

Answer 4. In fiscal year 1964, NASA initiated feasibility studies of improvements to the uprated Saturn I (Saturn-1B) which included consideration of strap-on solid rocket motors (SRM's) for increased performance. The same contractors were funded in fiscal year 1965 for studies of promising configurations in greater depth. These follow-on fiscal year 1965 studies were the "Saturn-1B Improvement Studies" with Chrysler (contract NAS 8-20260) and Douglas (contract NASA 8-20259). These contractual efforts included consideration of Minuteman and 120-inch (five and seven segment) strap-on SRM's. For a 100-nautical-mile circular orbit the resulting strap-on SRM configuration ranged in payload capability from approximately 50,000 pounds with four strap-on Minuteman to approximately 110,000 pounds with four strap-on 120-inch SRM's (seven segments).

Missions for which the uprated Saturn I (Saturn-1B) with strap-on solid rocket motors might be used include earth orbital manned and unmanned experiments, orbital injection of small, short duration space stations, and logistics support of large, long-duration space stations. Other possibilities included high energy, unmanned missions, usually with an upper third stage such as Centaur.

Question 5. What studies have been conducted by NASA relative to manned weather satellites and what is the outlook for such satellites at this time?

Answer 5. Investigations related to meteorology and weather satellites conducted in connection with our space station studies have been concerned with manned support of meteorological experiments. These studies did not address themselves to the creation of operational weather satellites in the sense of TIROS, Nimbus, and so forth, but rather toward manned facilities to conduct experiments and develop operational systems. The studies examined the spectrum of meteorological research objectives, instruments required for experiments in support of these objectives, flight mission requirements, and accommodation of the instruments aboard the conceptual station configurations.

Question 6. How are the fiscal year 1967 funds budgeted as between the four classes of Advanced Mission studies?

Answer 6:

Study area:	Fiscal year 1967 (thousands)
Earth Orbital.....	\$3, 100
Lunar	450
Planetary	1, 500
Launch vehicle and general program.....	1, 150
Total	6, 200