



SPACE SHUTTLE UPDATE

STS-5 COLUMBIA

Summer has slipped by and now that somewhat cooler weather heads our way, it is a good time to bring things up to date on the Space Shuttle program. Things are going smoothly with Columbia as preparations are made for its fifth flight. This fifth flight will be its first operational flight, a five-day space voyage set to begin on November 11.

The refurbished Columbia, complete with a new external tank and twin solid-rocket boosters, will undergo a month of tests before the start of its fifth mission.

On STS-5, Columbia will have a crew of four and will launch two commercial satellites into orbit for the first time. The satellites will be ejected from Columbia by a spring-loaded turntable, then boosted into orbit by separate rocket stages.

This fifth mission will also mark the first American spacewalk since 1974. Mission specialists Joseph Allen and William Lenoir will wear 240-pound space suits and will perform several light chores in the shuttle's cargo bay.

A miniature television camera, its postage-stamp-size lens peeking over astronaut Joseph Allen's helmet, will give viewers on Earth a first-hand look at what astronauts will see during a space walk.

Besides all of the other "firsts" on STS-3, this mission will also be the first to have four astronauts aboard, and it will be the first to employ mission specialists astronauts. The crew was announced on March 2, 1982 and the members are as follows: Vance D. Brand, mission commander; Robert F. Overmyer, pilot; with Dr. Joseph P. Allen and Dr. William B. Lenoir as the two mission specialists.

STS-6 FIRST FLIGHT OF CHALLENGER

This will be the first flight of Shuttle orbiter Challenger and is planned for January 1983. It will be a two-day mission to deploy NASA's Tracking and Data Relay Satellite, one of an eventual two-satellite system which will provide more comprehensive voice and data coverage between the ground and orbiting Space Shuttles.

On March 2, 1982 the four-member crew was announced. The members are: Paul J. Weitz, mission commander; Karol J. Bobko, pilot; and the two mission specialists will be Dr. Story Musgrave and Donald H. Peterson.

Challenger, America's newest space craft looks cleaner, sharper, slicker than the four flight veteran Columbia it is joining. But the real changes are on the inside, according to Wayne Koons, manager of the Manufacturing and Test Office at the Johnson Space Center.

CREWS FOR TWO OTHER CHALLENGER MISSIONS

STS-7 CHALLENGER

The crew of this mission was announced on April 29, 1982. The members are: Robert L. Crippen, mission commander; Fredrick H. Hauck, pilot; and the two mission specialists are John M. Fabian and Dr. Sally K. Ride.

STS-7 is to be a six-day flight of Challenger and is planned for April 1983. Its payloads are to be (1) a German shuttle pallet satellite (SPAS); (2) the second Office of Space and Terrestrial Applications instrument package (OSTA-2); (3) a Canadian communications satellite (TELESAT-F); and (4) an Indonesian communications satellite (PALAPA-B1).

STS-8 CHALLENGER

The crew of this mission was announced on April 29, 1982. The members are: Richard H. Truly, mission commander; Daniel C. Brandenstein, pilot; and the two mission specialists are Dale A. Gardner and Guion S. Bluford, Jr.

This three-day mission is to be the third flight of Challenger. Payloads will be (1) an Indian communications satellite (INSAT 1-B), and (2) NASA's tracking and data relay satellite (TDRS-B), the second and final element in a system to give nearly full-time voice and data communication between orbiting Space Shuttle and mission control.

THE FIRST SIX-MAN CREW

SPACELAB 1

The first flight of Spacelab 1 is scheduled for launch in September 1983, aboard STS-9. Spacelab 1 is the joint project between NASA and the European Space Agency. Not only will this flight have the first six-man crew to launch into space in one spacecraft but one of the crew members will be the first foreign astronaut to fly in an American spacecraft.

The original crew of four was announced on April 29, 1982 with the members being: John W. Young, mission commander, Brewster H. Shaw, Jr., pilot; and the two mission specialists being Dr. Owen K. Garriott and Dr. Robert A. Parker.

The two-man crew of payload specialists (one each from NASA and the European Space Agency) was announced on September 20, 1982. The NASA member is Bryon K. Lichtenberg and the European Space Agency member is Ulf Merbold. Lichtenberg is a biomedical engineer and Vietnam War fighter pilot, and Merbold is a physicist from Greiz, West Germany.

Selected as the backup payload specialists crew for Spacelab 1 are Wubbo J. Ockets, a physicist from the Netherlands, and Michael L. Lampton, a physicist from Williamsport, Pa. The selection of the Spacelab 1 payload specialists crew and backup crew was based on the votes of 36 scientists.

Spacelab is a 23-foot-long pressurized laboratory that will house a large variety of scientific experiments. It will be taken to space in the payload bay of the space shuttle orbiter. One of the payload specialists and a mission specialist will work in the lab throughout the mission. Spacelab was built and paid for by the nations of the European Space Agency.

Spacelab 1 is scheduled for launch on September 30, 1983 but because of the complexity of the many experiments due for it, the date could be delayed some.

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SCCS COVERS FOR THE IMPORTANT CREW SELECTIONS

Here is a list of the SCCS covers for the events detailed in this issue of The Space Log. None of these covers has been offered by us before and the prices will be good on this initial offering only, as we serviced a smaller than usual quantity on each event. Each cover is correctly cancelled on the official NASA date of selection with the Mailer's Permit Postmark (Houston) hand cancel.

- STS-5 A single cover cancelled March 2, 1982. Cachet pertains to crew of Brand, Overmyer, Allen, and Lenoir.
- STS-6 A single cover cancelled March 2, 1982. Cachet pertains to crew of Weitz, Bobko, Musgrave, and Peterson.
- STS-7 A single cover cancelled April 29, 1982. Cachet pertains to crew of Crippen, Hauck, Fabian, and Ride.
- STS-7 A single cover cancelled April 29, 1982 with cachet featuring Dr. Sally K. Ride. Dr Ride is the first woman selected for a manned U. S. space mission and will become the first female astronaut to be launched into space.
- STS-8 A single cover cancelled April 29, 1982. Cachet pertains to Truly, Brandenstein, Gardner, and Bluford.
- STS-8 A single cover cancelled April 29, 1982 featuring Dr. Guion S. Bluford, Jr., the first black astronaut to be launched into space.
- STS-9 SPACELAB 1 A single cover cancelled April 29, 1982 featuring the crew of four of Young, Shaw, Gariott, and Parker.
- STS-9 SPACELAB 1 A single cover cancelled September 20, 1982 featuring the payload specialists Lichtenberg and Merbold.

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If all goes as scheduled the next year should be an exciting one in the era of the Space Shuttle. There will be a lot taking place and as one JSC official said, "Coordination of the operations of many experiments from this control center is going to have to click like a new watch if everything is to work properly and on time."

And we will continue to keep you readers posted with these issues of The Space Log.