



Volume 15

MISSION BULLETIN

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SHUTTLE MISSION 61A--THE FIRST GERMAN SPACELAB

Astronauts and scientists aboard Challenger on the seven-day flight of mission 61A said they accomplished more than anyone hoped. The crew of eight, largest yet to fly in a Shuttle mission, was headed by Henry W. Hartsfield, commander. The other members were: Steven R. Nagel, pilot; Guion S. Bluford, Jr., mission specialist; James F. Buchli, mission specialist; Bonnie J. Dunbar, mission specialist; Reinhard Furrer, payload specialist; Ernst Messerschmid, payload specialist; and Wubbo Ockels, payload specialist.

The "Deutschland Spacelab Mission D-1" is the first of a series of dedicated West German missions on the Space Shuttle. It also is the first time a Spacelab payload has come from Europe completely checked out and ready for installation in the orbital laboratory. Spacelab D-1 is managed by the Federal German Aerospace Research Establishment (DFVLR) for the German Federal Ministry of Research and Technology (BMFT). DFVLR's responsibilities included provision of the payload, payload analytical and physical integration and verifications, and payload operation on orbit. The Spacelab payload was assembled by MBB/ERNO over a 5-year period at a cost of approximately \$175 million. The company serves as prime contractor to the 12-nation European Space Agency in the \$1-billion Spacelab project.

Scientists have been working for 10 years developing the 76 experiments carried aboard D-1. These were in the area of biology, life science, adaptation of the human body to space and the processing of various materials in weightlessness. Hartsfield divided his crew into two teams, working 24 hours a day. A 12-hour day for each had been planned but due to the heavy workload, each team worked about 15 hours out of each day.

SPACALAB CONTROL CENTER IN MUNICH

As with all Space Shuttle missions, Mission Control in Houston maintained control over the Shuttle vehicle and overall safety and conduct of the flight. But for the first time in the short history of The Space Shuttle Program, control over the Spacelab portion was someplace other than Mission Control. For D-1, the Federal Republic of Germany had management responsibility for the scientific mission carried out during the seven-day flight. The payload operations control center was at the German Space Operations Center (GSOC) located in Oberpfaffenhofen, near Munich.

GLOMR SATELLITE LAUNCHED FROM CHALLENGER

The Global Low Orbiting Message Relay Satellite (GLOMR) was launched from Challenger during the late part of the first day of the mission. The GLOMR satellite is a data-relay, communications spacecraft and is expected to remain in orbit for about 1 year. The purpose of the 150-pound, 62-sided polyhedron satellite is to demonstrate the ability to read signals and command oceanographic sensors, locate oceanographic and other ground sensors, and relay data from them to customers. GLOMR was designed and built by Defense Systems, Inc., McLean, VA for the Department of Defense. This was the second attempt to deploy GLOMR. It was carried on mission 51B in April 1985 but was not deployed due to problems with the battery supply.

SCCS 61-A MISSION COVERS

Our first set contains two different covers...the launch cover is cancelled at Kennedy Space Center on October 30, 1985 and the landing cover is cancelled at Edwards (landing site) on November 6, 1985, landing date. For Houston, site of Shuttle Mission Control, we again have two different sets of two. The first set of two (one for launch and one for landing) is cancelled at Houston on correct dates and time, with the Houston machine cancel. The second set of two is cancelled on launch and landing dates with the Houston Mailer's Permit Postmark hand cancel. In addition we have three other mission event covers. These are (1) October 30 "Crew of eight, a record for Shuttle", (2) October 30 "First shuttle mission to have control at site other than Mission Control in Houston" and (3) GLOMR launch from Challenger. These are cancelled on correct dates, and each has its own cachet, and cancelling done by the Houston MPP hand cancel.

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