

Skydiver Felix Baumgartner planning 36km record bid

By Pallab Ghosh Science correspondent, BBC News



Felix Baumgartner would fall so fast that he would exceed the speed of sound

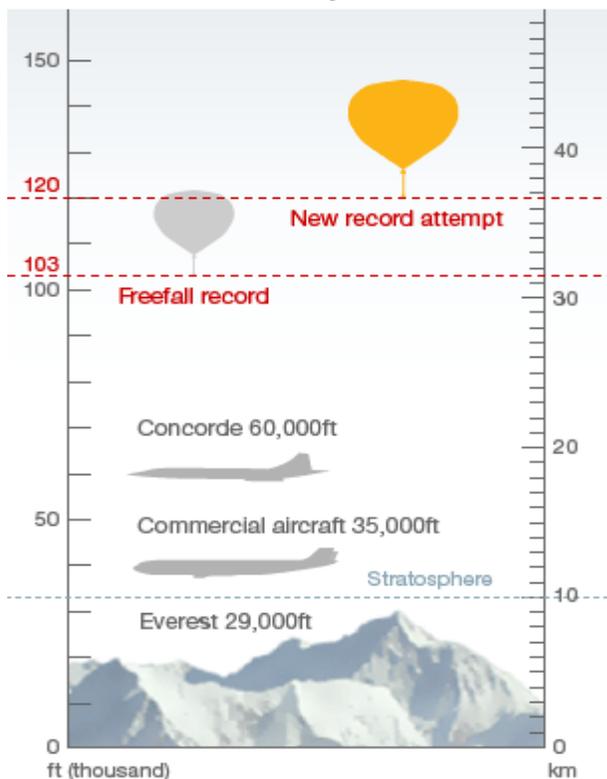
An Austrian adventurer planning the highest skydive in history has announced that he will make the record attempt later this year.

Felix Baumgartner will jump from a balloon 36.5km (120,000ft) up, where a leak in his pressurised suit could lead to a rapid loss of consciousness.

He will fall so fast that he becomes the first person to go faster than the speed of sound unaided by a machine.

Many have sought to achieve the feat down the decades but all have failed.

Freefall record attempt



Mr Baumgartner is famous for stunts such as jumping off the Petronas Towers in Malaysia.

In a video released to promote the attempt, Mr Baumgartner said the last test before he goes on the jump had been successful.

"It means I can deliver, I can perform. The equipment will function," he said.

Mr Baumgartner's most important piece of equipment will be his suit, which completely encases him to maintain air pressure and provide an oxygen supply.

The suit is similar to those worn by astronauts but it has to be tougher and more mobile than a Nasa space suit.

It will have to maintain its integrity in the near vacuum of the very high atmosphere: if there is a serious breach in the suit, Mr Baumgartner's tissues would start to swell and the moisture in his eyes and mouth would start to boil.

Pressurised test

Engineers tested the suit with Mr Baumgartner inside by recreating the flight conditions with a pressurised capsule.

"The suit does its job," said Mr Baumgartner.

The suit will also have to protect him from the extreme cold, with temperatures dropping to minus 70C. And it will have to withstand the forces of passing through the sound barrier.

Gp Capt David Gradwell is head of aviation medicine for the UK's Royal Air Force (RAF). He describes the attempt as a remarkable effort, fraught with challenges.

"[Mr Baumgartner] will be falling very fast so he will have to be sure he remains stable so that he doesn't spin out of control," he told BBC News.

"He needs to see through the visor of his pressure helmet to see what's going on in order to operate his parachute properly and see that it has properly deployed."

If the attempt succeeds, it will have beaten a record set in 1960 by Joe Kittinger, who leapt out from a balloon at 31km (102,800ft).

Kittinger is part of Baumgartner's team and believes the new attempt will succeed. But the retired former USAF colonel admits that when the Austrian makes his leap he will be "saying a prayer for the jump".

A BBC/National Geographic documentary is also being made about the project.