SPACE TECHNOLOGY LABORATORIES, INC.
PUBLIC RELATIONS • ORCHARD 0-1311 • EXT. 2001-2-3
5730 ARBOR VITAE STREET, LOS ANGELES 45, CALIFORNIA

FOR IMMEDIATE RELEASE

TEST OBJECTIVES

The Explorer VI experiment, under the direction of the National Aeronautics and Space Administration, is designed to place a heavily instrumented, 142 lb. spherical satellite in an elliptical orbit around the earth.

Instrumented to carry out a variety of experiments important to man's knowledge of the space surrounding earth, Explorer VI represents the most complex device yet developed to investigate the extraterrestrial environment.

Initial design and development of the Explorer VI satellite experiment began in November of 1958 when NASA, directed by Dr. T. Keith Glennan, and the Air Force's Ballistic Missile Division, then under the command of Maj. Gen. B. A. Schriever, assigned major tasks in the development of the project to Space Technology Laboratories, Inc.

STL provided overall systems engineering and technical direction for the Thor-Able III vehicle and Explorer VI satellite; the operation of the world-wide tracking and communications network; the research and development of components and subsystems used in launch control and tracking equipment; and the hardware and the development of the second, third and satellite stages of the vehicle.

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TEST OBJECTIVES

To conduct electromagnetic propagation experiments from an earth satellite to determine the propagation characteristics of the ionosphere and troposphere.

To demonstrate the satisfactory operation of the Thor-Able III vehicle, its payload and the world-wide network of satellite tracking stations. The above includes the following:

A. Satisfactory operation of the payload equipment consisting of a primary transmitter, digital instrumentation system, solar power supply system, Doppler Command System, and the experiment sensors.

B. Satisfactory open loop operation of the second stage guidance receiver in conjunction with the advanced guidance system ground station. This new guidance system may be used in future space probes.

C. Satisfactory performance of the third stage propulsion system.

D. Satisfactory operation of the special tracking stations and equipment.

E. Satisfactory operation of the second/third and third/fourth stage separation mechanisms.

F. Satisfactory operation of the second stage autopilot control system and the spin control system.

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