



Red Bull Stratos: Final Statistics

5 February 2013

The following data represent the final results from the Red Bull Stratos Mission, announced at the Red Bull Stratos Scientific Summit held at the California Science Center in Los Angeles, USA.

Official lift off time: 9:28:37 MDT

Complete lift of process takes about 30 seconds and comprises of three phases:

- 1) Balloon is released
- 2) Forklift begins to move toward balloon [Lift off time recorded at start of phase 2]
- 3) Capsule released from forklift

Maximum overland speed rate of manned balloon/capsule: 135.7 miles per hour / 117.9 knots

Altitude at which Felix Baumgartner stepped off the capsule: 38,969.4 m / 127,852.4 ft

Fastest speed achieved during freefall: 1,357.6 kmh / 843.6 mph (Mach 1.25)

Vertical distance of freefall: 36,402.6 m / 119,431.1 ft

Key freefall timings/altitudes/speeds:

At 34 seconds into freefall, Felix goes supersonic.

Altitude: 33,446 m / 109,731 ft

Speed: 1115 kmh / 693 mph

At 50 seconds into freefall, Felix reaches maximum vertical speed.

Altitude: 27,833 m / 91,315.6 ft

Speed: 1,357.6 kmh / 843.6 mph

At 64 seconds into freefall Felix becomes subsonic.

Altitude: 22,960.7 m / 75,330.4 ft

Speed: 1,043 kmh / 648 mph

At 180 seconds into freefall, speed has slowed substantially.

Altitude: 7,619.3 m / 24,997.7 ft

Speed: 285 kmh / 177 mph



At 260 seconds into freefall, Felix deploys main parachute.

Altitude: 2,567 m / 8,421 ft above sea level (approximately 5,000 ft / 1,525 m above ground level)

Speed: 191.5 kmh / 119 mph

Duration of supersonic velocity: 30 seconds

Duration of “flat” spin: About 13 seconds

Total time spent in freefall: 4 minutes 20 seconds

Total time from the moment he jumped to landing: 9 minutes 18 seconds

Total time from launch of balloon to Felix’s landing: 2 hours 47 minutes

Minimum temperature (at 59,721 feet / 18,203 meters): -95.62 Fahrenheit / -70.9 Celsius

Records:

- **Maximum Vertical Speed:*** 1,357.6 kmh / 843.6 mph / Mach 1.25
- **Highest Exit (Jump) Altitude:*** 38,969.4 m / 127,852.4 ft
- **Vertical Distance of Freefall:*** 36,402.6 m / 119,431.1 ft
- **Highest Manned Balloon Ascent:** 39,068.5 meters / 128,177.5 feet

- **First person to break the speed of sound in freefall, without the protection or propulsion of a vehicle**
- **Highest untethered altitude outside a vehicle**
- **Largest balloon ever flown with a human aboard:** 29.47 million cubic feet
- **Fastest overland speed of manned balloon:** 135.7 miles per hour / 117.9 knots

* Official World Record category; data currently under review for confirmation by the Fédération Aéronautique Internationale governing body