SpaceX rocket explosion unlikely to slow launches for long

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SpaceX's rocket explosion last week may only briefly slow the company's ambitious launch schedule at Cape Canaveral, Fla., but it could also give a boost to its competitors, experts say.

On June 28, a Falcon 9 rocket, launched from Cape Canaveral Air Force Station and headed toward the International Space Station, blew up 27 miles above the Atlantic Ocean. The $60 million rocket and its 4,000 pounds of cargo were destroyed.

Last week SpaceX still was trying to gather debris from the rocket, which NASA hired. The cargo was not insured, and the space agency is assessing its losses.

For the time being, NASA is turning to other options to resupply the space station. A Russian Progress capsule went up Friday.

A Japanese resupply capsule is set to be launched in August. And another commercial resupply capsule from Orbital ATK is scheduled for launch from Cape Canaveral later this year, about a year after its most recent attempt ended in a rocket explosion.

Most analysts believe SpaceX will rebound more quickly, figure out what went wrong, fix it and launch more Falcon 9s from Cape Canaveral sometime this year.

SpaceX, however, already has postponed a planned August launch.

Dale Ketcham, chief of strategic alliances for Space Florida, cautioned that the root cause of the explosion still must be determined but said SpaceX founder and chief executive Elon Musk has built an efficient company.

"Elon has a habit of taking longer and costing more than he originally anticipated, but still it's a hell of a lot faster than the government," Ketcham said.

There might be only a three- or four-month lag in SpaceX launches, said Marco Caceres, a senior space analyst at the Teal Group, a Virginia-based aerospace research firm. The Falcon 9 had 18 consecutive successful launches starting in 2010 before last week, which surpassed almost everyone's expectations, considering the history of rocketry, Caceres said.

"Eighteen out of 19 is pretty good," he said. "These failures do happen. If it was a brand-new vehicle and you had this, you'd be concerned, because you'd be thinking maybe it's a design flaw. But after 18 flights, this vehicle is fine."

SpaceX had launched five Falcon 9 rockets already this year. The company also has contracts for 36 more Falcon 9 rockets, and five of its next-generation rocket, the Falcon Heavy.

Yet that may not be the message Congress and the U.S. Department of Defense will get privately from SpaceX's competitors, including the United Launch Alliance, which uses two rockets with much longer track records of success, the Atlas V and the Delta IV.

The ULA is not commenting publicly on SpaceX's disaster, but the Falcon 9 explosion may open the door to two things the company wants: congressional permission for ULA to buy more Russian-made RD-180

engines for its Atlas V rockets, and increased Air Force concern about contracting with SpaceX.

Similarly, Boeing Aerospace may gain an advantage with NASA in the space agency's next big venture: hiring private companies to carry astronauts to the space station. Both SpaceX and Boeing have won approval to provide those trips, probably starting in 2018.

"I can't imagine that SpaceX's competition won't be showing pictures (in Washington) of this vehicle failing in flight," said Greg Autry, an assistant professor at the University of Southern California who wrote last year's Federal Aviation Report on commercial space markets.

Some future SpaceX commercial customers could be ready to shrug off the Falcon 9 explosion and get back to business with SpaceX as soon as possible, partly because the Falcon 9 remains their cheapest ride into space.

One customer, Bigelow Aerospace, is unfazed. Mike Gold, Bigelow's director of business growth, said a Falcon 9 failure "is simply the nature of the beast" in the rocket industry, and he expects SpaceX to return to normal business as soon as possible.

The company will be ready to send up its new Bigelow Expandable Activity Module to the space station whenever SpaceX is ready to take it, he said.

But that is assuming a simple fix.

"It's unpredictable," said Mike Gruntman, professor of astronautics at the USC Viterbi School of Engineering, who has investigated other rocket failures as a consultant. "This may just be a symptom of something else happening. It takes time. What happens when you start

scrubbing [the data,] you find this could be a design flaw, this could be workmanship ... it could be all kinds of things."

"But the other thing, when the scrubbing goes on, there usually are small other things that are found. So it's a positive step. A shake-down step," Gruntman said.