

C-130H Hercules



Current Status:

[See full schedule](#)

#439	OMG - Deployment (ends 10/21/17)
#436	ACT-America Deployment (ends 11/13/17)

The NASA Goddard Space Flight Center's (GSFC) Wallops Flight Facility (WFF) Aircraft Office operates two NASA C-130H Hercules research aircraft to support airborne scientific research activities. The C-130H is used to perform scientific research, provide logistics support on an as-needed basis to other airborne science missions, and can be used as a technology test bed for new airborne and satellite instrumentation. These aircraft are also available to support range surveillance and recovery operations as needed. The C-130H is a self-sufficient aircraft that can operate from short field civilian and military airports to remote areas of the world in support of scientific studies and other operations.

The C-130H is a four-engine turboprop aircraft designed for maximum payload capacity. The C-130H, NASA 439, has been extensively modified to support airborne science related activities. The aircraft has two large nadir ports. One nadir port is approximately 50 inches in diameter (pressurized) and the other nadir port is approximately 24 inches in diameter (unpressurized). A large removable side fuselage plug exists on the port side of the aircraft just forward of the wings. An experimental power system is installed in the aircraft as well as a variety of other small fuselage ports including a flight station zenith port. The aircraft also is capable of carrying 5 cargo pallets that can be utilized to carry cargo or modified to support instrument racks and seats. The large rear cargo door allows for easy installation of large instruments and payloads. The aircraft is equipped with external fuel tanks to increase range and duration.

The C-130H, NASA 436, has been modified to support airborne science related activities as well. The aircraft has three 16 inch nadir ports. Two 20x30 inch rectangular and four 10 inch diameter fuselage windows. A zenith port exist in the flight station for small instruments as well as sonobuoy tubes on the cargo ramp. An experimental power system is installed in the aircraft capable of producing 115V 60Hz, 400Hz and 28VDC. The large rear cargo door allows for easy installation of large instruments and payloads. The aircraft is equipped with external fuel tanks to increase range and duration.

The performance numbers presented below are based on a 20,000lb payload. Heavier payload may reduce aircraft range and duration.

The Aircraft Office is committed to providing safe, reliable, and cost effective platforms for airborne research and other flight activities.