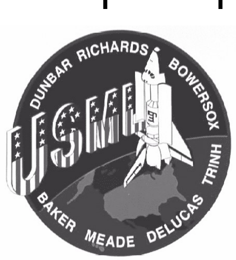
SPACE SHUTTLE MISSIONS SUMMARY

FLT NO.	ORBITER	CREW (7) TITLE, NAMES & EVA'S	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 INC	ORBIT HA/HP	FSW	PAYLOAD WEIGHTS, PAYLOADS/ EXPERIMENTS	MISSION HIGHLIGHTS (LAUNCH SCRUBS/DELAYS, TAL WEATHER, ASCENT I-LOADS, FIRSTS, SIGNIFICANT ANOMALIES, ETC.)
STS-50 SEQ FLT #48 KSC-48 PAD 39A-34 MLP-3	OV-102 (Flight 12) Columbia 9th Spacelab Flight Long Module (6) EDO 1 OMS PODS LP05-1 RP05-1 FRC2-12	CDR: Richard N. Richards (Flt 3 - STS-28 & STS-41) P256/R101/V55/M92 PLT: Kenneth D. Bowersox P257/R146/M130 M/S 1 (PYLD CDR): Bonnie J. Dunbar (Flt 3 - STS 61-A & STS-32) P258/R79/V49/F7 M/S 2: Ellen S. Baker (Flt 2 - STS-34) P259/R105/V75/F10 M/S 3: Carl J. Meade (Flt 2 - STS-38) P260/R117/V76/M105 P/S 1: Larry DeLucas P261/R147/M131 (U OF ALA, BIRM) P/S 2: Gene Trinh P262/R148/M132 (JPL) MCC FCR-1 (28) FLIGHT DIRECTORS: Asc/Ent - J. W. Bantle Ld/O 2 - R. E. Castle O 1 - R. D. Jackson O 3 - G. E. Coen Team 4 - R. M. Kelso MOD - A. L. Briscoe	KSC 39, PAD A 177:16:12:23Z 12:07:00 PM EDT (P) 12:12:23 PM EDT (A) Thursday 12 6/25/92 (5) LAUNCH WINDOW 2H 30M CTOB EOM PLS: EDW TAL: BYD TAL WX: BEN, ROTA SELECTED: RTLS: KSC 15/CI/N TAL: BEN 36/N/N AOA: EDW 22/N/N PLS: EDW 22/N/N TDEL: 0.48 0.682/0.72 MAX Q NAV: 688 PSF 690 PSF SRB STG: 2:05.9 2:05.9 PERF: NOMINAL 2 ENG TAL (BEN): 3:01 3:00 NEG RETURN: 3:57 4:00 PTA (U/S 235): 4:57 4:54 PTM (U/S 235): 5:58 5:40 MECO CMD: 8:26.9 8:27.6 VI: 25875 25870 OMS-2: 39:56 39:51 222.3 FPS222.6 FPS	KSC 33 (KSC 10) 191:11:42:27Z 7:42:27 AM EDT Thursday 5 7/9/92 (1) DEORBIT BURN: 191:10:41:38Z XRANGE: 389 NM ORBIT DIR: DL 23 AIM PT: NOMINAL MLGTD: 2321 FT 191:11:42:27Z VEL: 208 KGS 203 KEAS HDOT: -2 FPS TD NORM 205: 2122 FT NLGTD: 7832 FT 191:11:42:45Z VEL: 149 KGS HDOT: -5.1 FPS DRAG CHUTE DEPLOY: 136 KEAS 191:11:42:47Z BRK INIT: 111 KGS DRAG CHUTE JETTISON: 55 KGS 191:11:43:11Z AVE BRK DECEL: 6.6 FPS/S WHEELS STOP: 191:11:43:25Z 12996 FT ROLLOUT: 10675 FT 58 SECS WINDS: H 1.6 KTS L 4.8 KTS OFFICIAL 1H, 5L Continued. . .	104/104/ 109% PREDICTED: 100/104/ 104/72/104 ACTUAL: 100/104/ 104/74/104 1 = 2019 (10) 2 = 2031 (7) 3 = 2011 (7) M 3 EOM WEIGHT: 225865 LBS X CG: 1077.7 LANDING WEIGHT: 225615 LBS X CG: 1079.1	BI-051 RSRM 24W ET-50 LWT-43 ET RPT 247K 1:17:12 MET ET BR/UP 216K 1:18:03 MET ET IMPACT LAT: 13.28°N LONG: 162.64°W	28.46° (28)	DIRECT INSERTION POST OMS-2 163.5 X 159.7 NM ORBIT ADJ 1: 159.9 X 159.2 NM 04/00:23:18 ORBIT ADJ 2: 163.0 X 129.1 NM DEORBIT 163 X 130 NM VELOCITY 25786 FPS ENTRY RANGE 4347 NM	OI-21 (2)	CARGO: 32447 LBS PAYLOAD CHARGEABLE: 24305 LBS DEPLOYED: 0 LBS NON-DEPLOYED: 22126 LBS MIDDECK: 2179 LBS SHUTTLE ACCUMULATED WEIGHTS: DEPLOYED: 663337 LBS NON-DEPLOYED: 581526 LBS CARGO TOTAL: 1416560 LBS PERFORMANCE MARGINS (LBS): FPR: 4671 FUEL BIAS: 983 FINAL TDDP:2940 RECON: 3276 PAYLOADS: PLB: UNITED STATES MICROGRAVITY LABORATORY (USML-1/LM) MATERIALS SCIENCE, FLUID PHYSICS, COMBUSTION SCIENCE, BIO-TECHNOLOGY MIDDECK: IPMP UVPI SAREX-II 4 + 4 EDO CRYO TK SETS NO RMS	KSC W/D: OPF 108, VAB 5, PAD 23=136 days LAUNCH POSTPONEMENTS: - Launch date was 5/11/92 as of 7/10/91. - Launch postponed to 6/3/92. Weather delayed OV-102 delivery to KSC after major mod period at Palmdale. - Launch postponed to 6/25/92 because of Ku-Band comm work, RSB corrosion repair, and LiOH canister locker interference. LAUNCH SCRUB: None. LAUNCH DELAYS: - 5M 23S delay during T-9 hold due to a concern about a cirrus layer at 28K-33K with a detached anvil (potential lightning in launch area). WX STA PLT reported it was not a problem because he could see through it. TAL WX: - Banjul forecast and observed NO GO - ceiling. Ben Guerir forecast and observed GO (selected). Rota forecast NO GO - Vis (Haze), observed GO. ASCENT I-LOADS: - Nominal selected, no uplink required. FLIGHT DURATION/LANDING SITE CHANGE: - Extended 1 day because of forecasted rain at EDW. - Changed landing site to KSC and landed one rev early because EDW had forecast of rain in clouds. FIRSTS: - First flight of OV-102 after OMDP (Major Mods at Palmdale). - First EDO flight and EDO pallet. - First flight of RCRS (Regenerable CO2 Removal System). - First flight of OV-102 with drag chute, INWS, etc. (Second flight of drag chute - deployed after NLGTD). - First flight to exceed GEMINI VII flight duration (by 54:33). Only 3 SKYLAB flights exceed STS-50 duration. DRAG CHUTE STRATEGY: Second drag chute deploy with NLG on ground. Continued. . .



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STS-50 Continued				Continued. . . DENS ALT: 1423 FT FLT DURATION: 13:19:30:04 331:30:04 S/T: 307:15:59:29 OV-102: 88:20:44:28 DISTANCE: 5,758,332 sm						Continued. . . SIGNIFICANT ANOMALIES: - RCRS shutdown due to a short in the controller, hence LiOH canisters used until IFM required use at 5 days MET. - SL/Orbiter air not mixing properly. Found a removable inline redundant seal was not removed from tunnel air ducting as should be for on-orbit operations. - Waste water dump line blockage causing reduction in dump rate. - Cryo O_2 tank 2 had a 1 lb/hr leak. - Cryo O_2 tank 2 heater A2 experienced intermittent power dropouts. - Fuel cell 3 O_2 purge valve did not close completely. Manually closed, did not purge again for remainder of flight. - Cryo O_2 tank 7 check valve failed in open position. - SS inverter overvolt shut down when SL H_2O loop was turned on. - FWD starboard floodlight did not come on. - R OMS yaw TVC excessive movement during ascent. - Aileron trim deflected to 2.2° at M=10.1, preflight predicted was maximum of 0.80 deflection. - TAGS jam on day 2, used teleprinter. - Flight deck Canon A1, Mark II camcorder failure. - ROB brake pressure low. - APU 1 gearbox N2 pressure decay/ transducer erratic. - L1U jet heater fail on. - F2F jet fail off.