MEMORANDUM FOR ASSISTANT SECRETARY OF THE ARMY (R&D)

SUBJECT: ARGON Follow-On (A') Proposal

Reference: A' Presentation to SAFUS, 12 Dec 62

I have had under consideration a proposal to develop an enhanced capability for a geodetic satellite system beyond the present ARGON program. The system is proposed to obtain world-wide photographic data coverage to permit the compilation directly of provisional maps and to provide increased geodetic control. In addition, these photographs, when combined with panoramic and conventional photography, would allow for the upgrading of these maps to Class A standards.

I have had an analysis made of the satellite and booster vehicle requirements for such a system and, in particular, have sought to achieve the maximum interchangeability between such a new payload and other payloads being used, or planned, in the total satellite program. In order to arrive at a final decision it is essential that we satisfy ourselves that this new proposal will, in fact, when combined with the results of panoramic photography, satisfy all the urgent requirements for classes of maps and for geodetic control. I would appreciate your analysis of the proposal from this point of view and would like to receive, by 28 December 1962, a statement with supporting analysis as to the capabilities which you think this system will have.

The proposal appears to be a most attractive one and if analysis supports the contention that the outstanding requirements will be satisfied by the system, I think it forms a very attractive means to achieve the desired goals at an early date.

Joseph V. Charyk
Director
National Reconnaissance Office

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A' System
Characteristics

Declassified and Released by the NRO
in accordance with 50-2958
on NOV 6 1997
A' SYSTEM CHARACTERISTICS

A. Exploit fully the existing space systems and TAT capability with proposed A' system.

B. Optimize payload.

C. Minimize modification to existing space system.

D. Use available techniques and equipment for data reduction.

E. Camera:
   Terrain - 12" focal length, f/5.6 9" x 14½" format
   Stellar - 6" focal length, f/2.5 2½" x 3" format

F. Orbit parameters:
   Period - 89.4 min
   Alt. - 133 nm
   Eccentricity - circular