	89
128	4	3	9	8.89	1.78	7	19	29	2	51	38E	2	42	39E	142
128	4	7	9	8.89	1.78	7	36	12	2	7	41E	3	2	41E	161
124	1	7	5	8.49	8.99	13	36	17	3	16	48W	3	22	48W	99
125	7	8	4	8.48	8.79	15	4	5	3	7	71W	3	11	71W	69
127	3	8	3	8.38	8.59	17	53	49	2	35	118W	2	32	118W	53
131	3	1	2	8.28	8.48	23	44	35	2	73	148E	2	71	141E	36
131	3	2	5	8.59	1.19	23	45	25	2	69	143E	2	64	146E	95
131	3	5	3	8.38	8.59	23	47	38	2	61	147E	2	58	147E	54
132	7	3	6	8.59	1.19	1	14	59	2	71	119E	2	65	122E	188
133	6	3	11	1.89	2.18	2	47	42	2	68	182E	2	58	184E	172
133	6	6	17	1.68	3.37	2	55	51	2	27	186E	2	8	187E	298
134	4	4	5	8.59	1.19	4	19	32	2	53	81E	2	48	82E	94
134	4	7	7	8.69	1.39	4	25	12	2	38	83E	2	23	84E	115
135	4	2	3	8.38	8.59	5	44	19	2	74	48E	2	72	51E	51
135	4	4	18	8.99	1.98	5	46	56	2	64	55E	2	54	58E	163
135	4	7	3	8.38	8.59	5	51	11	2	46	59E	2	44	59E	47
136	4	1	4	8.48	8.79	7	15	14	2	71	29E	2	67	31E	72
136	4	2	5	8.49	8.99	7	18	11	2	59	34E	2	54	35E	89
136	4	3	5	8.49	8.99	7	24	18	2	51	36E	2	46	37E	85
137	4	6	4	8.48	8.79	9	3	34	3	3	16E	3	8	17E	84
137	4	6	6	8.59	1.19	9	9	12	3	26	17E	3	34	18E	136
138	2	4	12	1.98	1.98	18	25	15	2	38	6W	2	28	6W	162
143	3	8	3	8.38	8.59	17	54	7	2	35	128W	2	32	119W	54

NOTE - ISSUES 1842 IS BEING FLOWN WITH THE AGENA MOVING NOSE-FIRST THROUGH ORBIT INSTEAD OF THE USUAL TAIL-FIRST FLIGHT. AS A RESULT OF THIS CHANGE IN AGENA ORIENTATION THE FOLLOWING VARIATIONS IN NORMAL SYSTEM PARAMETERS SHOULD BE NOTED -

~~SECRET~~

- (1) AT THE DESCENDING NODE THE STELLAR CAMERA NOW LOOKS WESTWARD INSTEAD OF EASTWARD.
- (2) THE MASTER PAN CAMERA, INSTRUMENT 196, IS THE AFT LOOKING CAMERA AND THE SLAVE PAN CAMERA, INSTRUMENT 197, IS THE FORWARD LOOKING CAMERA.

NOTE - THE LAST FIVE FRAMES OF THE FORWARD PAN CAMERA AND THE LAST FRAMES OF THE AFT PAN CAMERA FOR OPERATION 71-4-5 ARE CONTAINED IN THE B MISSION RECOVERY CAPSULE. THE REMAINING FRAMES OF OPERATION WERE IN THE A MISSION RECOVERY CAPSULE.

NOTE - OPERATION 72-8-8 WAS THE CUT AND WRAP OPERATION OCCURRING AT THE A TO B TRANSFER.

NOTE - OPERATION 61-2-8 WAS THE LENS STOWING OPERATION OCCURRING AT THE TIME OF THE A MISSION RECOVERY.

NOTE - TLM DATA OBSERVED ON OPERATION 143-3-8 INDICATE THAT THE MASTER PAN CAMERA, INSTRUMENT 196, WAS OUT OF FILM PRIOR TO THE OPERATION WHILE THE SLAVE PAN CAMERA, INSTRUMENT 197, RAN OUT OF FILM AT 13 CYCLES OF THIS OPERATION.

NOTE - TLM DATA INDICATE NORMAL CAMERA SYSTEM PERFORMANCE DURING THE ENTIRE MISSION.

**SECRET**

A. 1848-2

B. ORY

C. PERFORMANCE ESTIMATE - PART TWO

RATE ESTIMATE

FWD PAN CAMERA NUMBER 197

OPN NO	FR	R	A	TUR/ DUR	INST CPS	INST ANG-VEL	SCAN RATE R/SEC	RATE I/SEC	PGT RATE CALIB	REQD
71	4	5	5	6	5 ON 1737	0.4372	0.03689	2.747	65.92	-1.7 -1.6
					OFF 12	0.4379	0.03695	2.752	66.84	-1.7 -1.6
72	4	2	4	6	5 ON 8	0.1789	0.01442	1.074	25.78	-1.7 -42.4
					OFF 23	0.1789	0.01442	1.074	25.78	-1.7 -43.4
72	7	1	28	6	5 ON 1145	0.3568	0.03884	2.237	53.68	-1.7 -1.2
					OFF 58	0.3665	0.03892	2.382	55.26	-1.7 -8.8
72	7	2	64	6	5 ON 1386	0.3845	0.03244	2.416	57.98	-1.7 -8.4
					OFF 163	0.4898	0.03458	2.575	61.88	-1.7 -8.4
72	7	7	19	6	5 ON 1862	0.4424	0.03733	2.788	66.71	-1.7 -2.2
					OFF 45	0.4427	0.03736	2.782	66.76	-1.7 -2.4
73	9	2	14	6	5 ON 1523	0.4168	0.03517	2.619	62.85	-1.7 -8.6
					OFF 36	0.4212	0.03554	2.647	63.52	-1.7 -8.7
73	9	6	59	6	5 ON 2264	0.4229	0.03569	2.657	63.78	-1.7 -2.1
					OFF 144	0.4842	0.03418	2.539	68.95	-1.7 -1.4
74	1	6	24	6	5 ON 1991	0.4428	0.03738	2.777	66.66	-1.7 -2.6
					OFF 57	0.4488	0.03713	2.765	66.36	-1.7 -2.6
77	2	8	28	6	5 ON 2631	0.3673	0.03899	2.388	55.39	-1.7 -8.3
					OFF 79	0.3529	0.02978	2.217	53.21	-1.7 -8.8
79	3	6	9	6	5 ON 1759	0.4385	0.03788	2.755	66.12	-1.7 -1.7
					OFF 22	0.4397	0.03718	2.762	66.38	-1.7 -1.8
81	8	8	4	6	5 ON 8	0.1638	0.01382	1.029	24.78	-1.7 -153.6
					OFF 24	0.1638	0.01382	1.029	24.78	-1.7 -155.5
83	3	1	56	6	5 ON 1299	0.3833	0.03234	2.488	57.88	-1.7 -8.9
					OFF 142	0.4858	0.03424	2.558	61.19	-1.7 -8.6
84	6	6	47	6	5 ON 2533	0.3845	0.03244	2.416	57.98	-1.7 -8.7
					OFF 127	0.3621	0.03056	2.275	54.61	-1.7 -8.1
85	7	2	11	6	5 ON 1364	0.3842	0.03248	2.413	57.91	-1.7 -8.9
					OFF 31	0.3893	0.03285	2.446	58.78	-1.7 -8.8
85	7	4	18	6	5 ON 1646	0.4322	0.03638	2.783	64.87	-1.7 -1.2
					OFF 44	0.4348	0.03662	2.727	65.44	-1.7 -1.4
86	3	2	32	6	5 ON 1444	0.4251	0.03418	2.545	61.88	-1.9 -8.9
					OFF 77	0.4156	0.03587	2.611	62.67	-1.9 -1.8
86	3	4	163	6	5 ON 1599	0.4245	0.03582	2.667	64.81	-1.9 -1.2
					OFF 372	0.4414	0.03725	2.774	66.56	-1.9 -2.7
87	4	2	84	6	5 ON 1264	0.3763	0.03175	2.365	56.75	-1.9 -1.4
					OFF 167	0.4233	0.03483	2.534	68.82	-1.9 -8.9
87	4	5	17	6	5 ON 1622	0.4267	0.03682	2.682	64.38	-1.9 -1.3
					OFF 35	0.4382	0.03638	2.783	64.87	-1.9 -1.4
87	4	6	19	6	5 ON 1914	0.4417	0.03727	2.775	66.68	-1.9 -2.6
					OFF 45	0.4416	0.03726	2.775	66.59	-1.9 -2.6
88	4	2	24	6	5 ON 1522	0.4157	0.03587	2.612	62.68	-1.9 -1.1
					OFF 59	0.4226	0.03566	2.656	63.73	-1.9 -1.2

**SECRET**

~~SECRET~~

89	9	6	41	6	5	ON	2319	8.4154	8.83585	2.618	62.64	-1.9	-2.3
						OFF	181	8.4815	8.83387	2.522	68.54	-1.9	-1.9
98	8	1	28	6	5	ON	1287	8.3663	8.83891	2.382	55.24	-1.9	-1.8
						OFF	76	8.3796	8.83283	2.385	57.25	-1.9	-1.3
98	8	8	22	6	5	ON	2282	8.4199	8.83543	2.638	63.32	-1.9	-2.4
						OFF	55	8.4131	8.83486	2.596	62.38	-1.9	-2.3
92	6	18	28	6	5	ON	2783	8.3536	8.82983	2.222	53.32	-1.9	-8.8
						OFF	59	8.3438	8.82981	2.168	51.84	-1.9	-8.4
98	1	1	57	6	5	ON	1379	8.3954	8.83337	2.485	59.63	-1.9	-1.3
						OFF	142	8.4157	8.83587	2.612	62.68	-1.9	-1.2
108	1	4	15	6	5	ON	1785	8.4387	8.83782	2.757	66.16	-1.9	-2.8
						OFF	37	8.4482	8.83715	2.766	66.39	-1.9	-2.1
108	1	6	24	6	5	ON	2482	8.3919	8.83387	2.463	59.18	-1.9	-1.9
						OFF	62	8.3816	8.83228	2.398	57.55	-1.9	-1.7
108	1	7	63	6	5	ON	2598	8.3737	8.83153	2.348	56.35	-1.9	-1.5
						OFF	178	8.3428	8.82893	2.154	51.78	-1.9	-8.7
101	3	2	38	6	5	ON	1363	8.3959	8.83341	2.488	59.78	-1.2	-8.5
						OFF	95	8.4184	8.83463	2.578	61.88	-1.2	-8.3
101	3	4	76	6	5	ON	1498	8.4147	8.83499	2.686	62.53	-1.2	-8.3
						OFF	181	8.4347	8.83668	2.731	65.55	-1.2	-8.7
101	3	6	77	6	5	ON	1787	8.4375	8.83692	2.749	65.98	-1.2	-8.8
						OFF	176	8.4451	8.83755	2.796	67.11	-1.2	-1.6
101	3	7	32	6	5	ON	1915	8.4451	8.83756	2.797	67.12	-1.2	-1.7
						OFF	68	8.4441	8.83747	2.798	66.97	-1.2	-1.9
102	3	1	30	6	5	ON	1357	8.3949	8.83332	2.481	59.55	-1.2	-8.5
						OFF	97	8.4698	8.83458	2.575	61.79	-1.2	-8.3
102	3	2	79	6	5	ON	1586	8.4168	8.83517	2.619	62.86	-1.2	-8.3
						OFF	187	8.4365	8.83683	2.743	65.82	-1.2	-8.7
102	3	6	22	6	5	ON	1818	8.4435	8.83742	2.787	66.88	-1.2	-1.3
						OFF	58	8.4449	8.83754	2.795	67.89	-1.2	-1.5
102	3	8	36	6	5	ON	1952	8.4451	8.83755	2.796	67.12	-1.2	-1.8
						OFF	83	8.4438	8.83738	2.783	66.88	-1.2	-2.6
103	3	4	24	6	5	ON	1594	8.4273	8.83685	2.685	64.43	-1.2	-8.5
						OFF	56	8.4329	8.83653	2.728	65.28	-1.2	-8.7
103	3	7	74	6	5	ON	1756	8.4437	8.83718	2.769	66.45	-1.2	-1.1
						OFF	178	8.4451	8.83756	2.797	67.12	-1.2	-1.8
104	4	0	48	6	5	ON	2181	8.4336	8.83659	2.725	65.39	-1.2	-2.1
						OFF	95	8.4232	8.83576	2.663	63.91	-1.2	-2.8
104	4	6	38	6	5	ON	2372	8.4115	8.83472	2.586	62.86	-1.2	-1.7
						OFF	95	8.3972	8.83351	2.495	59.89	-1.2	-1.4
105	2	4	23	6	5	ON	2112	8.4389	8.83783	2.758	66.18	-1.2	-2.1
						OFF	55	8.4347	8.83668	2.731	65.55	-1.2	-2.1
106	4	5	29	6	5	ON	2256	8.4262	8.83596	2.678	64.27	-1.2	-1.9
						OFF	72	8.4178	8.83525	2.625	63.88	-1.2	-1.8
109	2	9	41	6	5	ON	3812	8.3128	8.82648	1.966	47.17	-1.2	3.1
						OFF	136	8.2962	8.82499	1.861	44.67	-1.2	4.9
111	3	0	17	6	5	ON	1959	8.4451	8.83755	2.796	67.11	-1.2	-1.8
						OFF	46	8.4442	8.83748	2.791	66.98	-1.2	-1.9
115	3	2	46	6	5	ON	1514	8.4184	8.83538	2.629	63.89	-1.1	-8.5
						OFF	189	8.4379	8.83636	2.787	64.98	-1.1	-8.6
116	2	1	17	6	5	ON	1712	8.4384	8.83699	2.754	66.11	-1.1	-8.8

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116	2	2	13	6	5	OFF	48	0.4418	0.83721	2.771	66.58	-1.1	-0.9
						ON	1847	0.4449	0.83754	2.796	67.18	-1.1	-1.3
						OFF	38	0.4456	0.83768	2.808	67.19	-1.1	-1.4
116	2	4	62	6	5	ON	2729	0.3528	0.82978	2.212	53.88	-1.1	-1.8
						OFF	183	0.3264	0.82754	2.851	49.21	-1.1	1.5
117	4	2	13	6	5	ON	1418	0.4858	0.83417	2.545	61.87	-1.1	-0.7
						OFF	35	0.4181	0.83461	2.577	61.85	-1.1	-0.6
117	4	5	162	6	5	ON	1973	0.4454	0.83758	2.798	67.16	-1.1	-1.7
						OFF	374	0.4154	0.83585	2.618	62.65	-1.1	-1.9
118	4	5	34	6	5	ON	1718	0.4383	0.83698	2.754	66.89	-1.1	-0.6
						OFF	79	0.4429	0.83737	2.783	66.79	-1.1	-1.8
118	4	7	86	6	5	ON	2821	0.4441	0.83747	2.798	66.96	-1.1	-1.8
						OFF	198	0.4385	0.83632	2.785	64.92	-1.1	-2.1
119	8	2	31	6	5	ON	1386	0.4814	0.83387	2.522	68.53	-0.7	-0.5
						OFF	79	0.4132	0.83487	2.596	62.31	-0.7	-0.2
119	8	6	45	6	5	ON	1788	0.4439	0.83746	2.789	66.94	-0.7	-0.7
						OFF	184	0.4471	0.83773	2.889	67.42	-0.7	-1.1
119	8	8	37	6	5	ON	2829	0.4453	0.83757	2.798	67.14	-0.7	-1.5
						OFF	85	0.4487	0.83719	2.769	66.46	-0.7	-1.7
120	4	1	57	6	5	ON	1461	0.4126	0.83482	2.593	62.22	-0.7	-0.3
						OFF	137	0.4293	0.83627	2.781	64.81	-0.7	-0.2
120	4	2	33	6	5	ON	1632	0.4332	0.83655	2.722	65.32	-0.7	-0.2
						OFF	76	0.4397	0.83718	2.763	66.38	-0.7	-0.4
120	4	3	56	6	5	ON	1752	0.4425	0.83734	2.788	66.73	-0.7	-0.6
						OFF	127	0.4471	0.83772	2.889	67.42	-0.7	-1.8
120	4	7	58	6	5	ON	2396	0.4198	0.83468	2.576	61.83	-0.7	-1.6
						OFF	148	0.3564	0.83268	2.428	58.26	-0.7	-1.4
124	1	7	29	6	5	ON	2761	0.3482	0.82938	2.188	52.51	-0.7	-0.9
						OFF	86	0.3363	0.82838	2.113	58.71	-0.7	0.3
125	7	8	24	6	5	ON	2638	0.3713	0.83133	2.333	55.99	-0.7	-1.3
						OFF	55	0.3618	0.83046	2.268	54.43	-0.7	-1.3
127	3	8	17	6	5	ON	2814	0.4458	0.83762	2.881	67.22	-0.7	-1.3
						OFF	48	0.4442	0.83748	2.791	66.98	-0.7	-1.5
131	3	1	9	6	5	ON	1465	0.4132	0.83487	2.596	62.31	-0.7	-0.5
						OFF	23	0.4164	0.83514	2.616	62.79	-0.7	-0.4
131	3	2	34	6	5	ON	1515	0.4194	0.83543	2.638	63.31	-0.7	-0.4
						OFF	82	0.4296	0.83625	2.699	64.78	-0.7	-0.3
131	3	5	17	6	5	ON	1639	0.4339	0.83661	2.726	65.42	-0.7	-0.3
						OFF	41	0.4375	0.83691	2.749	65.97	-0.7	-0.3
132	7	3	35	6	5	ON	1491	0.4168	0.83517	2.619	62.85	-0.7	-0.4
						OFF	87	0.4276	0.83688	2.687	64.48	-0.7	-0.3
133	8	3	69	6	5	ON	1855	0.4325	0.83658	2.718	65.22	-1.4	-1.8
						OFF	159	0.4426	0.83735	2.781	66.74	-1.4	-1.3
133	8	6	117	6	5	ON	2144	0.4359	0.83678	2.739	65.73	-1.4	-2.2
						OFF	277	0.4437	0.83487	2.537	68.88	-1.4	-2.3
134	4	4	35	6	5	ON	1768	0.4485	0.83717	2.768	66.43	-1.4	-1.2
						OFF	81	0.4437	0.83744	2.788	66.98	-1.4	-1.4
134	4	7	44	6	5	ON	2128	0.4384	0.83699	2.755	66.11	-1.4	-2.2
						OFF	132	0.4381	0.83629	2.782	64.86	-1.4	-2.4
135	4	2	15	6	5	ON	1456	0.4494	0.83454	2.572	61.73	-1.4	-1.2
						OFF	38	0.4147	0.83499	2.686	62.54	-1.4	-1.1

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135	4	4	65	6	5	ON	1614	0.4286	0.83617	2.693	64.63	-1.4	-8.9
						OFF	158	0.4484	0.83716	2.767	66.48	-1.4	-1.1
135	4	7	15	6	5	ON	1869	0.4441	0.83747	2.798	66.97	-1.4	-1.5
						OFF	34	0.4443	0.83749	2.792	67.88	-1.4	-1.6
136	4	1	24	6	5	ON	1514	0.4172	0.83528	2.621	62.91	-1.4	-1.1
						OFF	59	0.4243	0.83588	2.666	63.99	-1.4	-1.8
136	4	2	32	6	5	ON	1691	0.4355	0.83675	2.737	65.68	-1.4	-1.8
						OFF	76	0.4485	0.83717	2.768	66.43	-1.4	-1.2
136	4	3	32	6	5	ON	1818	0.4425	0.83733	2.788	66.72	-1.4	-1.3
						OFF	73	0.4443	0.83749	2.792	67.88	-1.4	-1.5
137	4	6	25	6	5	ON	2617	0.3713	0.83133	2.333	55.99	-1.4	-2.4
						OFF	71	0.3585	0.83825	2.252	54.86	-1.4	-2.4
137	4	8	38	6	5	ON	2954	0.3198	0.82699	2.818	48.23	-1.4	8.5
						OFF	123	0.3842	0.82567	1.911	45.87	-1.4	2.2
138	2	4	63	6	5	ON	2128	0.4376	0.83692	2.749	65.98	-1.4	-2.2
						OFF	149	0.4239	0.83576	2.663	63.92	-1.4	-2.5
143	3	8	16	5	5	ON	2869	0.4487	0.83718	2.769	66.45	-1.4	-2.1
						OFF	41	0.4382	0.83698	2.753	66.88	-1.4	-2.2

RATE ESTIMATE

AFT-PAW CAMERA NUMBER - 196													
JPW NO	FR	R	A	TUR/	INST	INST	SCAN	RATE	PCT	RATE			
				DUR	CPS	ANG-VEL	R/SEC	I/SEC	CALIB	REQD			
71	4	5	5	6	5	ON	1758	0.4441	0.83748	2.791	66.98	-1.2	-8.2
						OFF	12	0.4449	0.83754	2.795	67.89	-1.2	-8.3
72	8	8	4	6	5	ON	13	0.1718	0.81449	1.879	25.98	-1.2	-42.3
						OFF	23	0.1718	0.81449	1.879	25.98	-1.2	-43.3
72	7	1	28	6	5	ON	1158	0.3623	0.83848	2.264	54.34	-1.2	-8.6
						OFF	58	0.3711	0.83131	2.332	55.96	-1.2	-8.1
72	7	2	65	5	5	ON	1319	0.3896	0.83288	2.448	58.76	-1.2	8.4
						OFF	163	0.4158	0.83588	2.612	62.69	-1.2	8.5
72	7	7	29	6	5	ON	1875	0.4471	0.83773	2.889	67.42	-1.2	-1.2
						OFF	45	0.4472	0.83773	2.818	67.43	-1.2	-1.4
73	9	2	15	5	5	ON	1536	0.4232	0.83569	2.658	63.79	-1.2	8.4
						OFF	35	0.4275	0.83688	2.686	64.47	-1.2	8.4
73	9	6	67	6	5	ON	2277	0.4293	0.83623	2.698	64.74	-1.2	-8.2
						OFF	144	0.4299	0.83459	2.576	61.81	-1.2	8.6
74	1	6	24	6	5	ON	2824	0.4471	0.83772	2.889	67.41	-1.2	-1.4
						OFF	57	0.4467	0.83769	2.887	67.37	-1.2	-1.8
77	2	5	25	6	5	ON	2644	0.3728	0.83139	2.337	56.89	-1.2	1.6
						OFF	79	0.3572	0.83814	2.244	53.86	-1.2	1.9
79	5	8	9	6	5	ON	1772	0.4455	0.83759	2.799	67.18	-1.2	-8.3
						OFF	22	0.4467	0.83769	2.887	67.36	-1.2	-8.4
81	8	8	4	6	5	ON	13	0.1646	0.81389	1.834	24.82	-1.2	-153.5
						OFF	24	0.1646	0.81389	1.834	24.82	-1.2	-155.4
83	3	1	57	6	5	ON	1312	0.3894	0.83277	2.448	58.56	-1.2	-8.1
						OFF	142	0.4116	0.83473	2.586	62.87	-1.2	8.3
84	6	6	47	6	5	ON	2546	0.3896	0.83288	2.448	58.75	-1.2	1.3
						OFF	127	0.3667	0.83894	2.384	55.29	-1.2	1.9
85	7	2	11	6	5	ON	1317	0.3892	0.83284	2.445	58.68	-1.2	-8.1

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					OFF	31	8.3946	8.83329	2.479	59.58	-1.2	8.1
					ON	1659	8.4369	8.83686	2.745	65.88	-1.2	8.8
					OFF	44	8.4488	8.83719	2.778	66.47	-1.2	-8.1
86	3	2	32	6	5 ON	1457	8.4138	8.83492	2.688	62.41	-8.8	8.8
					OFF	77	8.4248	8.83584	2.669	64.86	-8.8	8.8
86	3	4	166	6	5 ON	1612	8.4341	8.83663	2.728	65.46	-8.8	8.7
					OFF	372	8.4493	8.83791	2.823	67.75	-8.8	-8.6
87	4	2	67	6	5 ON	1277	8.3848	8.83248	2.413	57.98	-8.8	8.1
					OFF	167	8.4128	8.83476	2.589	62.13	-8.8	8.8
87	4	5	15	6	5 ON	1635	8.4366	8.83684	2.744	65.84	-8.8	8.6
					OFF	35	8.4488	8.83713	2.765	66.36	-8.8	8.5
87	4	8	28	6	5 ON	1927	8.4493	8.83791	2.823	67.76	-8.8	-8.8
					OFF	45	8.4493	8.83791	2.823	67.75	-8.8	-8.8
88	4	2	25	6	5 ON	1535	8.4249	8.83585	2.678	64.87	-8.8	8.7
					OFF	59	8.4322	8.83647	2.715	65.17	-8.8	8.7
89	9	6	41	6	5 ON	2332	8.4246	8.83583	2.668	64.83	-8.8	8.3
					OFF	131	8.4181	8.83468	2.577	61.84	-8.8	8.8
98	3	1	28	6	5 ON	1228	8.3736	8.83153	2.348	56.34	-8.8	-8.4
					OFF	76	8.3874	8.83269	2.434	58.42	-8.8	8.2
94	8	8	22	6	5 ON	2295	8.4293	8.83623	2.698	64.74	-8.8	8.2
					OFF	55	8.4222	8.83563	2.653	63.67	-8.8	8.4
92	6	18	25	6	5 ON	2716	8.3685	8.83842	2.265	54.36	-8.8	1.9
					OFF	59	8.3583	8.82956	2.281	52.83	-8.8	2.2
98	1	1	58	6	5 ON	1392	8.4838	8.83487	2.537	68.89	-8.8	8.3
					OFF	142	8.4249	8.83585	2.678	64.87	-8.8	8.6
100	1	4	16	6	5 ON	1798	8.4488	8.83787	2.828	67.68	-8.8	8.1
					OFF	37	8.4491	8.83789	2.822	67.72	-8.8	-8.3
100	1	6	24	6	5 ON	2495	8.4882	8.83377	2.514	68.35	-8.8	8.8
					OFF	62	8.3895	8.83286	2.447	58.73	-8.8	1.8
100	1	7	64	6	5 ON	2643	8.3813	8.83217	2.395	57.49	-8.8	1.2
					OFF	178	8.3494	8.82948	2.195	52.68	-8.8	1.9
101	3	2	38	6	5 ON	1376	8.3982	8.83368	2.582	68.84	-1.5	-8.4
					OFF	95	8.4129	8.83484	2.595	62.27	-1.5	-8.1
101	3	4	78	6	5 ON	1523	8.4174	8.83522	2.623	62.94	-1.5	-8.1
					OFF	151	8.4388	8.83695	2.752	66.84	-1.5	-8.2
101	3	6	78	6	5 ON	1728	8.4489	8.83728	2.778	66.48	-1.5	-8.3
					OFF	176	8.4462	8.83763	2.882	67.25	-1.5	-1.4
101	3	7	39	6	5 ON	1928	8.4462	8.83763	2.882	67.25	-1.5	-1.6
					OFF	83	8.4458	8.83762	2.881	67.22	-1.5	-1.5
102	3	1	59	6	5 ON	1374	8.3971	8.83358	2.495	59.88	-1.5	-8.4
					OFF	97	8.4123	8.83479	2.591	62.18	-1.5	-8.1
102	3	2	81	6	5 ON	1519	8.4196	8.83548	2.636	63.27	-1.5	-8.8
					OFF	187	8.4398	8.83711	2.764	66.32	-1.5	-8.3
102	3	6	22	6	5 ON	1831	8.4457	8.83761	2.888	67.21	-1.5	-8.9
					OFF	52	8.4459	8.83763	2.882	67.24	-1.5	-1.3
102	3	8	36	6	5 ON	1965	8.4462	8.83763	2.882	67.25	-1.5	-1.6
					OFF	83	8.4456	8.83768	2.888	67.28	-1.5	-1.3
103	3	4	24	6	5 ON	1627	8.4323	8.83631	2.784	64.89	-1.5	-8.2
					OFF	56	8.4361	8.83688	2.748	65.76	-1.5	-8.3
103	3	7	75	6	5 ON	1769	8.4441	8.83747	2.792	66.97	-1.5	-8.5
					OFF	172	8.4462	8.83763	2.882	67.25	-1.5	-1.6

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