SAMOS II FACT SHEET

I. GENERAL INFORMATION

Project SAMOS is a research and development program to determine the capabilities for making observations of space, the atmosphere and the nature of the globe from satellites. The program is under the executive management of the Secretary of the Air Force.

II. TEST OBJECTIVE

SAMOS II was launched into the Pacific Missile Range from an Air Force launch pad at the Naval Missile Facility, Point Arguello, California, to place the vehicle in a near circular polar orbit. The purpose of the research and development SAMOS flights is component testing bearing on the engineering feasibility of obtaining an observation capability from an orbiting satellite.

III. CONFIGURATION

SAMOS employs the AGENA as its second stage. It is boosted out of the atmosphere by a modified Air Force ATLAS, and placed into orbit by the AGENA.

First Stage

Booster: An Air Force ATLAS modified for the SAMOS II.

Height: Approximately 77 feet. (With adapter section).

Launch Weight: Approximately 262, 000 pounds.

Propulsion: Rocketdyne liquid propellant engine. 356, 000 pounds thrust.

Guidance and Control: The ATLAS booster is equipped with the GE/Burroughs radio command guidance system. The guidance system can detect position and rate, compare this information with the predetermined projectory data and command flight correction.

Satellite Vehicle

The entire Lockheed AGENA second stage becomes the orbiting satellite vehicle.

Height: About 22 feet.

Weight: Approximately 11,000 pounds at launch. Orbital weight after fuel exhaustion will be approximately 4,100 pounds.

Propulsion: Following coast period after ATLAS Burnout, a Bell liquid fuel rocket engine, developing 15,000 pounds of thrust, will propel the second stage into orbit.

Instrument Package: Test photographic and related equipment.

IV. TRACKING, TELEMETRY AND COMMAND

a. Primary tracking, telemetry and command during orbit will be performed by:

Vandenberg Tracking Station, Vandenberg AFB, California

Hawaiian Tracking Station, Kaena, Oahu, Hawaii

Kodiak Tracking Station, Kodiak, Alaska

b. Ascent Guidance (booster)

GE MOD II, Vandenberg AFB, California

c. Ascent Tracking and Telemetry

Vandenberg Tracking Station, Vandenberg, California

d. Downrange Telemetry and Tracking Ship

Pvt. Joe E. Mann

e. Ascent Radar and/or Optical Tracking (PMR)

Point Arguello, California

Point Mugu, California

St. Nicholas Island, California

f. USAF Satellite Test Center, Sunnyvale, California

(Control Center receiving all orbital data and exercising command control of SAMOS)