Payloads

STS-101

Mission to America's Remarkable Schools

Payload Bay

270 lb

Principal Investigator: Dennis Chamberland, KSC

Overview

This life sciences payload, sponsored by the NASA's Kennedy Space Center (KSC), contains 20 experiments from schools across the United States. The projects include seeds of various types reflown from SEEDS I and II as well as regionally important seed varieties such as lettuce and spinach. In addition, some schools submitted cellular specimens like chlorella and e.Coli (from commercial high school scientific supply houses).

Each experiment is placed in a 2-inch-diameter PVC tube inside a Complex Autonomous Payload (CAP)/Getaway Special (GAS) canister. The CAP/GAS is positioned in space shuttle cargo bay 13, port side, forward position.

MARS is a passive payload that does not require any power or crew interaction. Experiments are self-contained, back-filled with dry nitrogen at one atmosphere before launch, and sealed throughout the mission.

History/Background

The Complex Autonomous Payload project grew out of the Getaway Special program as a means to fly designated canisters as shuttle secondary payloads sponsored by NASA. These CAP experiments offer an inexpensive means for educational institutions to experiment in space. The GAS program also provides inexpensive access to space for non-NASA experiments. The GAS program allows educational institutions to develop a payload that fits in the NASA standard 5-cubic-foot GAS canister. The payload control weight is 270 pounds--100 pounds for the experiment and 170 pounds for the carrier. The Goddard Space Flight Center Wallops Island facility manages the GAS program.

The primary program objective is outreach to schools with an emphasis on NASA space life sciences, encouraging direct student participation in the space shuttle program. The program is managed by KSC and the NASA Space Life Sciences Outreach Program Intercenter Working Group.

Further information on the Getaway Special program, as well as other shuttle carrier programs managed by Goddard Space Flight Center, can be found at http://sspp.gsfc.nasa.gov.

Benefits

Encourages student participation and experimentation in space life sciences.

Section Index | Main Index | Search | Contacts

Updated: 03/27/2000