IRVE-3 flight hardware test sounding rocket

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Engineers checked out the Inflatable Reentry Vehicle Experiment after the successful completion of an inflation system test. Credit: NASA/ Sean Smith

NASA will launch an inflatable aeroshell/heat shield technology demonstrator on a Black Brant XI sounding rocket July 22 from the agency's launch range at the Wallops Flight Facility in Virginia.

The Inflatable Reentry Vehicle Experiment (IRVE-3) is the third in a series of suborbital flight tests of this new technology.

Technicians will vacuum pack the uninflated 10-foot (3.05 meters)

diameter cone of high-tech inner tubes into a 22-inch (56 centimeters) diameter sounding rocket.

During the flight test an on board system will inflate the tubes -- stretching a thermal blanket that covers them -to create an aeroshell or heat shield. That heat shield will protect a payload that consists of four segments including the inflation system, steering mechanisms, telemetry equipment and camera gear.

Provided by NASA's Goddard Space Flight Center

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