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SpaceX launches Bangladesh's first communications satellite

An upgraded version of the SpaceX Falcon 9 Block 5 rocket lifts off Friday, May 11, 2018 from launch pad 39A at the Kennedy Space Center carrying Bangladesh's first communications satellite. | Photo Credit: AP

An updated version of the SpaceX Falcon 9 rocket, tailored for eventual crewed missions for NASA, made its debut launch on Friday from Florida's Cape Canaveral carrying a communications satellite for Bangladesh into orbit.

The newly minted Block-5 edition of the Falcon 9 — equipped with about 100 upgrades for greater power, safety and reusability than its Block-4 predecessor — lifted off at 4:14 p.m. EDT (2014 GMT) from the Kennedy Space Center.

Minutes later, the rocket's main-stage booster flew itself back to Earth to achieve a safe return landing on an unmanned platform vessel floating in the Pacific Ocean. The recoverable Block-5 booster is designed to be reused at least 10 times with minimal refurbishment between flights, allowing more frequent launches at lower cost – a key to the SpaceX business model.

Enhanced rocket reusability also is a core tenet of SpaceX owner and billionaire entrepreneur Elon Musk's broader objectives of making space travel commonplace and ultimately sending humans to Mars. SpaceX has safely return-landed 24 of its boosters and reflown 11 of them. Friday's flight marked the ninth SpaceX launch so far this year, compared to five orbital-class missions the company had logged at the same point in 2017, according to Musk.

It came a day after the original launch countdown was halted one minute before blastoff time due to a technical problem detected by the rocket's onboard computers. Friday's second attempt by SpaceX, formally known as Space Exploration Technologies, appeared to have gone off without a hitch.

The rocket's payload, the Bangladeshi government's first communications satellite, Bangabandhu-1, was placed into Earth orbit at 4:47 p.m. EDT, just 33 minutes after launch, according to SpaceX.

The achievement was hailed by Bangladesh Prime Minister Sheikh Hasina in a livestream appearance from her country's capital, Dhaka. "Today is a very delightful and glorious day for our motherland, Bangladesh, and Bangalee nation," she said. "With launching of Bangabandhu Satellite-1, we are hoisting our national flag in the space."

The Block-5 also marks another milestone for Musk's California-based company. It is expected to be the first SpaceX vehicle to satisfy NASA's standards for its Commercial Crew Programme to carry agency astronauts to the International Space Station. NASA requires seven successful flights before the new rocket receives final certification for a manned mission. Besides missions to the space station, the new rocket will be used to launch U.S. Air Force global positioning satellites and other high-value, military and national security payloads.

Block-5 marks the final version of the Falcon 9 lineup before SpaceX introduces its super heavy-lift launch vehicle, dubbed the Big Falcon Rocket, or BFR, which will be designed to send manned missions to Mars. SpaceX is one of two private companies hired by NASA to ferry astronaut crews to the space station. The other is Boeing Co.

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