VC - Gill

National Aeronautics and Space Administration
Goddard Space Flight Center
Contract No.NAS-5-12487

ST -PR -LPS -10706

N.L.

"L U N A - 14"

A NEW ARTIFICIAL SATELLITE OF THE MOON

(Tass Communique)

(USSR)

22 APRIL 1968

ST – PR – LPS – 10706

"L U N A - 14"
A NEW ARTIFICIAL SATELLITE OF THE MOON

TASS COMMUNIQUE

After executing the deceleration maneuver, the automatic station "LUNA-14" was transfered to a selenocentric orbit on 10 April 1968, thus becoming an alternate Soviet artificial satellite of the Moon.

The new AMS "LUNA-14" pursues the scientific investigations of the Moon and outer space, having begun by the earlier Soviet automatic stations-satellites of the "Luna" series.

As already communicated AMS LUNA-14 was placed into the flight trajectory toward the Moon on 7 April 1968. During the three and one half days of flight twenty radiocommunication sessions were conducted with it, during which various operating regimes of its instrumentation and systems were verified, and scientific measurements in outer space were conducted.

With the view of ensuring the placing of the AMS into the orbit of an artificial Moon's satellite, trajectory correction was effected on 8 April at 2237 hours Moscow time. Earlier the station was oriented by the elestial bodies (Sun and Moon) with the aid of astroorientation systems and it was brought into a position required for performing the correction. After that, the motive installation was switched on at the calculated time so as to ensure the correction of motion trajectory. The trajectory measurements con ducted in subsequent sessions have shown that the correction maneuver was performed successfully, so that the station entered the pre-calculated trajectory passing at the prescribed distan œ from the surface of the Moon. According to parameters of the trajectory obtained after correction, initial data were determined for performing the deceleration with the view of transferring the station into a selenocentric orbit.

As AMS LUNA-14 approached the Moon, the automatic guidance system was switched on at command from the ground, assuring the performance of deceleration session in accord with the program.

At 2225 hours Moscow time the motive installation was switched on, decreasing the station's velocity from 2190 to 1279 m/sec and the station entered the selenocentric orbit.

Following are the investigations envisioned with the aid of the scientific instrumentation installed on board LUNE-14:

---

* Released by Soviet press (Pravda, Komcomol'skaya Pravda, etc..)

- the refinement of the correlation of Earth's and Moon's masses, of the gravitational field of the Moon and of its shape by the method of prolonged systematic observations of AMS's orbit parameter variations;

- the investigation of conditions of passage and stability of radiosignals transmitted from the Earth on board of LUNA-14 and in the inverse direction for its various positions relative to lunar surface and also at turns of the station behind the Moon;

- the conducting of measurements of charged particle fluxes arriving from the Sun and of cosmic rays;

- the obtaining of additional information for the construction of the theory of motion of the Moon.

According to preliminary data, the selenocentric orbit parameters of LUNA-14 are close to the computed values and constitute the maximum drifting from the surface of the Moon (in aposelion) 870 km and the minimum (in periselion) 160 km, the revolution period being 2 hours 40 minutes and the orbit inclination - 42 degrees.

According to telemetry data, the on-board systems and the scientific instrumentation designed for conducting the investigation of the Moon and of the outer space operate normally. A steady radiocommunication is maintained with the station.

The computing-coordination center conducts the processing of the incoming information.

Soviet scientists, builders and engineers, the technicians and the workers have dedicated the launching of the AMS "LUNA-14" to our popular holiday, say the "Cosmonautics Day".

CONTRACT No.NAS-5-12487
Volt Technical Corporation
1145 - 19th St.NW
WASHINGTON D.C. 20036.
Telephone: 223-6700 (XX- 36 & 37)

Translated by ANDRE L. BRICHANT

on 22 April 1968

(3 pp. 100 copies)