

READING CHALLENGE

Felix Baumgartner's Space Jump

On 14 October 2012, one man stepped out of a capsule 39 kilometres above the Earth — and fell faster than the speed of sound

True Stories | B1 Level | ~15 min read | 5 Quiz Questions

Level	B1 (Intermediate)
Age Group	Teens (11–16)
Skill	Reading
Topic	True Stories
Duration	~20 minutes
Vocabulary	15 words with definitions
Quiz	5 multiple-choice questions

Article

At 9:28 in the morning on 14 October 2012, a small white **capsule** floated 39,045 metres above the state of New Mexico in the United States. Inside it, dressed in a white **pressurised** suit, sat a 43-year-old Austrian skydiver named Felix Baumgartner. He had spent five years preparing for this moment. Below him, the Earth curved away like a blue marble wrapped in cloud. Above him was the deep black of space. Baumgartner opened the capsule door, stood on the edge, and spoke quietly into his microphone: 'I know the whole world is watching now. I wish you could see what I can see. Sometimes you have to be up really high to understand how small you are.' Then he stepped off the edge and fell.

The Mission: Red Bull Stratos

The project was called Red Bull Stratos, named after the **stratosphere** — the layer of the atmosphere that Baumgartner would be jumping through. The mission had two main goals: to break the record for the highest ever manned balloon flight and the highest ever **freefall** jump, and to collect scientific data about how the human body survives at extreme **altitude**. Red Bull, the energy drink company, was the primary **sponsor** of the project, providing an estimated 65 million US dollars to fund it. The previous record had been set in 1960 by a United States Air Force officer named Joe Kittinger, who had jumped from 31,333 metres during a top-secret military project called Operation Excelsior. Kittinger's jump was so dangerous that on one test jump, his pressure suit failed and he lost consciousness before a reserve **parachute** opened automatically and saved his life. More than fifty years later, Kittinger — now in his eighties — became an adviser to the Red Bull Stratos team. He was the only voice Baumgartner heard in his earpiece during the jump, speaking from **mission control** on the ground.

Five Years of Preparation

Preparing for the jump took far longer than most people realise. Baumgartner had been a professional skydiver and BASE jumper since his teenage years — BASE standing for Buildings, Antennas, Spans (bridges), and Earth (cliffs). He had jumped from the Christ the Redeemer statue in Rio de Janeiro, from the Petronas Towers in Malaysia, and across the English Channel in a carbon-fibre wing suit. But jumping from the **stratosphere** was a completely different challenge. The team had to design an entirely new **pressurised** suit that could keep Baumgartner alive in conditions where the temperature drops to minus 56 degrees Celsius and the air pressure is so low that without protection, the blood in a human body would begin to boil. The suit weighed around 100 kilograms and was so thick and stiff that Baumgartner initially struggled to bend his fingers. He spent months training in it, learning to move, breathe, and — most importantly — to stabilise his body during **freefall** at the edge of space. The mental challenge was just as serious as the physical one. Baumgartner suffered from claustrophobia — an intense fear of small, enclosed spaces. The

pressurised suit felt like a prison. He worked for two years with a sports psychologist to overcome this fear before he felt ready to wear the suit for extended periods. 'The suit was my enemy for a long time,' he later admitted in interviews.

The Terrifying Spin

Baumgartner had been falling for approximately 40 seconds when something went wrong. His body began to rotate — slowly at first, then faster and faster. Within seconds he was spinning in an uncontrolled spiral, tumbling head over heels at tremendous speed. This was the moment the entire team on the ground had feared most. An uncontrolled spin at **supersonic** speed is one of the most dangerous situations a jumper can face. As the spinning accelerates, blood is forced away from the brain by centrifugal force. A jumper can lose consciousness within seconds. If Baumgartner had passed out, he would have been unable to deploy his **parachute** and would have died. The mission rules stated clearly: if a spin could not be controlled, Baumgartner should **abort** and pull the emergency parachute immediately. For nearly 13 terrifying seconds, Baumgartner fought the spin with every technique he knew, adjusting the position of his arms and legs against the rushing air. Slowly, the rotation began to stabilise. By the time he had fallen to around 28,000 metres, his body was under control again. He had survived the most dangerous **threshold** of the jump.

Breaking the Sound Barrier

At approximately 34,000 metres — about 13 seconds into the **freefall** — Baumgartner became the first human being to break the sound barrier without any kind of vehicle. He reached a maximum speed of 1,357.64 kilometres per hour, which is Mach 1.25 — one and a quarter times the speed of sound. There was no dramatic bang or visible shockwave that Baumgartner could feel inside his suit. The air at that **altitude** is so thin that the experience of passing through the sound barrier is almost imperceptible to the jumper himself. 'I didn't feel it,' he said afterwards. 'I didn't feel **supersonic** at all. I was just trying to stabilise.' The data was confirmed by tracking equipment on the ground and by instruments built into the suit itself. Scientists and engineers at **mission control** watched the numbers climb past Mach 1.0 on their screens and broke into applause. Below his **visor**, Baumgartner could see the curvature of the Earth and the darkness of space above. He was completely alone, falling through near-silence, in a place where no human being had ever freefall jumped before.

Landing and Records

After 4 minutes and 19 seconds of **freefall** — during which he fell approximately 36,402 metres — Baumgartner deployed his **parachute** at around 2,500 metres above the desert floor. He landed safely on his feet in the New Mexico desert at 11:17 in the morning, immediately dropping to his

knees and raising both fists in the air. The jump set three official world records, all confirmed by the Fédération Aéronautique Internationale (FAI): the highest manned balloon flight (39,045 metres), the highest **altitude** for a freefall jump (also 39,045 metres), and the fastest speed during freefall (1,357.64 km/h, Mach 1.25). The total time from stepping out of the **capsule** to landing was 9 minutes and 3 seconds. Watching the entire jump via live stream online were an estimated eight million people — at that time, the largest live-stream audience in internet history. Millions more watched on television. When Baumgartner landed safely, the relief and celebration in the **mission control** room was extraordinary. Joe Kittinger — whose 52-year-old record had just been broken — was among the first to congratulate him.

A Pioneer for Science

Beyond the spectacle and the records, the Red Bull Stratos mission produced genuinely useful scientific data. The **pressurised** suit technology developed for Baumgartner's jump has contributed to improvements in suits for astronauts and high-**altitude** pilots. The data collected about how the human body responds to extreme altitude, rapid **decompression**, and **supersonic freefall** has been shared with aerospace researchers around the world. Baumgartner himself has said that he sees his role as that of a **pioneer** — someone who takes risks so that future generations can go further. 'I want kids to look up at the sky and not see a limit,' he said in a 2013 interview. 'I want them to see a beginning.' In October 2014, a Google executive named Alan Eustace quietly broke Baumgartner's altitude record by jumping from 41,422 metres — though his maximum speed did not exceed the sound barrier. Baumgartner's record for fastest freefall speed and his status as the first human to break the sound barrier in freefall remain unbeaten to this day. The story of Felix Baumgartner is ultimately not just about extreme sport. It is about **oxygen**, courage, and what happens when human beings decide to push past every boundary they thought existed — one step at a time, from the edge of space.

Vocabulary

These 15 words appear in the article. Study them to improve your reading comprehension.

Word	Definition
stratosphere	the layer of Earth's atmosphere between about 12 and 50 kilometres above the ground
freefall	the act of falling through the air without anything slowing you down, such as a parachute
altitude	the height of something above sea level or above the ground
pressurised	describing a container or suit that is kept at a controlled air pressure to keep a person safe
supersonic	faster than the speed of sound, which is approximately 343 metres per second at sea level
abort	to stop a planned activity before it is finished, usually because of danger or a problem
mission control	a team of experts on the ground who guide and monitor a space or high-altitude mission
parachute	a large piece of fabric attached to a person or object to slow down a fall through the air
capsule	a small sealed container or vehicle designed to carry a person, especially in space or at high altitude
decompression	the process of reducing pressure, or a dangerous condition caused by a sudden drop in air pressure
pioneer	a person who is the first to explore or develop a new area of activity or knowledge
visor	the clear, protective front part of a helmet that covers the face
oxygen	a gas in the air that humans and animals need to breathe in order to survive
sponsor	a person or organisation that pays for an event or project, usually in exchange for advertising
threshold	the level or point at which something begins or changes; a boundary between two states

Comprehension Quiz

Choose the best answer (A, B, C or D) for each question.

1. What was the name of the project that Felix Baumgartner's jump was part of?

- A. Operation Excelsior
- B. Red Bull Stratos
- C. Project Freefall
- D. Mission Stratosphere

2. Who had set the previous record for the highest freefall jump, back in 1960?

- A. Alan Eustace
- B. Neil Armstrong
- C. Joe Kittinger
- D. Chuck Yeager

3. What was the most dangerous problem Baumgartner faced during his freefall?

- A. His oxygen supply ran out for several minutes
- B. His visor cracked and he could not see
- C. His body went into an uncontrolled spinning spiral
- D. His parachute failed to open on the first attempt

4. What maximum speed did Baumgartner reach during his freefall?

- A. 1,100 km/h (Mach 1.03)
- B. 1,357.64 km/h (Mach 1.25)
- C. 980 km/h (just below the sound barrier)
- D. 1,600 km/h (Mach 1.5)

5. How many people were estimated to be watching the jump live online at the time?

- A. Around 500,000 people
- B. Around two million people
- C. Around twenty million people

D. Around eight million people

Answer Key

#	Answer	Correct Option
1	B	Red Bull Stratos
2	C	Joe Kittinger
3	C	His body went into an uncontrolled spinning spiral
4	B	1,357.64 km/h (Mach 1.25)
5	D	Around eight million people