

Summary Minutes No. 36
(USP/SM-36)

36th Meeting of the
UNMANNED SPACECRAFT PANEL
of the
Aeronautics and Astronautics Coordinating Board

DATE : 14 April 1964

TIME : 9:00 A.M.

PLACE : The Pentagon, Room 4B854

PRESENT: Chairman : Mr. R. F. Garbarini, NASA/SE
Vice Chairman: Mr. S. J. Colby, DDR&E/OSD

Panel Members: Capt. C. C. Andrews, USN, OpNav
Dr. J. E. Naugle, NASA/SG
Mr. O. W. Nicks, NASA/SL

Secretary : Mr. J. Posner, NASA/SP

Technical Information Subpanel:
Lt. Col. L. Allen, Jr., USAF, DDR&E/OSD
Maj. D. L. Flood, USAF/AFRDDG
Maj. W. H. Hubbard, USA, OCRD/DA

Briefers : Mr. M. Dubin, NASA/SG
Maj. J. L. Ramey, USAF, SSD/AFSC
Mr. H. L. Spector, NASA/KR

Visitors : Lt. Col. O. A. Bernhoff, USAF, SSD/AFSC
Col. D. L. Carter, USAF, Hqtrs/AFSC
Col. L. V. Gossick, USAF/AFRDD
Capt. H. Silberstein, DOD/DDR&E
Mr. J. O. Spriggs, NASA/SA
Lt. Col. L. Stone, USAF/AFRSTA
Mr. L. L. Suter, NASA/AI
Capt. W. C. Walters, Jr., USAF, Hqtrs/AFSC

ABSENT : Panel Members: Maj. Gen. R. D. Curtin, USAF/DCS/R&D
Col. J. W. Milner, USA, OCRD
Dr. J. D. Nicolaidis, NASA/SA

2. Coordination of Scientific Experiments

Mr. Colby reported that he and Mr. Garbarini had met several times and had developed a paper describing a revised procedure for coordination of scientific experiments between NASA and DOD. This procedure has been coordinated within and between agencies, has been signed by Dr. Seamans, and was going in to Dr. Brown today for signature. A report on its status will be given to USP at the next meeting.

3. National Geodetic Satellite Program

Mr. Garbarini noted that Dr. Brown and Dr. Seamans had signed an agreement worked out with the Bureau of the Budget on the Geodetic Program. Dr. Naugle reviewed the status and the schedule of the NASA Geodetic Satellite Program and how it fits into the firm requirement for an 80° and a 40° launch as established by Navy. The following schedule was shown:

<u>Spacecraft</u>	<u>Launch Schedule</u>	<u>Remarks</u>
S-66a	July 1964	80° inclined orbit
S-66b	3rd Quarter 1964	(1) back-up to S-66a or, if not so re- quired, (2) 40° inclined orbit
GEOS A	3rd Quarter 1965	
GEOS B	(1) late 1965 - if back-up to GEOS A, or, if not so required, (2) 1966	
BALLOON	(1) 1965 or 1966 (2) 1966	back-up

Dr. Naugle described some of the characteristics of GEOS A and B as follows:

<u>Spacecraft</u>	<u>Instrumentation</u>
340# Gravity Stabilized Launched by Delta Vehicle Prototype plus 2 flight units to be built	Flashing Light Doppler SECOR Laser Reflector Radar Reflector Range/Range Rate

Captain Andrews expressed Navy's desire that the 40° inclination launch be included in the S-66 project plans as a firm requirement. He also noted that the Navy had initiated planning to request small electronic, Doppler only, satellites to meet this requirement in FY 1965 if the NASA program is unable to do so.

4. Advanced Technological Satellite

Mr. Garbarini gave a brief status report on the Advanced Technological Satellite. Since the briefing given at the last (35th) meeting the examination of the total program has been proceeding. NASA and DOD have met to discuss coordination procedures and to establish points of contact at the several organizational levels to discuss experiments and exchange of information.

The first flight spacecraft (6,000 mile gravity gradient experiment) and the implementation of objectives have been the subject of discussion between DOD, NASA Headquarters, and Goddard. Included in the discussions was the technique for accomplishing the test in a manner that would meet DOD requirements.

NASA has submitted the specifications of the five flight ATS program to DOD for suggestions or recommendations of payload. Mr. Colby asked the representatives of the several services present at this meeting to consider and express their need with respect to specific requirements and to establish points of contact.

Mr. Garbarini noted that the contract with Hughes Aircraft is still being negotiated and therefore has not been definitized.

5. Space Weather Symposium

Mr. Dubin described the Space Weather Symposium held at the Arleigh House on April 2-4, 1964. In attendance were about 100 people representing about 24 different government operating elements. The prime purpose of the meeting was to provide information to the ICAS Panel on Space Environmental Forecasting in their study of the National Space Weather Needs. Central theme of the meeting involved defining government and industry needs for space weather observations and forecasting on a near real time basis.

MISCELLANEOUS

A discussion was initiated relating to the proposed launch by Air Force of two Journeyman rockets off the coast of Peru. Questions were raised concerning whether or not existing data meets the needs for which