

# SPACE SHUTTLE MISSIONS SUMMARY

FLT NO.	ORBITER	CREW (2)	LAUNCH SITE, LIFTOFF TIME, LANDING SITES, ABORT TIMES	LANDING SITE/ RUNWAY, CROSSRANGE LANDING TIMES, FLT DURATION, WINDS	SSME-TL NOM-ABORT EMERG THROTTLE PROFILE ENG. S.N.	SRB RSRM AND ET	ORBIT		FSW	PAYLOAD WEIGHTS, PAYLOADS/ EXPERIMENTS	MISSION HIGHLIGHTS (LAUNCH SCRUBS/DELAYS, TAL WEATHER, ASCENT I-LOADS, FIRSTS, SIGNIFICANT ANOMALIES, ETC.)
		TITLE, NAMES & EVA'S					INC	HA/HP			
STS-2 SEQ FLT # 2 KSC 2 OFT-2 PAD 39A-2	OV-102 Flight 2 Columbia  OMS PODS LVO1 - 2 RVO1 - 2 FRC2 - 2	CDR: Joe H. Engle P3/R3/M3  PLT: Richard H. Truly P4/R4/M4	KSC 39A 316:15:09:59.8Z 7:20:00 AM EST (P) 10:10:00 AM EST (A) Thursday 1 11/12/81 (1)	EDW 23, LAKEBED (EDW 2, LKBD 2) 1:23:12 PM PST Saturday 1 11/14/81 (1)  XRANGE: 63 NM  ORB DIR: DR (2)  AIM PT: NOMINAL  MLGTD: 780 FT 318:21:23:12Z VEL: 186 KGS 197 KEAS HDOT: -1.0 FPS  TD NORM 195: 960 FT  NLGTD: 4429 FT 318:21:23:26Z VEL: 137 KGS HDOT: -5.1 FPS  BRK INIT: 109 KGS  AVE BRK DECEL: 6.1 FPS/S  WHEELS STOP: 318:21:24:03Z 8491 FT  ROLLOUT: 7711 FT 50 SEC  WIND: 20H, 3R KNOTS OFFICIAL: 17H, 6L  DENS ALT: 3500 FT  FLT DURATION: 2:06:13:12 54:13:12  S/T: 4:12:34:05  OV-102: 4:12:34:05  DISTANCE: 933,757 sm	100/100 (107)  68%  1 = 2007 (2) 2 = 2006 (2) 3 = 2005 (2)	A9/10  MTR: STD  CASE: STD 168-80  SWT  ET-2  ET RPT 256K 49:20 MET  ET BR/UP 219K 50:28 MET  ET IMPACT LAT: 31.67°S LONG: 95.7°E	38.0° (1) 63.25°  START: -53.5°  END: -56.2°  MAX:	STANDARD INSERTION  INSERTION ALTITUDE: 137 NM  120/120 137/137 NM	R18/T11	CARGO: 18778 lbs  CHARGEABLE:  SHUTTLE ACCUMULATED WEIGHTS: DEPLOYED: 0 lbs NON-DEPLOYED: 29601 lbs CARGO TOTAL: 29601 lbs  PERFORMANCE MARGINS (LBS): FPR: 7057 FUEL BIAS: 1050 FINAL TDDP: 2049 RECON: 275  PAYLOADS: IECM/REM OSTA-1/PALLET MAPS SMIRR SIR-A FILE OCE DFI  RMS 1 (S.N. 201) RMS CHECKOUT (UNLOADED OPS)  2 CRYO TANK SETS	KSC W/D: OPF 99, VAB 18, PAD 70 = 187  LAUNCH POSTPONEMENT: - 45-day postponement caused by FRCS N204 spill on tiles resulting in debonding of tiles.  LAUNCH SCRUB: - Scrubbed 11/4/81 launch at T-31 seconds because APU's 1 & 3 lube oil outlet pressure high at 100 to 112 PSIA. Flushed APU's 1 and 3 gear boxes and changed clogged filters. Rescheduled launch for 11/12/81. 53 days total slip.  LAUNCH DELAYS: - 2H40M delay MDM OF3 failure. Flew in replacement MDM which also failed. Replaced with OV-099 MDM. - 10-minute delay for KSC confidence review of systems status. - Total launch delay: 2H50M  TAL WX: Rota go.  FLIGHT DURATION CHANGE: - Shortened flight from 5D4H to 2D6H (priority flight after Fuel Cell 1 failed at 0/04:45 MET).  FIRSTS: - First flight of RMS.  SIGNIFICANT ANOMALIES: - Fuel Cell 1 failure at 0/04:45 MET resulting in priority mission. Shortened flight from planned 5D4H to 2D6H. - Icing in WSB 3 inhibited lube oil cooling, resulting in elevated APU gearbox outlet temp. - Excessive gas in drinking water. - TV camera B RMS elbow camera, PLB cameras A,B,C lenses had contamination. - CRT 1 failed due to HV power supply problem. - RH SRB lost one main chute. - RH SRM aft field joint gas leak to primary O-ring with erosion. - LH fwd windows degraded by salt spray.  RADIATORS DEPLOYED #2 (port stowed last 1/2 of flight)  NOTE: ON STS-1 AND STS-2, THE NOMINAL OGS AIM POINT WAS 6500 FEET (5500 FEET WAS THE CLOSE-IN AIM POINT).
		MCC FCR-1 (2)  FLIGHT DIRECTORS: ASC - N. B. Hutchinson PLNG - T. W. Holloway ORBIT - C. R. Lewis ENT - D. R. Puddy ORB - H. M. Draughon MOD - E. F. Kranz			M 3 EOM  WEIGHT: 204356  X CG: 1096.6  LANDING  WEIGHT: 204263  X CG: 1098.1				DEORBIT 140 X 139 NM  VELOCITY 25726 FPS  RANGE 4474 NM		

