

Japan satellite blasts into space to deliver artificial meteors

January 18 2019, by Miwa Suzuki



The milky way and meteors of the April Lyrids annual meteor shower in the night sky over the Baltic Sea

A rocket carrying a satellite on a mission to deliver the world's first artificial meteor shower blasted into space on Friday, Japanese scientists said.

A start-up based in Tokyo developed the micro-[satellite](#) for the celestial show over Hiroshima early next year as the initial experiment for what it calls a "[shooting stars](#) on demand" service.

The satellite is to release tiny balls that glow brightly as they hurtle through the atmosphere, simulating a meteor shower.

It hitched a ride on the small-size Epsilon-4 rocket that was launched from the Uchinoura space centre by the Japan Aerospace Exploration Agency (JAXA) on Friday morning.

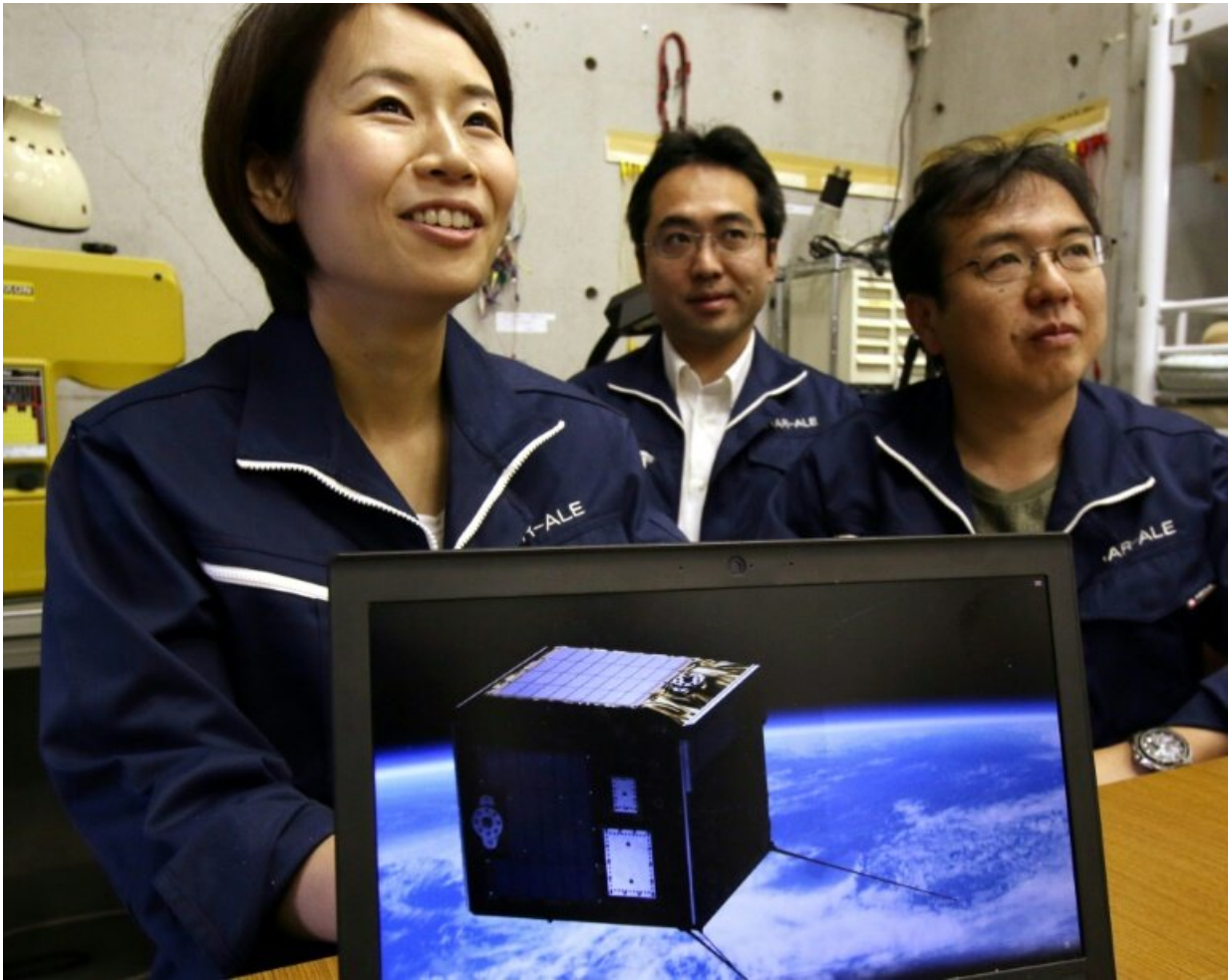
The rocket carried a total of seven ultra-small satellites that will demonstrate various "innovative" technologies, JAXA spokesman Nobuyoshi Fujimoto told AFP.

By early afternoon, JAXA confirmed all seven satellites had successfully been launched into orbit.

"I was too moved for words," Lena Okajima, president of the company behind the artificial meteor showers, told the Jiji Press agency.

"I feel like now the hard work is ahead."

The company ALE Co. Ltd plans to deliver its first out-of-this-world show over Hiroshima in the spring of 2020.



Lena Okajima, CEO of a space technology venture ALE is hoping to deliver shooting stars on demand and choreograph the cosmos

The satellite launched Friday carries 400 tiny balls whose chemical formula is a closely-guarded secret.

That should be enough for 20-30 events, as one shower will involve up to 20 stars, according to the company.

ALE's satellite, released 500 kilometres (310 miles) above the Earth, will gradually descend to 400 kilometres over the coming year as it orbits the

Earth.

Worldwide meteor shower shows

The company plans to launch a second satellite on a private-sector rocket in mid-2019.

ALE says it is targeting "the whole world" with its products and plans to build a stockpile of shooting stars in space that can be delivered across the world.



The annual Perseid meteor shower—seen here over eastern France—is a highlight for sky-watchers

When its two satellites are in orbit, they can be used separately or in tandem, and will be programmed to eject the balls at the right location, speed and direction to put on a show for viewers on the ground.

Tinkering with the ingredients in the balls should mean that it is possible to change the colours they glow, offering the possibility of a multi-coloured flotilla of shooting stars.

Each star is expected to shine for several seconds before being completely burned up—well before they fall low enough to pose any danger to anything on Earth.

They would glow brightly enough to be seen even over the light-polluted metropolis of Tokyo, ALE says.

If all goes well, and the skies are clear, the 2020 event could be visible to millions of people, it says.

Okajima has said her company chose Hiroshima for its first display because of its good weather, landscape and cultural assets.



A multiple exposure picture of the Perseids meteor shower, seen over Spain

The western Japan city rose from the ashes after the 1945 US atomic bombing and faces the Seto Inland sea where the floating gate of Itsukushima Shrine is.

ALE is working in collaboration with scientists and engineers at Japanese universities as well as local government officials and corporate sponsors.

It has not disclosed the price for an artificial meteor shower.

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