

Northrop Grumman Test Fires Stage-One Solid Rocket Motor For Sentinel Missile

PROMONTORY, Utah. – March 6, 2023 – Northrop Grumman Corporation (NYSE: NOC) conducted its first full-scale static test fire of the Sentinel stage-one solid rocket motor at the company's test facility in Promontory.



The Air Force Nuclear Weapons Center conducted its first full-scale static test fire of the LGM-35A Sentinel stage-one solid rocket motor at the Northrop Grumman test facility in Promontory, Utah, March 2, 2023. The Air Force plans to replace the fielded Minuteman III intercontinental ballistic missile with the next-generation Sentinel system currently in development. The Sentinel acquisition program represents the modernization of the land-based leg of the U.S. nuclear triad. (U.S. Air Force photo by R. Nial Bradshaw).

This development test will further prove the Sentinel team's design approach and gain confidence to move to the next stage of testing. The motor fired for the anticipated duration and met performance parameters and objectives within expected ranges.

“This static fire highlights the advances we’ve made in digital engineering and gives us confidence in our ability to translate that into hardware build and test as we continue to make progress on the path to flight testing,” said Sarah Willoughby, vice president, Sentinel, Northrop Grumman. “The results allow us to validate and anchor our stage-one motor performance before entering qualification testing and completing system analyses, key to lowering risk as we mature the Sentinel design and advance towards critical design review.”

Northrop Grumman also leveraged advanced testing equipment that allowed for increased data collection to better understand motor characteristics.

“Our investments in digital design, test and advanced manufacturing help to ensure we develop this next-generation missile more affordably and with innovation at its core, delivering to the Air Force a safe, secure, reliable and flexible capability,” added Willoughby.

The Sentinel intercontinental ballistic missile weapon system is the U.S. Air Force’s program to modernize the land-based leg of the strategic triad, replacing the Minuteman III system that has been in service for more than half a century.

The Sentinel missile features a three-stage booster, with Northrop Grumman producing stages one and two. The booster is a new design, using the latest materials and design technologies to ultimately improve performance, reliability, safety and sustainability.

Northrop Grumman is leading a nationwide team that includes companies from across the defense, engineering and construction industries as part of the Sentinel engineering and manufacturing development contract. Overall, the Sentinel program will involve over 10,000 people across the U.S. directly working on this vital national security program. For more information, please visit: www.northropgrumman.com/sentinel.

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