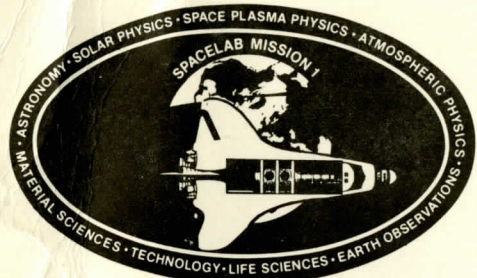


SPACELAB 1 INVESTIGATIONS



ATMOSPHERIC PHYSICS:

- NS001 - IMAGING SPECTROMETRY OBS
- ES013 - GRILLE SPECTROMETRY
- ES014 - OH EMISSION LAYER
- ES017 - LYMAN α -EMISSION

EARTH OBSERVATIONS:

- ES033 - METRIC CAMERA FACILITY
- ES034 - MICROWAVE REMOTE SENSING FAC

SOLAR PHYSICS:

- NS008 - SOLAR IRRADIANCE MONITOR
- ES016 - SOLAR SPECTRUM
- ES021 - SOLAR CONSTANT

TECHNOLOGY:

- NT011 - TRIPOLOGY, FLUID DYNAMICS

PLASMA PHYSICS:

- NS002 - PARTICLE ACCELERATORS (SEPA)
- NS003 - ATMOS EMISSIONS PHOTOMETRIC IMAGING (AEPI)
- ES019 - ELECTRON FLUX
- ES020 - PHENOMENA INDUCED BY CHARGED PARTICLE BEAMS (PIC-PAB)
- ES024 - ISOTOPE STACK

ASTRONOMY:

- NS005 - FAR ULTRAVIOLET (FAUST)
- ES022 - VERY WIDE FIELD CAMERA (VWFC)
- ES023 - X-RAY SPECTROSCOPY

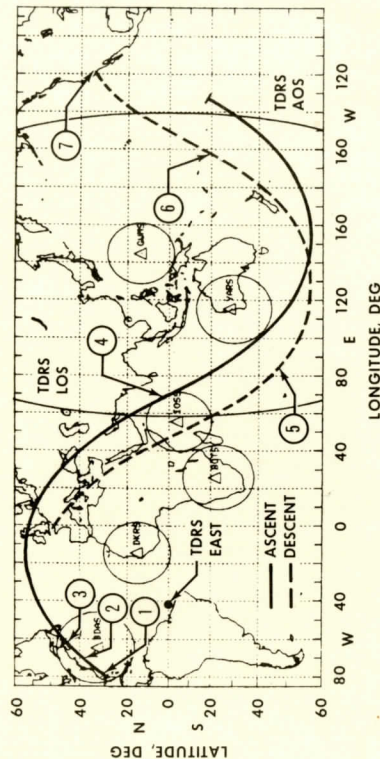
LIFE SCIENCE:

- ES201 - OPTOKINETIC STIMULATIONS (SLED)
- NS102 - VESTIBULAR
- NS104 - VESTIBULO - SPINAL REFLEX
- NS103 - ERYTHROKINETICS
- ES026 - VENOUS PRESSURE
- ES032 - BLOOD SAMPLES
- NS105 - HUMORAL IMMUNE RESPONSE
- ES031 - LYMPHOCYTE PROLIFERATION
- ES028 - BALLISTOCARDIOGRAPHICS
- ES030 - ELECTROPHYSIOLOGICAL
- ES025 - MASS DISCRIMINATION
- NS101 - HELIANTHUS ANNUUS/PLANT NUTATION
- NS007 - CIRCADIAN RHYTHMS
- ES029 - MICRO-ORGANISMS/BIOMOLECULES
- ES027 - ADVANCED BIOSACK
- NS006 - RADIATION ENVIRONMENT MAPPING

MATERIAL SCIENCE:

- ES300 - DOUBLE RACK FACILITY (CRYSTAL GROWTH, FLUID PHYSICS, METALLURGY)
- ES301-315 - ISOTHERMAL HEATING FACILITY
- ES316-320 - GRADIENT HEATING FACILITY
- ES321-324 - MIRROR HEATING FACILITY
- ES326-331 - FLUID PHYSICS MODULE
- ES338 - MERCURY IODIDE CRYSTAL GROWTH
- ES322-333 - CRYSTAL GROWTH IN SOLUTION
- ES334 - CRYSTAL GROWTH IN PROTEINS
- ES335 - LIQUID METAL DIFFUSION
- ES340 - ADHESION OF METALS

ASCENT AND DESCENT GROUNDTRACKS



LEGEND

- ① SRB SEPARATION
- ② MAIN ENGINE CUTOFF

- ③ OMS-1 IGN
- ④ OMS-2 IGN

- ⑤ DEORBIT IGN
- ⑥ ENTRY INTERFACE
- ⑦ LANDING AT EAFB

FLIGHT FACTS



STS-9 CREW

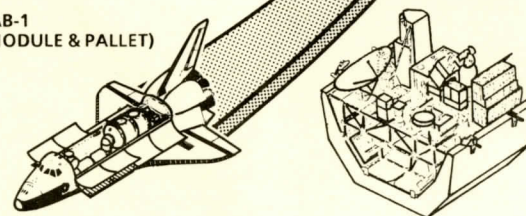
JOHN W. YOUNG, COMMANDER, RED
BRUSTER H. SHAW, JR., PILOT, USAF, BLUE
OWEN K. GARRIOTT, MISSION SPECIALIST, BLUE
ROBERT A. PARKER, MISSION SPECIALIST, RED
BYRON K. LITCHENBERG, PAYLOAD SPECIALIST, BLUE
ULF MERBOLD, PAYLOAD SPECIALIST, RED

PROFILE SUMMARY

NOMINAL LAUNCH TIME: 10:00 C.S.T.
ORBIT INCLINATION: 57.0 DEGREES
ORBIT ALTITUDE: 135 N.MI. CIRCULAR ORBIT
NOMINAL LANDING TIME AT EAFB: 10:11 A.M. C.S.T.
MISSION DURATION: 216:11 HOURS:MIN

STS-9 CARGO

SPACELAB-1
(LONG MODULE & PALLET)



STS-9

FLIGHT SCHEDULE



NASA - JSC

MISSION PLANNING AND ANALYSIS DIVISION

MISSION SUPPORT DIRECTORATE

NOVEMBER/DECEMBER 1983

SPACELAB 1 MISSION EXPERIMENT TIMELINE OVERVIEW

