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File - Fulcrum
generalF U L C R U MProgram History

1. May 1963 - DCI convened the Purcell Panel to determine the future role and posture of the US Reconnaissance Program.
2. June 1963 - Purcell Panel submitted report, recommending among other things CORONA improvement program to optimize performance.
3. Fall 1963 - CIA/DDS&T critiqued AF's CORONA improvement plan, which led to the Drell Committee with joint AF/CIA membership. No action on Drell report when DNRO proposed referring Drell recommendations to yet another committee.
4. Jan. 1964 - 25 P.I.'s from NPIC conducted detailed experiment to ascertain resolution required to identify the various USIB targets. Results demonstrated that the majority of targets could be properly identified with 2 - 4 foot resolution.
5. Feb. 1964 - CIA/DDS&T funded Itek (\$145 K) to determine the feasibility and potential intelligence value of various sensors in satellites. This study involving the basic principles of physics, concluded that black and white photography can still satisfy the majority of USIB reconnaissance requirements, but to do so properly, efficiently, and economically, large swath width coverage with at least 4 foot resolution would be required.
6. April 1964 - CIA/DDS&T funded STL to investigate a spinning vehicle hybrid system.
7. May 1964 - CIA, as well as Itek and STL, having independently concluded that Corona-type coverage consistent with Gambit-type resolution was needed, presented a proposal to the DNRO encompassing the following:

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- (a) 5,500# photographic payload using Titan 2.
 - (b) Two 60" f.l. stereo camera with nadir ground resolution of 2 - 4 feet over a strip 360 miles wide.
 - (c) 68,000 feet of 7" film covering 11 million sq. miles for each mission, requiring a new R/V.
 - (d) An estimated cost of \$10 M per launch
8. June 1964 - The Land Panel was convened to critically examine this concept. The panel reported that the concept held real promise and recommended that it be vigorously explored as to its detailed technical reliability in a 6-month Phase I effort with emphasis in the following 4 areas:
- (a) Feasibility of moving film rapidly and accurately through the camera.
 - (b) Stability and noise of the rotating camera bearing system.
 - (c) Compatibility of the all-up P/L weight with Titan 2's lifting capability.
 - (d) Composition, coupling, and control of the several components of angular momentum associated with the rotating camera and the high speed film supply.
9. Sept. 1964 - Phase I began (\$5.35 M)
- P/L - Itek
 - S/C - G. E. (winner of competition with STL and LMSC)
 - R/V - Avco (winner of competition with GE)
 - SE - STL (including vulnerability studies)
 - P/L backup - P. E.
 - Film handling backup - RCA
10. Feb. 1965 - Land Panel was again convened to evaluate technically the CIA FULCRUM camera system and the two AF systems - one at EK and one at Itek.

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11. March 1965 - Following the withdrawal of Itek from the FULCRUM program, PE began modifying the Itek design to incorporate major system improvements, the new design being known as "F-prime." An alternate camera concept, known as Matchbox, was also undertaken at PE.
12. July 1965 - PSAC Reconnaissance Panel under Dr. Land was convened and was briefed on the two CIA systems at PE and the AF systems.
13. Aug. 1965 - A 3-month further study effort was recommended by the Panel on the camera systems only. The new NRO agreement was released.