

## Space oddity

An engineer is working to create the first public zero-gravity experience on Earth. **Mia Hunt** looks at whether the idea has weight

**A**part from the select few who become astronauts or those who can afford to pay in excess of £4,000 for a parabolic flight, few of us will ever experience zero gravity. Or will we?

An engineer from Toulouse hopes to bring the sensation of weightlessness to the masses by developing a system capable of simulating zero gravity on Earth by way of a capsule fitted to a skyscraper.

Sylvain Roumégas has dreamed of creating a weightlessness leisure attraction since experiencing two seconds of microgravity in the cockpit of a glider a decade ago.

Eight months ago, he bit the bullet and left his job as a safety and reliability analyst in the aerospace industry to set up Lob-6, the start-up he hopes will deliver a leisure experience like no other. But is his idea up in the clouds, or will it become a reality?

Roumégas and a number of other aerospace engineers are busy designing the system that will allow a capsule, installed on the inside or outside of a tall building, to freefall for a distance - it will reach a top speed of 62mph (100km/h) - creating zero-

gravity conditions. There is a patent pending on the technology.

"I want to give people access to space conditions," Roumégas explains. "Now, people can only view space through their TV and in the movies. We see and hear about the astronauts in the International Space Station but there is a big gap between them and us - I believe Lob-6 will finally close the gap between those two worlds.

"I'm making an entertainment product," he adds. "Sure it is a special one; sure it will be the first of its kind in the world, but I'm not building a spaceship - I don't want to go into competition with Virgin Galactic."

### Sky-high costs

Roumégas is raising funding for the demonstration phase, which he estimates will cost in the region of more than £5m. He expects the total investment needed to bring his invention to the market will cost several times that amount.

Even so, he is confident there will be a Lob-6 device in operation within the next five years. And it has looked closer to becoming reality since March, when Roumégas did a deal with SRA Architects, which will design a skyscraper that will integrate seamlessly with the Lob-6 pod.

Where this first skyscraper, which would need to be a minimum of 200m in height - nearly as tall as the Cheesegrater - would be, and which developer would be behind it, remains to be seen,

but Roumégas says any city where there is a high concentration of skyscrapers and tourists is a possible host. He cites London and major cities in the Middle East and Asia as targets.

Roumégas plans to sell the product to the developer or operator, with Lob-6 to be retained on a contract to manage safety, maintenance and deliver staff training.

Roumégas's vision is that the capsule will be the "diamond in the crown" of any tower it operates from. The experience would begin at the ground-floor visitor centre, which would be likely to include an interactive exhibition, or similar, that would teach visitors about space and gravity.

Customers would have a safety briefing before entering the pod, where they would experience five to 10 cycles of zero gravity, each lasting 10 seconds. Plenty of time, Roumégas says, to carry out experiments such as doing somersaults or playing with floating objects and water.

It is estimated it would cost visitors around £400, which is cheaper than the average skydiving trip.

Roumégas believes it will draw people from far and wide and expects his product to be "very profitable" for the landlord. Despite the high initial investment, he says they would recoup their costs quickly.

The engineer hopes the Lob-6 experience will "contribute to the renewal of mainstream interest in space, its study and exploration".

The question is: will a developer be brave enough to take a punt on such an experimental idea? ■