

50 years ago: the first flight of Saturn V

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NASA's Saturn V – the tallest, heaviest and most powerful rocket ever flown in space – lifted off for its maiden flight, known as Apollo 4 mission, on Nov. 9, 1967, from Kennedy Space Center in Florida.

The giant rocket – that would carry 24 astronauts to the moon and put into Earth orbit Skylab, the United States' first space station – instantly became the icon of the U.S. space programme. At a height of 363 feet (111 m), it was 58 feet (18 m) taller than Statue of Liberty, and had a maximum thrust at launch of 7.5 million pounds. Its first stage consumed 15 tons of propellant per second.

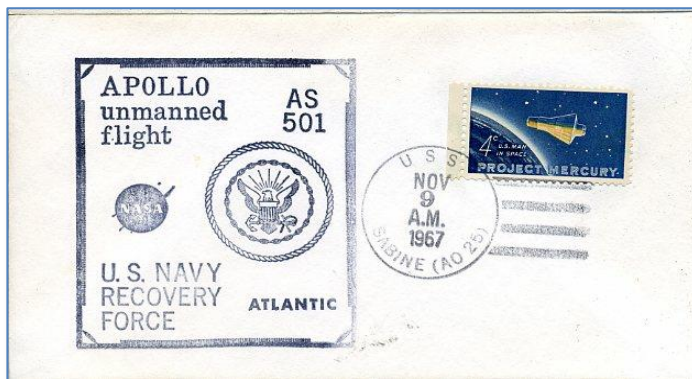
It represented the evolution of the successful

Jupiter series and this is why it got the name “Saturn” from the next planet after Jupiter.

Its development formally began in January 1961, under the guidance of Wernher von Braun, and in only 6 years went from paper design to flying into space.

Von Braun took a conservative approach and wanted to test each part of the rocket separately: piece by piece. But NASA was planning to land humans on the moon before the end of the decade, and when George Mueller assumed responsibility for the Apollo programme, as director of the NASA's Office Of Manned Space Flight, he immediately realized that NASA would never make it to the Moon by the end of the decade without a more forceful approach to its development schedule, and ordered a test of the entire rocket all in one go, adopting the "all-up" approach that was used in the U.S. Air Force's ballistic missile programme.

Despite the reluctance of Von Braun – who claimed that Saturn's components were not being mass produced like the military rockets' used by USAF – the first Saturn V made its first uncrewed flight, as Apollo 4, and was a stunning success. Not only were tested at once all the parts of the rocket, but Mueller also wanted that first flight to carry a live Apollo Command and Service Module as payload, so that their systems could be tested in orbit. The Apollo CSM rode atop it into an almost circular, 100-mile-high (190 km) orbit. The S-IVB stage was later reignited to boost the spacecraft to an apogee of 11,234 miles (18,079 km) above Earth. A heat shield test was added.



The 8 hour, 36 minute and 59 second mission ended with the Apollo 4 spacecraft re-entering Earth's atmosphere at almost 25,000 miles per hour (40,000 km/h), simulating a return from the Moon and splashing down to the northwest of Midway Island in the northern Pacific Ocean.

It was a decision that ultimately saved the Apollo programme.

Only Apollo 6 saw another unmanned Saturn launch in April 1968. Just a few

months later, in December 1968, the third Saturn V rocket would take the Apollo 8 crew to the Moon. The first Moon landing took then place on schedule, in July 1969.

This important milestone was commemorated with a stamp and a special cancellation designed in Austria by Alfred Gugerell, who is ASITAF Member.



A Biberpost stamp and special cancellation were also issued by the collector Ralf Schulz in Germany.



In the USA Zazzle issued a stamp.



Robert Pearlman, "Saturn V at 50: NASA moon rocket lifted off on maiden mission 50 years ago", in www.collectspace.com (Nov, 9, 2017)

Amy Shira, "NASA's Gutsy First Launch of the Saturn V Moon Rocket", in www.space.com (Nov, 15, 2012)

Umberto Cavallaro, "Propaganda e Pragmatismo in gara per la Conquista della Luna", Impremix, Torino 2011, p. 124.