

Secretive U.S. Air Force Spaceplane Breaks Record With 719 Straight Days in Orbit

[Matt Novak](#) [Today 6:00am](#)



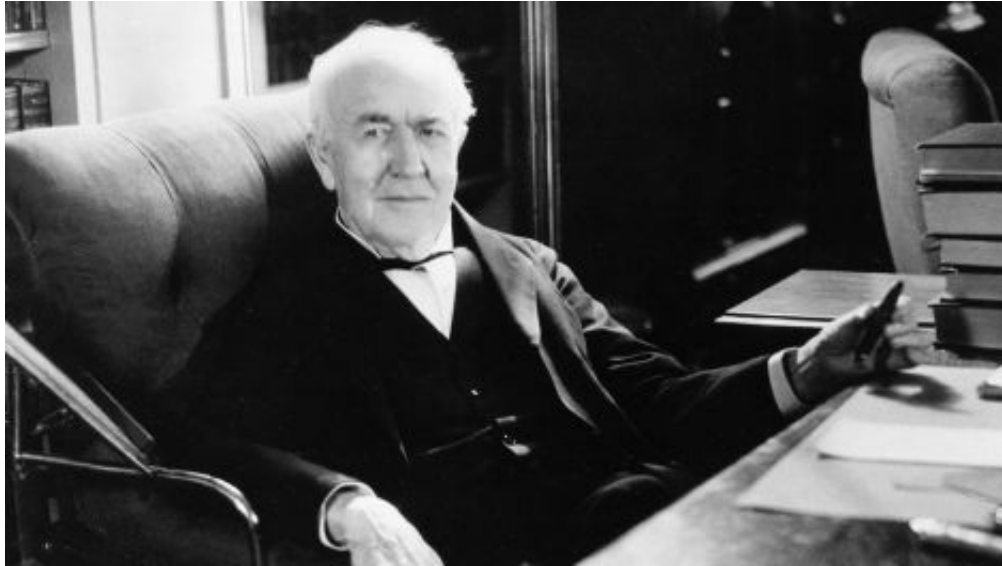
The X-37B Orbital Test Vehicle (OTV-5) being staged in September of 2017

Photo: Boeing/DVIDS

The U.S. Air Force's Boeing X-37B spaceplane broke a record yesterday for the most amount of time in orbit around the Earth. But we still don't know when the uncrewed plane is going to land or even what it's doing up there. All of the details about the X-37B mission are classified.

As of 6:43am ET today, the X-37B spaceplane's fifth mission, dubbed the Orbital Test Vehicle (OTV-5), will have spent 719 days in orbit—just 11 days shy of a full two years circling the globe. The previous record was 717 days,

20 hours and 42 minutes, achieved just a few years earlier with OTV-4.



All we know about the 29-foot long spaceplane's mission comes from the Air Force description, which is light on details, to say [the least](#):

The X-37B Orbital Test Vehicle, or OTV, is an experimental test program to demonstrate technologies for a reliable, reusable, unmanned space test platform for the U.S. Air Force. The primary objectives of the X-37B are twofold; reusable spacecraft technologies for America's future in space and operating experiments which can be returned to, and examined, on Earth.

The Air Force notes that the vehicle is able to "return experiments to Earth," but we have no idea what those experiments might be:

Upon command from the ground, the OTV autonomously re-enters the atmosphere, descends, and lands horizontally on a runway. The X-37B is the first vehicle since NASA's Shuttle Orbiter with the ability to return experiments to Earth for further inspection and analysis, but with an on-orbit time of 270 days or greater, the X-37B can stay in space for much longer.

Technologies being tested in the program include advanced guidance, navigation and control, thermal protection systems, avionics, high temperature structures and seals, conformal reusable insulation, lightweight electromechanical flight systems, advanced propulsion systems, advanced materials and autonomous orbital flight, reentry and landing.

The spaceplane looks a bit like the space shuttles, which were an incredibly exciting advancement for any kid of the 1980s and 90s. But the space shuttle program was killed and the vehicles now sit in museums.

Aside from its time in space, there are a number of other things that make this mission different. The X-37B has completed four missions using a Atlas 5 rocket but its most recent mission was launched on September 7, 2017 using a SpaceX Falcon 9 rocket. Previous missions were also launched from Edwards Air Force Base in California, but this most recent launch was from the Kennedy Space Center in Florida.

What are they doing up there? We have no idea. But given how bad things are going on Earth—between the global [rise of fascism](#), the deaths of children in American [concentration camps](#), and the disastrous [fires in the Amazon](#)—here's hoping that the Air Force is developing some kind of human escape plan.

The tardigrades clearly succeeded in becoming a [multi-planetary species recently](#). And given the way that humans are destroying our own planet it seems like they know what they're doing.