

CHRONOLGY OF DOCUMENTS PERTINENT TO USAF REQUESTS
FOR SPACE MISSIONS AND SUPPORT OF SPACE PROGRAMS

- 1. 29Oct57 The Air Force briefed the Secretary of Defense on the Advanced Reconnaissance System of (ARS)117L. Mr. McElroy expressed some enthusiasm, and asked if the Air Force could accelerate the work provided OSD made additional funds available.
- 2. 12Nov57 Memo, Mr. Richard E. Horner, SAJ(R&D) to Mr. McElroy supplying the requisite data on (ARS)117L. Mr. Horner stated that with small additional funds allocation in FY 1953, and \$28,000,000 in FY 1959, the Air Force could have (ARS)117L in orbit in June 1959, instead of June 1960 as currently scheduled. At same time Mr. Horner suggested immediate work on [a recoverable satellite using a THOR as booster, a Lockheed P1D PLPEN as satellite, and two rockets to push the payload out of orbit and back to earth.] Requested authorization to launch THOR-boosted satellite in March 1953.
- 3. 12Nov57 Memo, Secretary Douglas to Secretary McElroy, asking OSD for formal assignment to the Air Force of responsibility for development and operation of all military satellites.
- 4. 24Jan58 Memo, Mr. Horner to Mr. William Holaday, Director of Guided Missiles, OSD, stating that six space missions -- [Reconnaissance, Weapons Delivery, Space Research and Experiment, Manned Space Flight, Data Transmission, and Countermeasures -- were considered by USAF to be essential to national position and prestige, and recommending approval of the following astronomical programs:

<u>Program</u>	<u>Title</u>	<u>Sub-Projects</u>	<u>Missions</u>
I. 609	Ballistic Test	A. BRATS B. Aerial Survey	Space research and experiment Reconnaissance
II. 447	Manned Sys	L. X-15 M. Adv Res a/c	Space research and manned flight Manned space flight and experiment
III. 464	Dyna Soar	L. Manned Capsule Test M. Conceptual Test N. Boost Glide Tactical	Manned space flight Manned space flight Weapon delivery

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<u>Program</u>	<u>Title</u>	<u>Sub-Projects</u>	<u>Missions</u>
		O. Boost Glide Interceptor	Countermeasures
		P. Satellite Interceptor	Countermeasures]
		Q. Global Reconnaissance	Reconnaissance]
		R. Global Bomber	Weapon delivery
IV, 117	Satellite Sys	L. (a) ARS	Reconnaissance]
		(b) Recoverable Data	Reconnaissance]
		N. 24 Hour Reconnaissance Sys	Reconnaissance
		O. Global Surveil.	Reconnaissance, Space research and experiment
		P. Manned Strategic Station	Weapon delivery and reconnaissance
		Q. Strategic Communication Sta.	Data transmission
V. 499	Lunar Base System	D. Manned Variable Trajectory Test Vehicle	Manned Space Flight, space research and experiment
		E. Nuclear Rocket Test	Space research and experiment
		F. Ion Propulsion Test	Space research and experiment
		G. Lunar Transport	Manned space flight, space research and experiment
		H. Manned Lunar Base	Weapon delivery, [reconnaissance]

5. 1Feb58 Memo, Secretary of the Air Force to Secretary of Defense requesting CSD approval of USAF Memo of 12 Nov, and a directive to Air Force to continue the 117L Project under the overall direction of the contemplated Advanced Research Projects Agency (ARPA).

(For information only: 7 February 1958 the Secretary of Defense established by a Department of Defense Directive the Advanced Research Project Agency (ARPA), Mr. Roy Johnson, Director, to direct such research and development being performed within the Department of Defense as the Secretary might desire.)

7- ~~14~~ 14 Feb 58

14 Feb.
Reply: OSD ~~negative~~ approved the Memo of ~~14 Feb~~ 58, but the programs would have to be met within the Air Force resources for 1958. No reply however has been found in AFDAT files.

8- 14 Feb 58

The Secretary of the Air Force requested OSD to approve plan for USAF to initiate five specific astronautic projects:

1. THOR-ICBM to test advanced ICBM nose cones.
2. { TV satellite THOR and Hustler engine to boost satellite to orbit with first flight scheduled for September 1958.
3. { Recoverable satellite by deceleration, } using THOR and VANGUARD.
4. Scientific satellite of 300 pounds, using THOR and HUSTLER.
5. Moon impact using THOR and VANGUARD as 2 and 3, by October 1958.

8. 21 Feb 58

SAF(R&D) memo to OSD describing some aspects of [ARS] and asking that USAF be made Executive Agent.

9. 21 Feb 58

Memo, Malcolm MacIntyre, Under Secretary of the Air Force, to Mr. Holaday requesting authorization for USAF to proceed with ablation type nose cone.

10. 21 Feb 58

Memo, SAF(R&D) to Secretary of Defense requesting OSD approval of WS-117L.

11. 21 Feb 58

Memo, Horner to OSD requesting approval of WS-117L plans [to place a series of unmanned satellites in orbit around the earth to transmit information to ground stations.] On 24 Feb OSD informed ARPA that WS-117L program was approved in principle. (Memo, OSD to Secretary of the Air Force, subj: WS-117L Program, 24 Feb 1958.)

- ~~CONFIDENTIAL~~
12. 24Feb58 Memo, Chairman OSD-BMC to Executive Secretaries of the Army, Navy and Air Force BMC's, adding three new programs to those of highest national priority as previously established by NSC:
1. Anti-missile defense weapon system including active defense and other related early warning for defense of U.S. proper.
 2. Other satellite programs determined by OSD to be of political, scientific or psychological value.
 3. IGY satellite VANGUARD and JUPITER-C programs.
13. 28Feb58 Reply: Memo, Roy Johnson to the Secretary of the Air Force replying to USAF memo of 12 Nov 1957 and 14 Feb 1958. [Mr. Johnson had discussed USAF proposals with the Director of Guided Missiles, the Special Assistant to the President for Science and Technology, and the Director of Central Intelligence.] They wanted to avoid duplication, etc. Mr. Johnson approved acceleration of ATLAS 117L on highest priority; test firings of THOR booster as cheaper than ATLAS; development of THOR booster with suitable second stage vehicle for experimental flights with laboratory animals.
14. 28Feb58 Memo, SAF(R&D) to Holaday, with 7 Incls, explaining USAF astronautical development program.
15. 4Mar58 Memo, Secretary of the Air Force to the Secretary of Defense, presenting a program for defense against ICBM.
16. 19Mar58 Memo, Secretary of the Air Force to Johnson re approval of ABMA project to put into space and recover a manned vehicle.
17. 19Mar58 Memo, Mr. MacIntyre to ARPA explaining the increased cost of the USAF Man-in-Space Program.
18. 10Apr58 Memo SAF(R&D) to ARPA concerning the identification of USAF R&D programs for Astronautics.
19. 23Apr58 Memo, USAF to ARPA, Status Report on WS-117L.

20. 27May58 Memo, SAF(R&D) to ARPA on Astronautics Instrumentation Sites.
21. 28May58 Memo, ARPA to SAF(R&D) expressing desire to foster early placement of payloads in space, and hoping for earlier ATLAS-boosted WS-117L than was scheduled. Requested information on possibility of improving launch dates by several months.
22. 9Jun58 Memo, SAF(R&D) to ARPA concerning use of NAVAHO boosters.
23. 11Jul53 Memo, AFBMD to ARPA, Participation of University of Chicago in Lunar Probe Program.

(For information only: On 23 July the President signed HR 12575 establishing NASA. On 23 July General White issued GO No. 44 establishing AFDAT as of 15 July, and assigning to the Directorate the following projects:

<p>[Sentry (117L) Man-in-Space DYNA SOAR Lunar Probes [Satellite Interceptors]</p>	<p>Strategic Lunar Systems Satellite Tracking Ballistic Missile Test System Other programs to be assigned from time to time</p>
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24. 15Sep58 Memo, USAF to ARPA presenting an Air Force statement on the military uses of space.
25. 15Sep58 Memo, approved by C/S for Director, ARPA from SAF requesting approval and financial support of a program for a recoverable capsule. ARPA rejected the request on 24 Sept 1958.
26. 19Sep53 Memo, AFBMD to ARPA proposing instrumented payload configuration for 3rd Lunar Probe vehicle flight.
27. 22Sep58 Memo, approved by the Vice Chief of Staff for ARPA from AFDAT, forwarding copies of Abbreviated Development Plan for Strategic Communications Station System as requested 5 Sept 1953.

28. 28Sep58 Memo, ARDC to ARPA proposing Biosciences and Biotechnology Research and Development Effort.
29. 30Sep58 Memo, approved by Vice Chief of Staff for ARPA from SAF(R&D) urging early initiation, on an equal basis with 117L reconnaissance satellite, of Strategic Communications System.
30. 8Oct58 Memo, Secretary of the Air Force to Mr. Glennan, Administrator of NASA, seeking return of the 1,000,000 pound (increased to the 1,500,000 pound) thrust liquid rocket development because of USAF capability to do the work quickly.
31. 14Oct58 Memo, approved by the Vice Chief of Staff, for ARPA from Deputy for Operations, SAF(R&D) stating USAF satellite and space surveillance requirements, as asked by ARPA. Memo stressed need to devise a satellite detection, tracking, and position prediction system for use by NORAD.
32. 30Oct58 Proposed memo, approved by C/S for the Secretary of Defense from the Secretary of the Air Force, listing thirteen military uses of space, and requesting USAF be given responsibility for at least five vital missions. Secretary Douglas returned the memo as "overtaken by events."
33. 31Oct58 USAF/NASA agreement signed covering USAF participation in the development and use of Solid Rocket Test Vehicle 609A.
34. 10Nov58 Memo, SAF(R&D) to Director ARPA setting forth Air Force statement of Military Uses of Space, and stating that the documented Air Force Requirements for Space Systems are covered in the General Operational Requirements 80 and 130.
35. 21Nov58 Memo, approved by the Vice Chief of Staff for ARPA from SAF(R&D) explaining urgent SAC requirements for instantaneous, long range ground/air communications, and urging ARPA to give this requirement the top priority of the communications satellite program.
36. 24Nov58 ARDC memo requesting NASA assistance on ARPA directed program.

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37. 26Nov58 Memo, Asst Vice Chief of Staff to SAF(R&D) informing Mr. Horner of USAF plans, including programmed funds, schedule milestones, and program objectives, and asking his concurrence.
 38. 2Dec58 Proposed memo, approved by Asst Vice Chief of Staff for ARPA from the Secretary of the Air Force asking delay in Missile Defense Alarm Satellite (MIDAS) Development Plan until the Air Staff could complete its study of developing an ICBM Attack Alarm System (formerly a sub-system of 117L). On 17 Dec SAF(R&D) returned the draft as overtaken by events.
 39. 4Dec58 Memo, approved by the Asst Vice Chief of Staff for the Secretary of Defense from the Secretary of the Air Force, asking Mr. McElroy to obtain Bureau of the Budget release of \$10,000,000 of FY 59 funds being withheld by EOB, as well as another \$14,500,000 programmed by USAF in support of DYNA SOAR.
 40. 5Dec58 Memo of Understanding by the Chief of Staff covering NASA participation in the DYNA SOAR program. The NASA Administrator had already signed the agreement on 14 Nov 58.
 41. 9Dec58 Memo, approved by the Asst Vice Chief of Staff for SAF(R&D) from LtGen R. C. Wilson, DCS/D, urging Mr. Horner to discuss with Mr. Johnson USAF objections to the Communications Satellite Program as being directed by ARPA.
 42. 12Dec58 Ltr, Commander NORAD to Director ARPA on ICBM Defense System.
 43. 22Dec58 Memo, ARDC to ARPA on Development of Life Support Equipment Components.