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PM-1521-X-K

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24 PAGES

HEXAGON MISSION HISTORY

SUMMARY (SV-1 THROUGH SV-19)

This memorandum includes a statistical summary of each satellite vehicle (SV) flight photographic operational history. Included are the launch and recovery dates of each recovery vehicle (RV), principal orbital parameters, recovered feet from each camera, number and distribution of frames in each segment, total orbits, photo operations and camera power-on time. The data has been compiled from daily Rebound 850 messages, Rebound 831 messages for each RV and the Sensor Subsystem (SS) post-flight reports prepared by the West Coast Field Office.

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BLOCK I FLIGHT SUMMARY

SOR*	FLIGHT NO	SV-1 1201	SV-2 1202	SV-3 1203	SV-4 1204	SV-5 1205	SV-6 1206
139	RESOLUTION-ACCEPTANCE AVE (L/MM)	147	161	175	167	186	200
-	LAUNCH DATE	6-15-71	1-20-72	7-07-72	10-10-72	3-09-73	7-13-73
30-45	DURATION - DAYS	31	41	57	69	64	74
208,000	FILM TRANSPORTED - FEET	175,601	156,192	185,325	218,346	218,338	212,432
480	PHOTO OPERATIONS	430	426	720	731	639	666
82	ALTITUDE - NM (PERIGEE)	99	88	95	88	86	88
2.7	AVG GROUND RESOLUTION-FEET (TRI-BAR)	3.5	2.8	3.1	3.4	2.4	2.9
20	ESTIMATED GROUND COVERAGE (MILLION NM ²) (IMAGED)	32	40	65	51	44	46

* Standard Operational Requirements

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SV-1 (MIDSECTION S/N 003)
HEXAGON MISSION HISTORY SUMMARY

LAUNCH DATE, TIME (PST)	6/15/71, 1041 HRS		NOTES: (1) RV-3 NOT RECOVERED DUE TO PARACHUTE FAILURE. (2) RV-4 RECOVERED PREMATURELY DUE TO PYRO BATTERY DEGRADATION.					
INCLIN/PERIGEE/APOGEE	96.4°/99.3/165.1 NM							
PERIOD - (MIN.: SEC)	89:23							
B ANGLE (DEG)	+21°							
FILTER, A/B	W-2E/W-12							
TOTAL FILM (FT) A/B	100,826/100,502							
FILM LEFT (FT) A/B	12,510/13,217 (2)							
MAIN BUS VOLTS, MIN./MAX.	NA		NA-NOT AVAILABLE					
RV NUMBER	-1		-2		-3		-4 (2)	
TAKE-UP SN	015		008		011		010	
RECOVERY DATE	6/20/71		6/26/71		7/10/71 (1)		7/16/71	
RECOVERY REV/LAST OP OF RV	82/64		179/187		405/376		501/430	
MISSION DAYS TOTAL = 31	6		6		14		5	
ON TIME (SEC/HR)	NA		NA		NA		NA	
TOTAL = NA								
LEAK RATE (LB/MIN) 0.00024	ICD = 0.000496		ICD = 0.000434		ICD = 0.000370		ICD = 0.000308	
PNS RATE (LB/MIN)	0.022 ± 0.003		0.022 ± 0.003		0.022 ± 0.003		0.022 ± 0.003	
CAMERA	A	B	A	B	A	B	A	B
FILM TYPE	1414	1414	1414	1414	1414	1414	1414	1414
RECOVERED FEET	20469	20033	26094	27100	26983	27100	13044	12753
PLANE OF BEST FOCUS (in)	79	51	79	51	79	51	79	51
NUMBER OF FRAMES 120°	346	346	94	94	0	0	401	459
90°	1086	1086	1750	1750	1353	1353	517	421
60°	612	612	713	713	1149	1149	401	462
30°	12	12	998	998	1305	1305	24	24
TOTAL FRAMES	2056	2056	3555	3555	3807	3807	1343	1366
PERFORMANCE:								
GRD. RES (FT) @ 30° 2:1	2.6	3.0	2.9	3.0	NA	NA	2.5	2.8

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SV-2 (MIDSECTION S/N 002)
HEXAGON MISSION HISTORY SUMMARY

LAUNCH DATE, TIME (PST)	1/20/72, 1036 HRS		NOTES: (1) INCLUDES PRE-LAUNCH FOOTAGE (3135 ft. -A, 3130 ft. -B) (2) FILM SEPARATED/B-SIDE NA-NOT AVAILABLE					
INCLIN/PERIGEE/APOGEE	97.0°/86.1/188.7 NM							
PERIOD - (MIN.: SEC)	89:26							
B ANGLE (DEG)	+30°							
FILTER, A/B	W-12/W-2E							
TOTAL FILM (FT) A/B	110,945/110,298 (1)							
FILM LEFT (FT) A/B	10,541/54,460							
MAIN BUS VOLTS, MIN./MAX.	27.5/30.0							
RV NUMBER	-1		-2		-3		-4	
TAKE-UP SN	017		019		016		012	
RECOVERY DATE	1/26/72		2/8/72		2/17/72		2/29/72	
RECOVERY REV/LAST OP OF RV	97/75		290/202		451/293		629/426	
MISSION DAYS TOTAL = 40	7		13		9		11	
ON TIME (SEC/HR)	14495/4.03		16618/4.62		12687/3.52		16018/4.45	
TOTAL = 59,818/16.6								
LEAK RATE (LB/MIN)								
PNS RATE (LB/MIN)	0.023 - 0.026		0.021 - 0.025		0.021 - 0.022		0.021 - 0.023	
CAMERA	A	H	A	H	A	B	A	H
FILM TYPE	1414	1414	1414	1414	1414	1414	1414	1414
RECOVERED FEET	27935	28070	27564	27689	18186	79(2)	26669	0(2)
PLANE OF BEST FOCUS ()	59/61	87/85/83	59/43/46	85/76	46	76	46	(2)
NUMBER OF FRAMES 120°	923	923	685	686	329	0	805	(2)
90°	648	648	997	1000	605	0	800	(2)
60°	1020	1017	960	955	636	15	500	(2)
30°	541	541	1372	1368	814	0	1283	(2)
TOTAL FRAMES	3132	3129	4015	4009	2384	15	3388	(2)
PERFORMANCE:								
GRD. RES (FT) @ 30° 2:1	2.1	1.9	2.4	2.2	1.7	NA	2.2	NA

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SV-3 (MIDSECTION S/N 004)
HEXAGON MISSION HISTORY SUMMARY

LAUNCH DATE, TIME (PST)	7/7/72, 0946 HRS		NOTES: (1) INCLUDES PRE-LAUNCH FOOTAGE (2014 ft.-A, 2059 ft.-B). (2) FILM FOLDED NA - NOT AVAILABLE					
INCLIN/PERIGEE/APOGEE	96.9°/95.5/137.3 NM							
PERIOD - (MIN.: SEC)	88:47							
β ANGLE (DEG)	+34°							
FILTER, A/B	W-12/W-2E							
TOTAL FILM (FT) A/B	103,170/107,728 (1)							
FILM LEFT (FT) A/B	6009/19,564							
MAIN BUS VOLTS, MIN./MAX.	28.0/31.3							
RV NUMBER	-1		-2		-3		-4	
TAKE-UP SN	020		014		021		018	
RECOVERY DATE	7/15/72		7/29/72		8/12/72		9/2/72	
RECOVERY REV/LAST OP OF RV	132/135		359/314		586/461		927/720	
MISSION DAYS TOTAL = 57	8		14		14		21	
ON TIME (SEC/HR)	18572/5.16		21351/5.93		17303/4.81		24874/6.91	
TOTAL = 82,100/22.8								
LEAK RATE (LB/MIN)	0.000174		0.000142		0.000080		0.000079	
PNS RATE (LB/MIN)	0.021 (STEREO AVG.)		0.021 (STEREO AVG.)		0.021 (STEREO AVG.)		0.021 (STEREO AVG.)	
CAMERA	A	B	A	B	A	B	A	B
FILM TYPE	1414	1414	1414	1414	1414	1414	1414	1414
RECOVERED FEET	27364 (1)	27426 (1)	27400	27471	19,761	3,302	22,636	29,965
PLANE OF BEST FOCUS (")	84	118	84/92	118/110	92	110	92	110
NUMBER OF FRAMES 120°	836	835	866	866	627	104	0	0
90°	844	843	845	845	559	62	610	611
60°	799	799	783	783	754	91	1899	2676
30°	1204	1204	1649	1648	696	147	882	1304
TOTAL FRAMES	3683	3681	4143	4142	2636	404 (2)	3391 (2)	4591
PERFORMANCE:								
GRD. RES (FT) @ 30° 2:1	2.2	3.0	3.6	2.8	2.5	2.8	2.1	2.1

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SV-4 (MIDSECTION S/N 005)
HEXAGON MISSION HISTORY SUMMARY

LAUNCH DATE, TIME (PST)	10/10/72, 1003 HRS		NOTES: (1) INCLUDES PRE-LAUNCH FOOTAGE (2175 ft. -A, 2242 ft. -B) (2) INCLUDES 10,009 ft. OF SO-255 ON RV-4/A-SIDE					
INCLIN/PERIGEE/APOGEE	96.5°/85.3/156.6 NM							
PERIOD - (MIN.: SEC)	88:59							
β ANGLE (DEG)	+30.8 TO 32.8							
FILTER, A/B	CLEAR/W-12							
TOTAL FILM (FT) A/B	107,568/110,804 (1)							
FILM LEFT (FT) A/B	0/26							
MAIN BUS VOLTS, MIN./MAX.	27.0/29.7							
RV NUMBER	-1		-2		-3		-4	
TAKE-UP SN	024		025		026		022	
RECOVERY DATE	10/21/72		11/5/72		11/23/72		12/17/72	
RECOVERY REV/LAST OP OF RV	173/154		420/313		712/527		1102/731	
MISSION DAYS TOTAL = 68	12		15		18		23	
ON TIME (SEC/HR)	17430/4.84		20575/5.72		24072/6.69		20062/5.57	
TOTAL = 82,139/22.81								
LEAK RATE (LB/MIN)	0.000115		0.000104		0.000092			
PHS RATE (LB/MIN)	0.0218		0.0218		0.0218		0.0218	
CAMERA	A	B	A	B	A	B	A	B
FILM TYPE	1414	1414	1414	1414	1414	1414	1414/255	1414
RECOVERED FEET	28194 (1)	28439 (1)	29036	29056	27006	27655	23332 (2)	25628
PLANE OF BEST FOCUS (L)	98	80	106	80	106	80	102/132	80
NUMBER OF FRAMES 120°	0	0	0	0	0	0	0	0
90°	1444	1443	1861	1862	1025	1060	1102	1140
60°	1250	1250	1057	1057	1431	1450	1157	1275
30°	855	855	915	915	1818	1874	1053	1215
TOTAL FRAMES	3549	3548	3833	3834	4274	4384	3312	3630
PERFORMANCE:								
GRD. RES (FT) @ 30° 2:1	3.3	2.6	2.7	2.5	2.6	3.3	2.3/2.9	2.1

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SV-5 (MIDSECTION S/N 006)
HEXAGON MISSION HISTORY SUMMARY

LAUNCH DATE, TIME (PST)	3/9/73, 1200 HRS		NOTES: (1) INCLUDES PRE-LAUNCH FOOTAGE (1314 ft.-A, 1381 ft.-B) (2) INCLUDES 2007 ft. OF SO-255 ON RV-4/A-SIDE (3) DUE TO ISCCU FAILURE, PNS RATE WAS PREMATURELY DETERMINED WITH CHUTE PRESSURE DIAGNOSTIC EST.-ESTIMATED					
INCLIN/PERIGEE/APOGEE	95.7°/85.3/158.5 NM							
PERIOD - (MIN.: SEC)	88:30							
B ANGLE (DEG)	-8.0°							
FILTER, A/B	CLEAR/W-12							
TOTAL FILM (FT) A/B	108,197/110,141 (1)							
FILM LEFT (FT) A/B	0/0							
MAIN BUS VOLTS, MIN./MAX.	27.0/30.4							
RV NUMBER	-1	-2	-3	-4				
TAKE-UP SN	023	009	028	027				
RECOVERY DATE	3/21/73	4/4/73	4/18/73	5/11/73				
RECOVERY REV/LAST OP OF RV	194/122	422/276	649/432	1016/639				
MISSION DAYS TOTAL - 64	13	14	14	23				
ON TIME (SEC/HR)	15324/4.26	16861/4.63	18176/5.05	20456/5.68				
TOTAL = 70,817/19.7								
LEAK RATE (LB/MIN)								
PNS RATE (LB/MIN)	0.022-0.024 (EST.)(3)		0.024 -0.025 (EST.)(3)		0.024 (EST.)(3)		0.024 (EST.)(3)	
CAMERA	A	B	A	B	A	B	A	B
FILM TYPE	1414	1414	1414	1414	1414	1414	1414/255	1414
RECOVERED FEET	27342 (1)	27432 (1)	27486	27454	28526	28818	24843 (2)	26437
PLANE OF BEST FOCUS (L)	99	27	99	15	99	15	99/133	15
NUMBER OF FRAMES 120°	0	0	0	0	0	0	0	0
90°	1750	1749	1488	1488	1403	1400	1101	1178
60°	1083	1082	1438	1438	1773	1799	1188	1214
30°	572	572	787	787	597	596	1026	1233
TOTAL FRAMES	3405	3403	3713	3713	3773	3795	3315	3625
PERFORMANCE:								
GRD. RES (FT) @ 30° 2:1	1.8	1.6	3.5	2.2	2.5	3.4	2.3/3.2	2.1

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SV-6 (MIDSECTION S/N 007)
HEXAGON MISSION HISTORY SUMMARY

LAUNCH DATE, TIME (PST)	7/13/73, 1222 HRS.		NOTES: (1) INCLUDES PRE-LAUNCH FOOTAGE (1514 ft. -A, 1544 ft. -B) (2) INCLUDES 5000 ft. OF SO-255 ON RV-2/B-SIDE (3) INCLUDES 9999 ft. OF SO-255 ON RV-3/B-SIDE (4) INCLUDES 477 ft. OF SO-130 ON RV-4/A-SIDE (5) INCLUDES 6055 ft. OF SO-255 ON RV-4/B-SIDE							
INCLIN/PERIGEE/APOGEE	96.2°/87.7/154.5 NM									
PERIOD - (MIN.: SEC)	88:50									
B ANGLE (DEG)	-1.9°									
FILTER, A/B	W-12/CLEAR									
TOTAL FILM (FT) A/B	109,700/102,732 (1)									
FILM LEFT (FT) A/B	0/0									
MAIN BUS VOLTS, MIN./MAX.	27.1/30.0									
RV NUMBER	-1		-2		-3		-4			
TAKE-UP SN	030		038		013		047			
RECOVERY DATE	8/1/73		8/13/73		9/6/73		9/24/73			
RECOVERY REV/LAST OP OF RV	310/197		488/311		908/515		1202/666			
MISSION DAYS TOTAL - 74	20		12		24		18			
ON TIME (SEC/HR)	21328/5.92		14591/4.05		21918/6.09		16385/4.55			
TOTAL - 74,222/20.61										
LEAK RATE (LB/MIN)										
PHS RATE (LB/MIN)	0.023		0.023		0.023		0.023			
CAMERA	A	B	A	B	A	B	A	B		
FILM TYPE	1414	1414	1414	1414/255	1414	1414/255	1414/130	1414/255		
RECOVERED FEET	28922 (1)	28967 (1)	26720	26784 (2)	28159	24708 (3)	25899 (4)	22273 (5)		
PLANE OF BEST FOCUS (1/2)	-7	+57	-7	+57/+87	-7	+57/+93	-7/+23	+57/+93		
NUMBER OF FRAMES 120°	209	200	573	572	172	170	174	174		
90°	1174	1150	1089	1066	1072	910	1279	1049		
60°	1069	1049	1040	1018	1405	1197	1167	1002		
30°	1421	1371	609	585	1353	1216	705	601		
TOTAL FRAMES	3873	3772	3311	3241	4002	3493	3325	2826		
PERFORMANCE:										
GRD. RES (FT) @ 30° 2:1	2.4	2.3	3.0	2.7/3.0	2.25	2.23/3.9	2.2/NA	2.9/3.2		

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BLOCK II FLIGHT SUMMARY

SOR ¹	FLIGHT NO.	SV-7 1207	SV-8 1208	SV-9 1209	SV-10 1210	SV-11 1211	SV-12 1212
150	RESOLUTION-ACCEPTANCE AVG (L/MM)	195	191	197	198	197	200
-	LAUNCH DATE	11-10-73	4-10-74	10-29-74	6-08-75	12-04-75	7-08-76
50	DURATION - DAYS	103	106	130	121	117	155
208,000	FILM TRANSPORTED ² - FEET	213,633	215,693	228,619	225,691	167,685	237,425
750	PHOTO OPERATIONS	700	774	759	789	850	1,048
82	ALTITUDE - NM (PERIGEE)	89	86	85	89	90	90
2.7 AT 82NM	AVG GROUND RESOLUTION- FEET (TRI-BAR) (UNADJUSTED)	2.7	2.5	2.1	2.3	2.4	2.3
20	ESTIMATED GROUND COVERAGE (MILLION NM ²) IMAGED	50	46	51	40	28	37
NOTES 1. Standard Operational Requirement 2. Includes Prelaunch Footage. Refer to Individual Flight Summaries for Prelaunch Footage Values.							

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SV-7 (MIDSECTION S/N 010)
HEXAGON MISSION HISTORY SUMMARY

LAUNCH DATE, TIME (PST)	11/10/73, 1212 HRS		NOTES: (1) INCLUDES PRE-LAUNCH FOOTAGE (1815 ft. -A, 1716 ft. -B) (2) INCLUDES 5007 ft. OF SO-255 ON RV-1/B-SIDE (3) INCLUDES 501 ft. OF FE-3916 ON RV-4/B-SIDE (AT CORE) NA-NOT AVAILABLE					
INCLIN/PERIGEE/APOGEE	96.9°/88.7/154.4 NM							
PERIOD - (MIN.: SEC)	88:54							
B ANGLE (DEG)	+0.1°							
FILTER, A/B	(W-12)(W-2E3)/(W-12)(W-2E3)							
TOTAL FILM (FT) A/B	107,390/106,243							
FILM LEFT (FT) A/B	0/0							
MAIN BUS VOLTS, MIN./MAX.	26.8/29.6							
RV NUMBER	-1		-2		-3		-4	
TAKE-UP SN	041		043		039		037	
RECOVERY DATE	11/24/73		12/17/73		1/14/74		2/20/74	
RECOVERY REV/LAST OP OF RV	225/116		602/249		1040/423		1656/700	
MISSION DAYS TOTAL = 103	15		23		28		37	
ON TIME (SEC/HR)	14992/4.16		14230/3.95		18064/5.02		22454/6.24	
TOTAL = 49,740/19.37								
LEAK RATE (LB/MIN)								
PNS RATE (LB/MIN)	0.023		0.024		0.024		0.025	
CAMERA	A	B	A	B	A	B	A	B
FILM TYPE	1414	1414/255	1414	1414	1414	1414	1414	1414/3916
RECOVERED FEET	28964 (1)	27754(1)(2)	26015	26077	28982	29036	23429	23376 (3)
PLANEL OF BEST FOCUS ()	137	33/63	137	33	137	33	137	33/63
NUMBER OF FRAMES 120°	299	173	214	214	108	108	65	56
90°	1554	1507	1082	1082	1356	1358	396	402
60°	1019	994	1557	1557	1408	1407	1227	1223
30°	312	377	466	466	1109	1109	2189	2194
TOTAL FRAMES	3184	3051	3319	3319	3911	3982	3877	3875
PERFORMANCE:								
GRD. RES (FT) @ 30° 2:1	2.54	2.70/2.5	2.32	2.40	NA	NA	2.25	2.32/5.5

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SV-8 (MIDSECTION S/N 011)
HEXAGON MISSION HISTORY SUMMARY

LAUNCH DATE, TIME (PST)	4/10/74, 1220 HRS		NOTES: (1) INCLUDES PRE-LAUNCH FOOTAGE (1853 ft. -A, 1991 ft. -B) (2) INCLUDES 2588 ft. OF SO-255 ON RV-4/B-SIDE (3) INCLUDES 3036 ft. OF FE-3916 ON RV-4/B-SIDE					
INCLIN/PERIGEE/APOGEE	94.5°/85.5/164.4 NM							
PERIOD - (MIN.: SEC)	89:00							
B ANGLE (DEG)	-2.6°							
FILTER, A/B	W-12/W-12							
TOTAL FILM (FT) A/B	108,981/106,712 (1)							
FILM LEFT (FT) A/B	0/0							
MAIN BUS VOLTS, MIN./MAX.	26.8/29.9							
RV NUMBER	-1		-2		-3		-4	
TAKE-UP SN	045		021-A		044		042	
RECOVERY DATE	4/25/74		5/22/74		6/18/74		7/24/74	
RECOVERY REV/LAST OP OF RV	225/131		681/364		1116/577		1701/774	
MISSION DAYS TOTAL = 106	16		27		27		36	
ON TIME (SEC/HR)	15936/4.427		23511/6.531		22002/6.112		20259/5.628	
TOTAL = 81,708/22.70								
LEAK RATE (LB/MIN)								
PNS RATE (LB/MIN)	0.023		0.023		0.023		0.023	
CAMERA	A	B	A	B	A	B	A	B
FILM TYPE	1414	1414	1414	1414	1414	1414	1414	1414/255/3916
RECOVERED FEET	28042 (1)	28111 (1)	28854	27758	25258	24225	26827	26618(2)(3)
PLANE OF BEST FOCUS ()	68	25/26	68/76	25	76	25	76	25/35/55
NUMBER OF FRAMES 120°	270	270	118	118	40	40	0	0
90°	1148	1148	931	853	781	727	853	853
60°	1231	1230	1350	1352	1316	1266	1911	1889
30°	763	763	2117	2063	1991	1972	1072	1103
TOTAL FRAMES	3412	3411	4516	4386	4128	4005	3836	3845
PERFORMANCE:								
GRD. RES (FT) @ 30°, 2:1	2.06	1.86	2.03	2.05	1.90	1.40	2.24	2.10/2.9/5.4

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SV-9 (MIDSECTION S/N 012)
HEXAGON MISSION HISTORY SUMMARY

LAUNCH DATE, TIME (PST)	10/29/74 1130 HRS		NOTES: (1) INCLUDES PRE-LAUNCH FOOTAGE (1601 FT.-A,1609 FT.-B). (2) INCLUDES 5640 FT. OF SO-255 ON RV-2/B-SIDE. (3) INCLUDES 2508 FT. OF SO-255 AND 3384 FT. OF SO-130 ON RV-3/B-SIDE.					
INCLIN/PERIGEE/APOGEE	96.7°/85.3 NM/155.7NM							
PERIOD - (MIN.: SEC)	88:57							
B ANGLE (DEG)	+9.0							
FILTER, A/B	W-12/W-12(W-2E)							
TOTAL FILM (FT) A/B	116,813/111,806(1)							
FILM LEFT (FT) A/B	0/0							
MAIN BUS VOLTS, MIN./MAX.	26.3/29.4		NA-NOT AVAILABLE					
RV NUMBER	-1		-2		-3		-4	
TAKE-UP SN	048		046		040		024A	
RECOVERY DATE	11/17/74		12/23/74		1/21/75		3/7/75	
RECOVERY REV/LAST OP OF RV	307/140		886/366		1356/550		2094/759	
MISSION DAYS TOTAL = 130	20		36		29		45	
ON TIME (SEC/HR)	17299/4.81		24102/6.69		20262/5.63		21775/6.05	
TOTAL = 83438/23.18								
LEAK RATE (LB/MIN)	NA		0.000213		0.000174		0.000204	
PRS RATE (LB/MIN)	0.023		0.023		0.023		0.023	
CAMERA	A	B	A	B	A	B	A	B
FILM TYPE	1414	1414	1414	1414/255	1414	1414/255/130	1414	1414
RECOVERED FEET	29,512(1)	29,576(1)	29,546	26,845 (2)	28,505	27,652 (3)	29,250	27,731
PLANE OF BEST FOCUS (.)	31	70	31	70/100	31	70/100	31	70
NUMBER OF FRAMES 120°	161	161	35	0	211	211	79	79
90°	1420	1420	1005	954	973	923	1197	1095
60°	1259	1258	1607	1503	1481	1437	1576	1534
30°	955	955	1991	1685	1305	1267	1169	1086
TOTAL FRAMES	3795	3794	4638	4142	3970	3838	4021	3794
PERFORMANCE:								
GRD. RES (FT) @ 30° 2:1	3.40	2.75	2.16	2.16/2.96	2.23	2.57/-/5.00	2.05	2.68

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SV-10 (MIDSECTION S/N 013)
HEXAGON MISSION HISTORY SUMMARY

LAUNCH DATE, TIME (PST)		6/8/75, 1030 PST		NOTES: (1) Includes pre-launch footage (1864 feet -A, 1861 feet -B) (2) Includes 900 feet of SO-130 on RV-1/B-side (3) Includes 2139 feet of SO-255 and 1495 feet SO-130 on RV-2/B-side (4) Includes 4982 feet of SO-255 and 748 feet SO-130 on RV-3/B-side (5) Includes 3750 feet of SO-124 and 1988 feet SO-255 on RV-4/B-side (6) SO-255/SO-130 (7) SO-255/SO-124 N.O. - NOT OBTAINED			
INCLIN/PERIGEE/APOGEE		96.4°/88, RNM/157.0MM					
PERIOD - (MIN: SEC)		88:53					
β ANGLE (DEGREE)		+21.2°					
FILTER, A/B		W-12/(W-12)(W-2E3)					
TOTAL FILM (FT) A/B		115,189/110,502 (1)					
FILM LEFT (FT) A/B		0/0		N.O. - NOT OBTAINED			
MAIN BUS VOLTS - MIN/MAX		26.7/30.3					
	RV NUMBER	-1	-2	-3	-4		
TAKE-UP SN		020A	008A	019A	011		
RECOVERY DATE		6/23/75	7/29/75	9/04/75	10/6/75		
LAST REV/LAST OP OF RV		253/140	829/356	1429/555	1948/789		
MISSION DAYS TOTAL = 121		16	36	37	32		
ON TIME (SEC/HR)		16848/4.68	23167/6.44	21352/5.93	23424/6.51		
TOTAL = 84791/23.55							
LEAK RATE (LB/MIN)		0.000103	0.000154	0.000187	0.000123		
PMS RATE (LB/MIN)		0.023	0.023	0.023	0.023		
	CAMERA	A	B	A	B	A	B
FILM TYPE		1414	1414/SO-130	1414	1414/(6)	1414	1414/(7)
RECOVERED FEET		28763(1)	28713(1)(2)	29766	27994(3)	29,506	27,697(4)
PLANE OF BEST FOCUS (in)		31	31/61	31	31/61	31	31/61
NUMBER OF FRAMES 120°		0	0	0	0	0	0
90°		1460	1460	1292	1144	1017	920
60°		1373	1371	1529	1465	2155	2023
30°		828	828	1324	1277	1004	1004
TOTAL FRAMES		3661	3659	4145	3886	4176	3947
PERFORMANCE:							
GRD. RES (FT) @ 130°, 2:1		2.30	2.56/N.O.	2.33	2.21/N.O./N.O.	2.35	2.98/3.04/6.11
						3.10	N.O./2.68/3.06

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PM-1521-X-K

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SV-11 (MIDSECTION S/N 014
HEXAGON MISSION HISTORY SUMMARY

LAUNCH DATE, TIME (PST)		12/4/75, 1230 HRS PST		NOTES:					
INCLIN/PERIGEE/APOGEE		96.3°/90.0 NM/138.3 NM		(1) Includes prelaunch footage (1053 ft-A, 1052 ft-B)					
PERIOD - (MIN: SEC)		88:31		(2) Includes 1496 feet of SO-130 and 1495 feet of SO-255 on RV-1/B-Side					
B ANGLE (DEGREE)		-3.1		(3) Includes 1500 feet of SO-255 and 1500 feet of SO-130 on RV-3/B-Side					
FILTER, A/B		W-12/(W-12) (W-2E3)		(4) Includes 1493 feet of SO-255, 1500 feet of SO-130, and 4998 feet of SO-208 on RV-4/B-Side					
TOTAL FILM (FT) A/B		56,578/111,107 (1)		(5) SO-255/SO-130					
FILM LEFT (FT) A/B		56,550/0		(6) SO-255/SO-130/SO-208					
MAIN BUS VOLTS - MIN/MAX		26.6/31.0		(7) 1414 = 2.18/SO-130 = N.O./SO-255 = N.O.					
				(8) 1414 = 2.61/SO-255 = N.O./SO-130 = 3.3					
				(9) 1414 = 3.10/SO-255 = N.O./SO-130 = N.O./SO-208 = 2.68 N.O Not Obtained					
RV NUMBER		-1		-2		-3		-4	
TAKE-UP SN		030A		025A		027A		022A	
RECOVERY DATE		1/7/76		1/27/76		2/22/76		3/29/76	
LAST REV/LAST OP OF RV		555/193		881/343		1303/509		1888/850	
MISSION DAYS TOTAL = 117		35		20		26		36	
ON TIME (SEC/HR)		22,523/6.26		32,107/8.92		29,315/8.14		49,330/13.70	
TOTAL = (133,275/37.02)									
LEAK RATE (LB/MIN)		0.000110		0.000133		0.000165		0.000222	
PNS RATE (LB/MIN)		0.0216		0.0125		0.0125		0.0158	
CAMERA		A		B		A		B	
FILM TYPE		1414		1414/(5)		1414		1414/(6)	
RECOVERED FEET		26,590(1)		28,478(1) (2)		29,475		28,374(3)	
PLANE OF BEST FOCUS (μ)		51		77/107		-		77/107	
NUMBER OF FRAMES 120°		26		0		-		0	
90°		1453		1552		-		1456	
60°		1010		1060		-		1483	
30°		905		1123		-		773	
TOTAL FRAMES		3394		3735		-		4021	
PERFORMANCE:									
GRD. RES (FT) @ 130°, 2:1		3.51		(7)		-		N.O.	
								(8)	
								2.40	
								(9)	

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SV-12 (MIDSECTION S/N 015)
HEXAGON MISSION HISTORY SUMMARY

LAUNCH DATE, TIME (PST)	7/08/76, 1030 HRS PST		NOTES: (1) INCLUDES PRELAUNCH FOOTAGE: A=2348 FT., B=2342 FT. (2) INCLUDES 2000 FT. OF SO-255 AND 2000 FT. OF SO-130 ON RV-1/ B-SIDE (3) INCLUDES 1000 FT. OF SO-130 ON RV-2/ B-SIDE (4) INCLUDES 1750 FT. OF SO-255 AND 750 FT. OF SO-130 ON RV-3/ B-SIDE (5) INCLUDES 750 FT. OF SO-255 AND 750 FT. OF SO-130 ON RV-4/ B-SIDE (6) SO-255/SO-130 (7) GRD. RES. (SO-255=3 12/SO-130=N.O.) N.O. - NOT OBTAINED					
INCLIN/PERIGEE/APOGEE	97°/90.1 NM/138.0 NM							
PERIOD - (MIN.: SEC)	88:29							
B ANGLE (DEG)	22.1°							
FILTER, A/B	W-12/(W-12) (W-2E3)							
TOTAL FILM (FT) A/B	120,521/116,904							
FILM LEFT (FT) A/B	0/0							
MAIN BUS VOLTS, MIN./MAX.	26.9/30.4							
RV NUMBER	-1		-2		-3		-4	
TAKE-UP SN	028A		014A		023A		018A	
RECOVERY DATE	8/03/76		9/06/76		10/19/76		12/09/76	
RECOVERY REV/LAST OP OF RV	425/235		979/501		1679/753		2506/1048	
MISSION DAYS TOTAL = 155	27		34		43		51	
ON TIME (SEC/HR)	23814/6,615		26609/7,391		25443/7,068		28881/8,022	
TOTAL = 104,747/29.096								
LEAK RATE (LB/MIN)	N.O.		0.000136		0.000118		N.O.	
PNS RATE (LB/MIN)	0.0245		0.0230		0.0230		0.0267	
CAMERA	A	B	A	B	A	B	A	B
FILM TYPE	1414	1414/(6)	1414	1414/SO-130	1414	1414/(6)	1414	1414/(6)
RECOVERED FEET	29,992(1)	28,385(1)(2)	30,014	29,591(3)	30,028	29,082(4)	30,487	29,846(5)
PLANE OF BEST FOCUS (.)	42	48/78	42/38	48/84/54	38	54/84	38	54/84
NUMBER OF FRAMES 120°	0	0	55	61	22	28	37	0
90°	1021	1126	1038	949	1280	1161	951	957
60°	1588	1459	1559	1552	1450	1486	1674	1635
30°	1324	1144	1674	1636	1334	1267	1580	1551
TOTAL FRAMES	3933	3729	4326	4198	4086	3942	4242	4143
PERFORMANCE:								
GRD. RES (FT) @ : 30° 2:1	N.O.	N.O/N.O/N.O	2.55	2.74/N.O	2.84	2.75/N.O/N.O	3.34	2.95/(7)

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BLOCK III FLIGHT SUMMARY

¹ SOR	FLIGHT NO.	SV-13 1213	SV-14 1214	SV-15 1215	SV-16 1216	SV-17 1217	SV-18 1218
150	RESOLUTION-ACCEPTANCE AVG (L/MM)	186 (1414)	192 (1414)	172 (1414)	175 (1414)	165 (SO-208)	153 (SO-208)
-	LAUNCH DATE	6-27-77	3-16-78	3-16-79	6-18-80	5-11-82	6-20-83
90	DURATION - DAYS	176	178	188	261	204	270
230,000	FILM TRANSPORTED - FEET	239,331 ²	249,630 ²	295,750 ²	295,248 ²	303,527 ²	307,733 ²
1000	PHOTO OPERATIONS	1,068	1,471	1,501	1442	2112	1787
82	ALTITUDE - NM (PERIGEE)	90	92.5	90.8	94.9	95.0	94.5
2.7 AT 82 NM	AVG GROUND RESOLUTION-FEET (TRI-BAR) (UNADJUSTED)	2.6	2.1(SO-208)	1.8(SO-315)	1.7 (SO-315)	1.7 (SO-315)	2.0 (SO-315)
20	ESTIMATED GROUND COVERAGE (MILLION NM ²) IMAGED)	42.3	44.3	53.7	48.3	60.7	61.0
	S ³ OPERATIONS (TOTAL)	-	-	-	-	1576	1469

NOTES

1. Standard Operational Requirement
2. Includes Prelaunch Footage. Refer to Individual Flight Summaries for Prelaunch Footage Values.

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SV-13 (MIDSECTION S/N 016)
HEXAGON MISSION HISTORY SUMMARY

LAUNCH DATE, TIME (PST)		6/27/77, 1030 (PST)		NOTES: (1) INCLUDES PRE-LAUNCH FOOTAGE: A=2180 FT., B=2170 FT. (2) INCLUDES 508 FT. OF SO-130 ON RV-1, B-SIDE (3) INCLUDES 995 FT. OF SO-255 AND 2492 FT. OF SO-130 ON RV-2, B-SIDE (4) SO-255/SO-130 (5) INCLUDES 1498 FT. OF SO-255 AND 1494 FT. OF SO-130 ON RV-3, B-SIDE (6) SO-208/SO-460/SO-464 (7) SO-130/SO-208/SO-255/SO-460/SO-464/7011 (8) INCLUDES 7911 FT. OF SO-208, 3384 FT. OF SO-460, AND 5114 FT. OF SO-464 ON RV-4, A-SIDE (9) INCLUDES 1006 FT. OF SO-130, 11,946 FT. OF SO-208, 997 FT. OF SO-255, 2992 FT. OF SO-460, 3991 FT. OF SO-464, AND 1941 FT. OF 7011 ON RV-4, B-SIDE (10) SO-208=4.21/SO-460=3.83/SO-464=3.09 (11) SO-130=N.A./SO-208=3.83/SO-255=N.A./SO-460=N.O./SO-464=2.69/7011=3.03 (N.O., i.e., NOT OBTAINED) (N.A., i.e., NOT AVAILABLE)					
INCLIN/PERIGEE/APOGEE		97.2°/89.6NM/140.9NM							
PERIOD - (MIN: SEC)		88:30							
B ANGLE (DEGREE)		22.0°							
FILTER, A/B		(W-12)(CLEAR)/(W-12)(CLEAR)							
TOTAL FILM (FT) A/B		121,163/118,168(1)							
FILM LEFT (FT) A/B		0/0							
MAIN BUS VOLTS - MIN/MAX		27.1/31.3							
	RV NUMBER	-1		-2		-3		-4	
TAKE-UP SN		038A		047A		043A		041A	
RECOVERY DATE		8/02/77		9/05/77		11/04/77		12/19/77	
LAST REV/LAST OP OF RV		588/202		1141/440		2118/723		2848/1068	
MISSION DAYS TOTAL = 176		37		34		60		45	
ON TIME (SEC/HR)		20,943/5.82		23,354/6.49		26,256/7.29		30,646/8.51	
TOTAL = 101,199/28.11									
LEAK RATE (LB/MIN)		0.0000936		0.0001145		0.0000949		0.0000797	
PNS RATE (LB/MIN)		0.0231		0.0237		0.0245		0.0234	
	CAMERA	A	B	A	B	A	B	A	B
FILM TYPE		1414	1414/SO-130	1414	1414/(4)	1414	1414/(4)	1414/(6)	1414/(7)
RECOVERED FEET		29,506(1)	28,810(1)(2)	29,059	27,922(3)	29,815	28,729(5)	32,783(8)	32,707(9)
PLANE OF BEST FOCUS (μ)		70	56/86	70/74	56/62/86/92	74	62/92	52/56/74	40/44/54/62/92
NUMBER OF FRAMES 120°		0	64	77	42	43	0	11	11
90°		998	961	750	731	822	822	557	671
60°		1496	1390	1604	1579	1263	1234	1720	1650
30°		1960	1848	2507	2300	3239	3149	3903	3666
TOTAL FRAMES		4454	4263	4938	4652	5367	5205	6191	5998
PERFORMANCE:									
GRD. RES (FT) @ ±30°		2.67	2.93/N.O.	2.71	3.19/N.O./5.50	3.42	2.95/N.O./N.O.	3.35/(10)	3.93/(11)

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SV-14 (MIDSECTION S/N 017)

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SV-15 (MIDSECTION S/N 018)
HEXAGON MISSION HISTORY SUMMARY

LAUNCH DATE, TIME (PST)	3/16/79, 1030 PST		NOTES: (1) Includes prelaunch footage - A = 2031 Ft, B = 2039 Ft (2) Includes 1296 Ft. of SO-130 on RV-1, A-side (3) SO-315/SO-130/SO-255 (4) Includes 701 Ft of SO-130 & 1594 Ft of SO-255 on RV-1, B-side (5) Includes 1498 Ft of SO-130 & 598 Ft. of SO-255 on RV-2, B-side (6) Includes 1597 Ft of SO-130 & 998 Ft of SO-255 on RV-3, B-side (7) Includes 1098 Ft. of SO-130 on RV-4, A-side (8) Includes 800 Ft of SO-130 & 1794 Ft. of SO-255 on RV-4, B-side N.O. - i.e. Not Obtained			
INCLIN/PERIGEE/APOGEE	96.4°/90.8NM/148.4NM					
PERIOD - (MIN.: SEC)	88:45					
B ANGLE (DEG)	29.6°					
FILTER, A/B	(W-12)/(W-12)(CLEAR)					
TOTAL FILM (FT) A/B	150,615/145,135(1)					
FILM LEFT (FT) A/B	0/0					
MAIN BUS VOLTS, MIN./MAX.	27.7/31.1					
RV NUMBER	-1	-2	-3	-4		
TAKE-UP SN	029A	044A	030B	048A		
RECOVERY DATE	4/21/79	6/10/79	7/31/79	9/19/79		
RECOVERY REV/LAST OP OF RV	586/289	1397/703	2224/1120	3035/1501		
MISSION DAYS TOTAL = 188	36	50	51	51		
ON TIME (SEC/HR)	31,237/8.677	38,817/10.783	39,895/11.082	33,295/9.249		
TOTAL = 143,244/39.79						
LEAK RATE (LB/MIN)	1.752x10 ⁻⁴	1.301x10 ⁻⁴	1.247x10 ⁻⁴	1.310x10 ⁻⁴		
PNS RATE (LB/MIN)	0.0235	0.0242	0.0235	0.0241		
CAMERA	A	B	A	B	A	B
FILM TYPE	SO-315/ SO-130	(3)	SO-315	(3)	SO-315	(3)
RECOVERED FEET	37,083(2)	36,369(4)	37,898	36,246(5)	37,970	35,814(6)
PLANE OF BEST FOCUS (.)	44/98	54/108/108	44	54/108/108	44	54/108/108
NUMBER OF FRAMES 120°	0	0	0	0	0	0
90°	923	886	298	298	419	456
60°	1581	1488	1924	1878	1942	1954
30°	4648	4665	6107	5667	5845	5007
TOTAL FRAMES	7152	7039	8329	7843	8206	7417
PERFORMANCE:						
GRD. RES (FT) @ : 30°	1.92/N.O.	1.41/7.22ND	1.67	1.59/N.O./ N.O.	1.86	2.04/5.86/ 3.28

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SV-16 (MIDSECTION S/N 019) HEXAGON MISSION HISTORY SUMMARY

LAUNCH DATE, TIME (PDT)	18 JUNE 1980, 1130 HRS (PDT)		NOTES: (1) INCLUDES PRE-LAUNCH FOOTAGES A = 2247 FT, B = 2231 FT (2) INCLUDES 1798 FT OF SO-130 ON RV-1, A-SIDE (3) INCLUDES 1996 FT OF SO-255 ON RV-1, B-SIDE (4) INCLUDES 1496 FT OF SO-130 ON RV-2, A-SIDE (5) SO-315/SO-255/SO-130 (6) INCLUDES 1493 FT OF SO-255 AND 797 FT OF SO-130 ON RV-2, B-SIDE (7) INCLUDES 498 FT OF SO-255 AND 997 FT OF SO-130 ON RV-3, B-SIDE (8) SO-315/SO-130/QX-827 (9) SO-315/SO-255/QX-827 (10) INCLUDES 1879 FT OF SO-130 AND 5000 FT OF QX-827 ON RV-4, A-SIDE (11) INCLUDES 994 FT OF SO-255 AND 5004 FT OF QX-827 ON RV-4, B-SIDE N.O. - NOT OBTAINED					
ENCLIN/PERICLE/ARANGE	26.5"/93.9 IN/150.4 IN							
PERIOD - (HR: SEC)	83:53							
B ANGLE (DEG)	21.8"							
FILTER, A/B	U-12/(U-12)(CLEAR)							
TOTAL FILM (FT) A/B	148,135 FT/147,113 FT(1)							
FILM LEFT (FT) A/B	0/0							
BATH BUS VOLTS, MIN/MAX	27.0/30.2							
RV NUMBER	-1		-2		-3		-4	
TAKE-UP S/N	026A		022B		031B		014B	
RECOVERY DATE	7/24/80		9/06/80		10/24/80		3/05/81	
RECOVERY RLV/LAST OP OF RV	586/276		1305/624		2079/1001		4206/1442	
MISSION DAYS TOTAL = 261	36		44		48		133	
ON TIME (SEC/HR)	26,505/7.3625		35,024/9.7289		34,939/9.7053		40,717/11.3103	
TOTAL = (137,185/38.107)								
LEAK RATE (LB/MIN)	116.82 x 10 ⁻⁶ LB/MIN		147.42 x 10 ⁻⁶ LB/MIN		108.57 x 10 ⁻⁶ LB/MIN		96.00 x 10 ⁻⁶ LB/MIN	
PHS RATE (LB/MIN)	0.0235 LB/MIN		0.0241 LB/MIN		0.0234 LB/MIN		0.0236 LB/MIN	
CAMERA	A		B		A		B	
FILM TYPE	SO-315/SO-130		SO-315/SO-255		SO-315/SO-130		(5)	
RECOVERED FEET	36,299(1)(2)		36,765(1)(3)		37,019(4)		36,523 (6)	
PLANE OF BEST FOCUS (μ)	42/96		20/74		42/48/102		20/14/74/68	
NUMBER OF FRAMES	120°	0	0	0	0	0	0	0
	90°	1101	1048	635	673	764	821	914
	60°	2372	2463	2403	2394	1902	1889	1573
	30°	2130	2024	4170	3880	5023	4454	4745
TOTAL FRAMES	5603		5535		7208		6947	
PERFORMANCE:								
GROUND RESOLUTION (FT) AT ±30°	1.82/N.O.		1.80/4.04		1.54/5.66		1.54/3.34/5.17	

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 BIP 007-0881-746
 HANDLE VIA BYEMAN
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SV-17 (MIDSECTION 5/N 020)

HEXAGON MISSION HISTORY SUMMARY

Launch Date, Time (PDT)		5/11/82; 1133 hours (PDT)		Notes	
Inclin/Perigee/Apogee		96.49/95.0 NM/146.7 NM		(1) Includes Prelaunch Footage - A = 1820 Ft, B = 1780 Ft	
Period - (Min/Sec)		88:49		(2) SO-315/SO-255/SO-130	
B Angle (Deg)		22.0°		(3) Includes 1194 Ft. of SO-130 on A-Side, RV-1	
Filter (A/B)		W-12 (W-12) (Clear)		(4) Includes 846 Ft. SO-255 and 498 Ft. SO-130 on B-Side, RV-1	
Total Film (Ft) A/B		151,994/151,533 (1)		(5) Includes 489 Ft. of SO-130 on A-Side, RV-2	
Film Left (Ft) A/B		3495/0		(6) Includes 494 Ft. SO-255 on B-Side, RV-2	
Main Bus Volts, Min/Max		27.5/30.5 (10)		(7) Includes 499 Ft. of SO-130 on A-Side, RV-3	
				(8) Includes 499 Ft. SO-255 on B-Side, RV-3	
				(9) Includes 498 Ft. of SO-130 on B-Side, RV-4	
				(10) Water Retrieval. No Damage.	
				(11) Op No. 6. Loss of S ³ TPC Power Supply No. 1. DPE-A Not Operable.	
				(12) TV-B Exceeds ESD on Op 2103	
				(13) ESD on Rev 3072, Minimum Bus Volts = 24.3V	
				N.O. = Not Obtained	
RV Number		-1		-2	
Take-Up S/N		038B		018B	
Recovery Date		6/15/82		8/02/82 (10)	
Recovery Rev/last OP of RV		568/367		1347/849	
Mission Days Total = 204		36		48	
On Time (Sec/Hr)		35,581/9.8836		45,170/12.5472	
Total = 186,212/51.726					
Leak Rate (lb/min)		172.2x10 ⁻⁶ lb/min		94.2x10 ⁻⁶ lb/min	
PNS Rate (lb/min)		0.0236 lb/min		0.0237 lb/min	
Camera		A		B	
Film Type		SO-315/SO-130		(2) SO-315/SO-130	
Recovered Feet		37,374(3X1)		37,278(4X1)	
Plane of Best Focus (μ)		74/128		30/84/84	
Number of Frames		120°		0	
		90°		1222	
		60°		3001	
		30°		2960	
Total Frames		7123		7013	
Performance:					
Ground Resolution (ft) at 300°		1.38/N.O.		1.98/N.O./6.74	
S ³ On Time (sec/hr)					
Total = 368,232/102.287		63,621/17.6725		88,236/24.51	
S ³ Operations					
Total = 1576		266 (11)		343	

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PM-007-0881-744
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SV-18 (MIDSECTION S/N 021)
HEXAGON MISSION HISTORY SUMMARY

Launch Date, Time (PDT) 6/20/83; 1145 hours (PDT)		(1) Includes Prelaunch Footage - A = 1943 Ft, B = 1906 Ft		(6) Includes 498 Ft. SO-130; 12,459 Ft. SO-412	
Inclin/Perigee/Apogee 96.30/94.5 NM/149.4 NM		(2) SO-315/SO-255/SO-130/SO-412		(7) Includes 699 Ft. SO-130	
Period - (Min:Sec) 88:45		(3) Includes 489 Ft. SO-255; 698 Ft. SO-130; 12,458 Ft. SO-412		(8) Includes 499 Ft. SO-255	
S Angle (Deg) 22		(4) Includes 12,454 Ft. SO-412		(9) Includes 498 Ft. SO-255	
Filter (A/B) W-12, 2E/W-12, 2E		(5) Includes 498 Ft. SO-255; 12,452 Ft. SO-412		(10) Includes 499 Ft. SO-130	
Total Film (Ft) A/B 153,296/154,437 (1)					
Film Left (Ft) A/B 0/0					
Main Bus Volts, Min/Max 27.0/31.1					

RV Number		-1		-2		-3		-4	
Take-Up S/N		028B		008B		047B		023B	
Recovery Date		8/24/83		11/7/83		1/9/84		3/16/84	
Recovery Rev/last OP of RV		1060/389		2281/887		3306/1305		4387/1787	
Mission Days Total = 270		65		75		63		67	
On Time (Sec/Hr)		35,087/9.746		44,776/12.438		39,124/10.868		43,285/12.024	
Total = 162,272/45.076									
Leak Rate (lb/min) x 10 ⁻⁶		192 lb/min		150 lb/min		120 lb/min		102 lb/min	
PNS Rate (lb/min)		0.025 lb/min		0.025 lb/min		0.025 lb/min		0.025 lb/min	

Camera		A		B		A		B		A		B					
Film Type		(2)		SO-315/412		SO-315/412/255		SO-315/412/130		SO-315/130		SO-315/255		SO-315/255		SO-315/130	
Recovered Feet		38,982(1X3)		39,861(1X4)		37,980(5)		37,909(6)		37,941(7)		38,226(8)		38,393(9)		38,441(10)	
Plane of Best Focus (μ)		50/104		34		50/104		28/82		50/104		28/82		50/104		28/82	
Number of Frames	120°	33		33		0		0		0		0		0		0	
	90°	1840		1959		1598		1568		1604		1619		1689		1647	
	60°	2127		2116		2361		2352		2823		2853		2518		2512	
	30°	2571		2619		3833		3947		3047		3076		3521		3714	
Total Frames		6571		6727		7792		7867		7474		7548		7728		7873	

Performance:																	
Ground Resolution (ft) at ±30°		1.78/4.00/6.35/1.36		1.70/1.39		1.55/1.80/2.95		1.83/1.69/6.01		2.41/5.90		2.55/3.33		2.25/3.88		2.22/6.74	
S ³ On Time (sec/hr)																	
Total = 333,395/92.610		72,250/20.069				92,274/25.632				78,123/21.701				90,745/25.208			
S ³ Operations																	
Total = 1469		319				425				331				394			

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PM-1521-X-K
WORKING PAPER

BLOCK IV FLIGHT SUMMARY

SOR ¹	Flight Number	SV-19 1219	SV-20 1220
200	RESOLUTION-ACCEPTANCE AVG. (L/MM)	258 (S0-315)	
-	LAUNCH DATE	6/25/84	
160	DURATION - DAYS	109	
300,000	FILM TRANSPORTED - FEET	162, 419 ²	
1600	PHOTO OPERATIONS	1,005	
82	ALTITUDE - NM (PERIGEE)	115 ³	
2.0 AT 82 NM	AVG. GROUND RESOLUTION - FEET (TRI-BAR) (UNADJUSTED)	1.6 (S0-412)	
20	ESTIMATED GROUND COVERAGE (MILLION NM ²) (IMAGED)	36.9	
-	S ³ OPERATIONS (TOTAL)	804	

- NOTES: 1. Standard Operational Requirement.
2. Includes Prelaunch Footage. Refer to Individual Flight Summaries for Prelaunch Footage Values.
3. Altitude increase due to ECS Command System Failure.

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PM-1521-X-K

SV-19 (MIDSECTION S/N 022)
HEXAGON MISSION HISTORY SUMMARY

Launch Date, Time (PDT) 6/25/84, 1146 hours		Notes			
Inclin/Perigee/Apogee* 96.39/115.2 NM/134.9 NM		(1) Includes Prelaunch Footage - A = 2928 Ft, B = 2896 Ft (8) Rev. 105/OP 42, MR 16024, TU1B Brake verify ESD			
Period - (Min:Sec)* 88:57		(2) Includes 450 ft. SO-255; 451 ft. SO-130 (9) Rev. 697/OP 407, MR 16024, TU2B Brake verify ESD			
Angle (Deg)* 19.0		(3) Includes 1258 ft. SO-130 (10) Rev. 1156/OP 688, MR 16026, EWD-B-ESD, TU 2B			
Filter (A/B) W-12, 2E/W-12, 2E		(4) Includes 452 ft. SO-255 Brake did not engage			
Total Film (Ft) A/B 147,566/146,529 (1)		(5) Includes 1715 ft. SO-130 (11) Rev. 1710, OP 1006 failed to execute; ECS failure			
Film Left (Ft) A/B 59,747/71,929		(6) Includes 322 ft. SO-412; 999 ft. SO-130 (12) Rev. 334, 335/OP 112, 113-114, MR 16025; DPE-B			
Main Bus Volts, Min/Max 27.4/31.0		(7) Includes 931 ft. SO-315 failed to turn on; normal operation on OP 115.			
		* Reference to Rev. 270 (Day 18), 7/12/84 when orbit altitude was increased. (36 additional turn-on failures to EOM)			
RV Number		-1	-2	-3	
Take-Up S/N		037B	041B	043B	
Recovery Date		8/5/84	9/24/84	10/11/84	
Recovery Rev/last OP of RV		668/385 (8)	1480/846 (9) (10)	1757/1005 (11)	
Mission Days		42	50	17	
On Time (Sec/Hr)		43,679/12.133	52,593/14.609	17,078/4.744	
Total = 113,350/31.486					
Leak Rate (lb/min) x 10 ⁻⁶		105 lb/min	83 lb/min	86 lb/min	
PNS Rate (lb/min)		0.025 lb/min	0.025 lb/min	0.025 lb/min	
Camera		A	B	A	B
Film Type		SO-412/SO-130	SO-412/SO-130	SO-412/SO-255	SO-412/SO-130
Recovered Feet		37,036 (1)(2)	36,747 (1)(3)	37,511 (4)	24,222 (5)
Plane of Best Focus (°)		52/106	43/102	56/110	46/100
Number of Frames	120°	0	0	0	0
	90°	642	658	188	61
	60°	2859	2762	3865	2450
	30°	4394	4275	4890	3426
Total Frames		7895	7695	8943	5937
Performance:					
Ground Resolution (ft) at ±30°		1.53/NA	1.71/5.68	1.64/NA	NA
S ³ On Time (sec/hr)					
Total = 237,106/65.862		111,787/31.052	94,073/26.131	31,246/8.679	
S ³ Operations					
Total = 804		304 (12)	378	122	

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