Heat Test Shot Fired At Wallops

A solid propellant Scout rocket was fired 112 miles high yesterday from the National Aeronautics and Space Administration's Wallops Island Station in a test of a new heat shield material devised by Langley Research Center.

Space officials said the rocket, launched to test a new plastic nylon heat shield called phenolic nylon, was fired 1,100 miles out over the Atlantic. The rocket landed about 450 miles southeast of Bermuda.

The shot was intended to determine how well the heat shield material would perform while reentering the earth's atmosphere.

AFTER REACHING an altitude of 112 miles, the rocket was propelled back into the atmosphere at a speed of more than 18,000 miles an hour.

The launching was the 15th consecutive success for the solid-fuel Scout rocket.

In research work at Langley, scientists had increased the resistance of the phenolic nylon heat shield material by mixing it with millions of microscopic hollow plastic spheres known as microballoons. Produced commercially for such uses as prevention of evaporation from refinery storage tanks, the microballoons have an insulating effect because of the air trapped inside them.

The Wednesday launch was the fifth in a series of reentry experiments flown on Scouts. The last Scout reentry experiment qualified a heat shield material for the Apollo moonship in August 1964.