

Austrian eyes record jump from edge of space in US

October 8 2012, by Michael Thurston

An Austrian daredevil is hoping to make an unprecedented leap from the edge of space Tuesday, setting records as he breaks the speed of sound in freefall in the skies above the US state of New Mexico.

[Felix Baumgartner](#) will ascend to 120,000 feet—nearly 23 miles, or 36 km—in a capsule taken up to the edge of the [stratosphere](#) by a gigantic [helium balloon](#), before stepping out in a pressurized suit to fall back to earth.

The jump was initially due to take place Monday morning, but [was delayed](#) by 24 hours due to weather.

The 43-year-old has been training for five years for the jump, during which he will be in freefall for some five minutes before opening a parachute at 5,000 feet up to float back to the ground.

The biggest danger he faces is spinning out of control, which could exert G forces and make him lose consciousness—a controlled dive from the capsule is essential, putting him in a head-down position to increase speed.

"On a mission like this, you need to be mentally fit and have total control over what you do, and I'm preparing very thoroughly," said Baumgartner, who will wear a pressurized [space-suit](#) and carry oxygen tanks to help him breathe.

He hopes to set a number of records: the first man to break the speed of sound, around 690 mph; the highest ever jump—over three times the average airliner cruising altitude—and the fastest speed in freefall.

The Red Bull Stratos mission, backed by a 100-strong team of experts and centered on the [launch](#) site in Roswell, New Mexico, also hopes to contribute to medical and aeronautical research.

"We'll be setting new standards for aviation. Never before has anyone reached the speed of sound without being in an aircraft," said medical director Dr. Jonathan Clark, who was the crew surgeon for six Space Shuttle flights.

The mission will test "new equipment and developing the procedures for inhabiting such [high altitudes](#) as well as enduring such extreme acceleration," to improve safety for astronauts but also potential space tourists, he added.

The pod-like space capsule that will take Baumgartner to the edge of [space](#) is to be hoisted aloft by a giant helium-filled balloon—taller than the Eiffel Tower when fully inflated—around 6:00 am Tuesday (1200 GMT).

The ascent is expected to take between 2-3 hours. The descent, if all goes well, will take about 15 to 20 minutes—five minutes or so in [freefall](#), and 10 to 15 floating down with his parachute, hopefully to a soft landing.

The flight will be streamed live on the mission's website—www.redbullstratos.com—with more than 35 cameras on the ground and in the air, including on Baumgartner's suit.

Among the mission team is retired US Air Force Colonel Joseph

Kittinger, who holds three of the records Baumgartner will try to break—including the current record jump from 102,800 ft, set more than 50 years ago in 1960.

At that time no one knew whether a human could survive such a leap. "Man is always inquisitive, and always wants to go faster, higher, lower, deeper—that's part of the challenge of human beings.

"We always like to push the envelope," said the 83-year-old ahead of Monday's jump.

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