

SpaceX capsule soars with dummy in first test of crew escape (Update)

May 6 2015, by Marcia Dunn



SpaceX's Dragon capsule launches, Wednesday, May 6, 2015, from Cape Canaveral, Fla. SpaceX fired the mock-up capsule to test the new, super-streamlined launch escape system for astronauts. (Red Huber/Orlando Sentinel via AP)

SpaceX chalked up another big test flight Wednesday, firing a capsule into the air to try out its new, super-streamlined launch escape system for astronauts.

No humans were on board, just a life-size dummy, for the first-of-its-



kind flight. The whole thing lasted just 1½ minutes, but represented a huge milestone in SpaceX's effort to get America back to the business of launching astronauts from U.S. soil.

SpaceX chief executive Elon Musk called it a great outcome, and NASA offered congratulations.

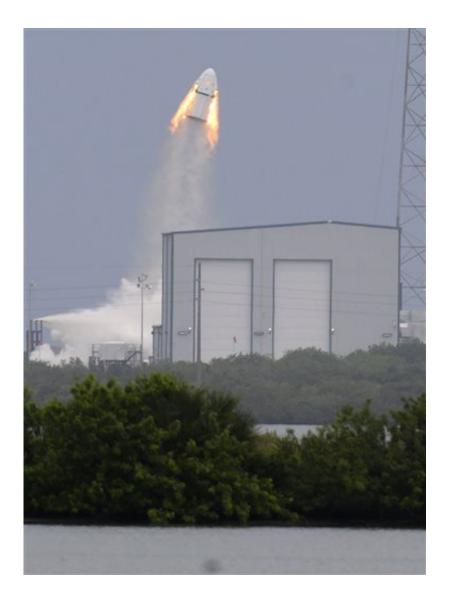
"Had there been people on board, they would have been in great shape," Musk said by phone from California, where his company is based.

"This bodes quite well for the future of the program," he said, quickly adding, "I don't want to jinx it."

The Dragon capsule shot off a test stand, not a rocket, and flew up and then out over the Atlantic. Eight rocket engines on the capsule provided the thrust. Red and white parachutes popped open and lowered the capsule into the ocean, just offshore.

"This flight test unlike any seen in Florida since the days of Apollo," NASA spokesman Mike Curie, the TV commentator for the test, said after the capsule plopped into the Atlantic. Recovery boats and a barge moved in to retrieve the craft.





A SpaceX Dragon mock-up capsule blasts into the air, Wednesday, May 6, 2015 during a test flight in Cape Canaveral, Fla. The unmanned flight was testing a new, super-streamlined launch escape system for astronauts. The California-based company led by billionaire Elon Musk aims to launch U.S. astronauts to the International Space Station as early as 2017. (Craig Bailey/Florida Today via AP)

SpaceX already hauls cargo to the International Space Station in a Dragon capsule for NASA; another supply run is set for next month. Determined from the start to crack the human spaceflight arena and put



people on Mars, Musk aims to launch U.S. astronauts to the orbiting lab as early as 2017, allowing NASA to reduce its reliance on Russia to ferry crews. The last manned launch from Cape Canaveral was in 2011 when the shuttle program ended.

Boeing also is developing a crew capsule for NASA. The space agency wants to make sure the commercial crew flights will be safe in an emergency, and is insisting on reliable escape systems.

Addressing reporters two hours after the test, Musk said he did not have specifics on how high or how far offshore the capsule flew. The anticipated altitude was a mile, and the splashdown zone a mile offshore.

He said all eight engines fired—although one was slightly off the mark—and that the capsule went from zero to 100 mph in 1.2 seconds.

"That's pretty zippy," Musk said.

Top speed was 345 mph.





Parachutes fully deploy and slow the descent of a SpaceX Dragon mock-up capsule, Wednesday, May 6, 2015, during a test flight in Cape Canaveral, Fla. The unmanned flight was testing a new, super-streamlined launch escape system for astronauts. The California-based company led by billionaire Elon Musk aims to launch U.S. astronauts to the International Space Station as early as 2017. (Craig Bailey/Florida Today via AP)

In the days leading up to the trial run, SpaceX officials had cautioned something might go wrong. The capsule could have been lost at sea or smashed down onto the Cape Canaveral Air Force Station, from where it



took off. A two-mile area was cleared before the test, just in case.

SpaceX said its revolutionary abort system, once perfected, will provide an escape for astronauts throughout their climb to orbit, something even NASA's early manned spacecraft could not do. The pointy launch-escape towers atop the Mercury and Apollo capsules were good for just the initial part of liftoff; the same is true of the Russian Soyuz spacecraft. The two-man Gemini capsules relied on ejection seats, as did the first four space shuttle flights.

Only the Russians ever used their escape system during a real manned launch—back in 1983—and it saved two cosmonauts' lives. The seven Challenger astronauts might have survived their 1986 accident with a decent escape system; that launch disaster, along with the 2003 loss of Columbia and seven astronauts during re-entry at flight's end, showed NASA just how valuable an abort system can be.





A SpaceX Dragon mock-up crew capsule and trunk separate after blasting into the air, Wednesday, May 6, 2015, during a test flight in Cape Canaveral, Fla. Parachutes popped out and lowered the capsule into the Atlantic Ocean, just offshore. The unmanned flight was testing a new, super-streamlined launch escape system for astronauts. The California-based company led by billionaire Elon Musk aims to launch U.S. astronauts to the International Space Station as early as 2017. (Craig Bailey/Florida Today via AP)

SpaceX plans to use the capsule again later this year for an abort test following an actual rocket launch from Vandenberg Air Force Base in



California. The company also wants to send an empty crew Dragon to the space station before putting astronauts on board.

Up until late last week, SpaceX was calling its flight dummy Buster. But the company noted on its website this week that, "Buster the Dummy already works for a great show you may have heard of called MythBusters. Our dummy prefers to remain anonymous for the time being."

Musk said the dummy fared well during Wednesday's test.



SpaceX's Dragon crew capsule parachutes deploy Wednesday, May 6, 2015 from Cape Canaveral, Fla. SpaceX fired the mock-up capsule to test the new, super-streamlined launch escape system for astronauts. (Red Huber/Orlando Sentinel via AP)





In this May 29, 2014, file photo, the SpaceX Dragon V2 spaceship is unveiled at its headquarters in Hawthorne, Calif. SpaceX is scheduled to conduct the first major test of its brand new, super-streamlined launch escape system for astronauts, Wednesday, May 6, 2015. (AP Photo/Jae C. Hong, File)

More information: SpaceX: www.spacex.com/

NASA: www.nasa.gov/exploration/commercial/crew/



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Citation: SpaceX capsule soars with dummy in first test of crew escape (Update) (2015, May 6) retrieved 9 April 2024 from

https://phys.org/news/2015-05-humans-dummy-aboard-spacex-capsule.html

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