Chinese private firm launches first space rocket

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The OneSpace rocket being prepared for launch. The suborbital rocket was launched into space by a start-up in China's burgeoning commercial aeronautics industry

A suborbital rocket was launched into space Thursday by a start-up in

China's burgeoning commercial aeronautics industry, as private firms snap at the heels of their dominant American rivals.

OneSpace, the Beijing-based company behind the launch, is one of dozens of Chinese rivals jostling for a slice of the global space industry, estimated to be worth about $339 billion by Bank of America Merrill Lynch and currently dominated by SpaceX and Blue Origin in the US.

Its nine-metre (30-foot) "Chongqing Liangjiang Star" rocket took off from an undisclosed test field in China's northwest and reached an altitude of 273 kilometres (170 miles) before falling back to Earth, the company said in a statement.

The launch aimed to demonstrate an early working model of the company's OS-X series of rockets, designed to conduct research linked to suborbital flights.

By the end of the decade OneSpace expects to build 20 of the OS-X rockets, which would be capable of placing a 100-kilo (220-pound) payload into an orbit 800 kilometres from the Earth's surface, said company spokesman Chen Jianglan.

The firm is also developing another type of rocket, the M-series, to compete in the growing microsatellite sector.

These small satellites are typically no larger than a shoebox and are used to monitor crops, weather patterns or disaster sites or used by universities for research purposes, according to Jonathan McDowell, an astronomer at the Harvard-Smithsonian Center for Astrophysics.

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Microsatellites are cheaper to build and easier to deploy than traditional truck-sized versions and their launch has become increasingly an lucrative market, currently dominated by the Indian space programme.

Chinese aerospace start-ups were eschewing the space travel ambitions of their US rivals to compete for these lucrative microsatellite contracts, said McDowell.

OneSpace's work has attracted the attention of several domestic and foreign clients, Chen told AFP, adding that "a number of satellite companies in Europe and Asia have approached us to establish strategic partnerships".

Once dominated by state research agencies and the military, China allowed private companies to enter the space industry to build and launch satellites in 2014.

Contested claims

Another Chinese start-up, iSpace, launched a suborbital rocket, the Hyperbola-1S, from a test field in the southern island of Hainan last month.

The rocket reached an altitude of 108 kilometres and served as a demonstration for its planned small launcher due to be completed by June 2019, the company's website said.

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A spokeswoman for iSpace insisted it had been "the first private Chinese firm to launch a commercial rocket".

But OneSpace maintains its rocket was "designed from scratch" and had "stronger control capabilities" than the Hyperbola-1S.

Experts have cast doubts on claims by both companies.

"Onespace and iSpace have both got their hands on retired Chinese missiles," McDowell said.

"I am not very sure whether there is a major difference between what Onespace has done."

Xin Zhang, a professor of aerospace engineering at Hong Kong University of Science and Technology, also sounded a note of caution.

"They may have cut corners," he said, adding it can take up to a decade to develop a fully functional rocket.

OneSpace was founded in 2015 while iSpace was founded two years ago.

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