

U.S. TO LAUNCH MINIATURE TEST SPHERES IN EARTH SATELLITE PROGRAM

WASHINGTON, D.C. -- The U.S. Defense Department announced recently that four three-stage rockets, each carrying a pint-sized test sphere, will be launched this fall and winter before the actual attempt is made to place a satellite into space.

The 6.4-inch, 4-pound orbs will be sent aloft to gather engineering data on the release of the satellite from the launching rocket and to test the ground network of tracking equipment.

The miniature magnesium globes will carry antennas and minitrack radio transmitters to permit tracking stations to measure velocity before and after ejection. Solar batteries will also be tested for possible use as power suppliers for the 20-inch, 21-pound satellite which will carry a considerable payload of scientific instruments.

Pentagon officials said it is "highly unlikely" that any of the "baby" spheres will become orbiting satellites. During the test flights, the four Vanguard rockets, which will be launched from Cape Canaveral, Florida, will be heavily laden with test instruments, making it unlikely that they will attain enough velocity to get out of the earth's atmosphere. However, as the test objectives are achieved in the experimental series, officials explained, fewer instruments will be required, thus suggesting a "theoretical possibility" that one of the later 6.4-inch spheres could start orbiting before the 20-inch satellite is launched later in the International Geophysical Year.

VIBRATION TEST -- Wayne Traylor, technician at the Naval Research Laboratory in Washington, readies one of the 6.4-inch experimental spheres for vibration tests as part of the preparations before launching. The six rectangular objects on the surface of the sphere house solar batteries which will be evaluated after the test flights for possible use as power suppliers for later satellites. The spheres, which will be launched by three-stage Vanguard rockets, also contain miniature radio equipment.

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SCIENCE - ARTIFICIAL SATELLITE

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