

## **Cape Canaveral Minuteman Chronology 1959-1970**

June 1959

Design work was completed for Minuteman launch silos, surface launch pads, operations building, assembly buildings, engineering and test structures, propellant inspection building, engine storage structure, and support facilities to be constructed at Patrick AFB, Florida.

*MM64-79*

29 July 1959

Construction began on Minuteman installations at Patrick AFB, Florida.

*MM64-79*

April 1960

Minuteman launch pad 1 at the Atlantic Missile Range was completed.

*MM64-79*

May 1960

Minuteman facilities constructed at the Atlantic Missile Range were occupied by the Air Force.

*MM64-79*

June 1960

Boeing shipped components of a 'dummy' checkout missile to the Atlantic Missile Range. Construction of facilities required for the first Minuteman flight test from the Atlantic Missile Range was completed.

*MM64-79*

July 1960

Flight test facilities for the Minuteman missile were completed at the Atlantic Missile Range.

*BMO45-90*

20 August 1960

The first Minuteman Mk5 re-entry vehicle was delivered to the Atlantic Missile Range.

*MM64-79*

October 1960

An inert full-scale Minuteman ground test missile was delivered to the Atlantic Missile Range test site.

*MM64-79*

3 October 1960

Aerofjet-General delivered the first Minuteman Stage II flight test motor to the Air Force Missile Test Center at Patrick AFB, Florida.

*BMO45-90, MM64-79*

10 October 1960

Hercules delivered the first flight test Stage III motor to the Atlantic Missile Range.

*MM64-79, BMO45-90*

8 November 1960

Thiokol Chemical Corporation delivered the first Minuteman Stage I flight test motor to Cape Canaveral.

*BMO45-90, SAMSO54-79, MM64-79*

January 1961

The second surface launcher for Minuteman research and development missiles at the Atlantic Missile Range was completed.

*MM64-79*

1 February 1961

The first Minuteman research and development flight test missile (FTM 401) was launched by the 6555<sup>th</sup> Test Wing from Pad 31 at the Atlantic Missile Range. All the missile's stages and subsystems were operational, marking the first time that a first flight test missile was launched with all systems and stages functioning. Following liftoff at 1059 EST, FTM 401 completed a 4600-mile flight, and its reentry vehicle impacted in the designated target area. This was the most successful first flight in the history of US missile development, and was conducted only two-and-one-half years after the requirement for the Minuteman ICBM had been established.

*BMO45-90, SAMSO54-79, MM64-79, SACMSL39-73, COMP45-72, POL55-68*

19 May 1961

The second flight test of the Minuteman missile occurred at the Atlantic Missile Range, Cape Canaveral, Florida. After successful first-stage motor burnout and second-stage ignition, the missile veered off course so the range safety officer destroyed it.

*OOAMA58-71*

27 July 1961

A successful flight test of the third Minuteman missile from Cape Canaveral obviated the need for further launches from surface pads. Ahead was the more advanced testing phase - launching from a 90-foot-deep silo.

*OOAMA58-71*

30 August 1961

The first attempt to launch a Minuteman missile from an underground silo (LC-32B) at the Atlantic Missile Range was a complete failure when the missile (FTM 404) exploded immediately after first stage ignition.

*BMO45-90, SAMSO54-79, COMP45-72*

17 November 1961

Minuteman FTM 405 was launched from silo 32B at the Atlantic Missile Range and completed a flight of 2993 nautical miles downrange. This was the first successful Minuteman launch from an underground silo.

*BMO45-90, SAMSO54-79, SACMSL39-73*

29 June 1962

The first launching of a Minuteman by an Air Force crew occurred from an underground silo at Cape Canaveral. This was the 13<sup>th</sup> successful flight out of 16 tests.

*OOAMA58-71*

7 December 1962

First model B Minuteman I flight test is successful at Cape Canaveral. Flight test missile (FTM 424) carries Mark 11 reentry vehicle. This launch, conducted by an all-Air Force crew, took place at Cape Canaveral, Florida.

*COMP45-72, SAMSO54-79, BMO45-90, MM64-79, SACMSL39-88, SACMSL39-73*

20 February 1963

Minuteman FTM 421B was successfully launched down the Atlantic Missile Range by an all-Air Force crew, thus completing the AMR test program for the Wing I configuration Minuteman missile (LGM-30A).

*BMO45-90, SAMSO54-79*

28 May 1963

The first Minuteman ICBM equipped with retrorockets to increase the distance between its third stage and reentry vehicle in flight was successfully launched from Cape Canaveral, FL.

*SACMSL39-73, COMP45-72*

28 May 1963

A Minuteman launched from Cape Canaveral successfully flew more than 4000 miles down the Atlantic Missile Range. This was the last silo launch by Boeing before turning over firing to the 6555<sup>th</sup> Aerospace Test Wing, Patrick AFB, Florida.

*OOAMA58-71*

1 July 1963

The first Minuteman I (LGM-30B) flight test missile to be fired from Cape Canaveral was launched from silo 32B.

*BMO45-90, SAMSO54-79, COMP45-72*

24 July 1963

The 50<sup>th</sup> launch of a Minuteman ICBM took place at Cape Canaveral. This was a Wing II version, and occurred on the 13<sup>th</sup> anniversary of the first missile launch ever at Canaveral (the ex-German V2 “Bumper”).

*OOAMA58-71*

13 November 1963

A Minuteman flight test missile with a cylindrical first-stage skirt and a gas-injection steering system was successfully flight tested. These were Wing VI technical innovations that would be introduced with the Minuteman II (LGM-30F).

*BMO45-90, SAMSO54-79, OOAMA58-71*

24 September 1964

The LGM-30F Minuteman II made a textbook maiden flight from Cape Kennedy, Florida. It met all test objectives in the flight, the first of about 36 planned in a program to develop Minuteman II as a major deterrent useful until the mid-1970s. The new ICBM featured a new and larger second stage with 34% more propellant and thrust. The missile is designed to strike deeper into potential enemy territory with great accuracy.

*OOAMA58-71*

8 July 1966

The first flight test of the Minuteman III Mk12 MIRV was successful. The Mk12 MIRV was carried on a Minuteman II ICBM launched from Cape Kennedy, Florida.

*SACMSL39-73, COMP45-72*

19 July 1966

Carrying a Mk12 reentry system, a Minuteman II was successfully launched 5000 miles down the Eastern Test Range by a crew from Patrick AFB, Florida. This was the latest in an unbroken string of successful Minuteman II launches which began in September 1964.

*OOAMA58-71*

6 February 1968

Minuteman II LGM-30F (FTM 468), carrying a research and development Mk12 reentry vehicle, was launched from silo 32 at Cape Canaveral. This was the 26<sup>th</sup> Minuteman II R&D launch: 20 from the Eastern Test Range and six from Vandenberg AFB.

*BMO45-90, SAMSO54-79*

16 August 1968

The first Minuteman III (FTM 201) was launched from LC-32B at Cape Kennedy and completed a successful flight 5000 miles downrange.

*BMO45-90, SAMSO54-79, OOAMA58-71, SACMSL39-73, COMP45-72*

14 December 1970

The successful flight of a Minuteman III from the Eastern Test Range marked the completion of Minuteman R&D testing at the range after almost ten years of operations. It was the 17<sup>th</sup> LGM-30G launched at the Cape and the 91<sup>st</sup> Minuteman east coast test. This was also the last ICBM launch to take place at Cape Kennedy.

*BMO45-90, SAMSO54-79, SACMSL39-73, OOAMA58-71*