

ALL INCLUSIVE

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Photos: Thomas Rusch, Michael Najjar

Soon the first hobby astronauts will venture into space. Including the German Michael Najjar – who's been training for this moment for years. Stages of a long countdown.

JULY 2011, BERLIN

Michael Najjar's journey into space began with a letter from Richard Branson, the British billionaire who wants to make space travel as ordinary as a transatlantic flight. Najjar was one of the very first passengers to book a flight with Branson's Virgin Galactic company. In his letter Branson thanked him for his booking, wrote about "a new chapter in spaceflight" and awarded him the honorary title of a Virgin Galactic Pioneer. The launch is planned for the next few years when a special jet will bring the spaceship developed by Branson's company to a height of 15,000 meters where the rocket motors ignite and propel the passengers to 110,000 meters above sea level. They'll turn in zero gravity for a few minutes and get views of the earth. The ticket comes with a price tag of €150,000 – that's a lot of dosh for a little space sightseeing. But this is not the only horizon Najjar has set his sights on. He's an artist whose large scale photographic works hang in museums all over the world. His art deals with technology and the impact technology has on our lives. For him the space flight is all part of the job. As the very first artist in space, he wants to turn his space trip into pictures. The ticket was paid for by his collectors who are looking forward to some spectacular works of art in return for their investment.

OCTOBER 2011, NEW MEXICO, USA

Spaceport America in the desert of New Mexico resembles an octopus built of concrete. This is the future launch pad for space tourists but construction work is still on-going. Pioneer astronauts like Najjar get special guided tours. He's full of enthusiasm, clicks away with his camera and visits a conference on commercial spaceflight organized each year in New Mexico by companies like Boeing. This is where he hears for the first time of a certain Andreas Bergweiler, a tour operator with excellent contacts to Russian cosmonaut trainers. Over the next months Najjar will write him a grand total of 327 emails to organize his own training program in Russia – the only place where amateur astronauts can get professional help to prepare for the rigors of space. "Space travel's been in the hands of government agencies for long enough," he says, "now space is opening up for nearly everybody." Michael Najjar is an athletically built man with a quick smile and a fondness for words like "crazy" and "incredible". And in fact these words give quite an accurate description of his space project. He wants to take the most extensive astronaut training possible and turn it into art. Yet there's no real need for him to go to such lengths: anyone who's halfway fit could take the Virgin Galactic flight with only a minimum of training. All they need to do is pass a few medical

examinations and take a three day course. But as Najjar says, “Why should I miss out on such an adventure?”

7 DECEMBER 2012, ZVYOZDNY GORODOK, RUSSIA

Truly committed amateur astronauts all end up in one place – Zvyozdny Gorodok or Star City as it’s called in English, a training facility for cosmonauts in Central Russia. New arrivals are greeted by a statue of Yuri Gagarin who trained here and was the first man in space in 1961. Najjar’s taken a berth here for a few days to clear up a number of critical issues like how do you deal with four times the force of normal gravity pushing you into your seat at lift-off and how do you take photographs in zero gravity. But the first lesson Najjar learns is that “you have to discuss every last little point” because he’s got a few things on his list that are off the beaten cosmonaut track. In a spacesuit he wants to go down in a twelve meter deep water tank with a real life model of a capsule of the International Space Station at the bottom. Najjar practices getting in and out of the capsule even though this is not a maneuver he will need on his own space flight. But on the photos taken he looks as though he’s actually floating in space.

12 DECEMBER 2012, NIZHNY NOVGOROD, RUSSIA

Najjar likes the Russians, they’re a pragmatic people. He’s booked a flight in a fighter jet, “they’ll let you fly without any fuss if you’re physically fit and financially solvent”. A camera films him in the co-pilot’s seat and gets the threefold looping and the moment when he breaks the sound barrier at 1300 km per hour. “The most awesome physical stress I’ve ever felt – totally crazy, totally fascinating.”

AUGUST 2013, COLOGNE, GERMANY

The Institute of Aerospace Medicine could hardly find a more cooperative guinea pig than Michael Najjar. He’s taking part in a project investigating how blood coagulates at increased gravity levels which will help avoid the onset of thrombosis in future amateur astronauts. Here too they believe that space tourism is set to be big business with rich pickings for research scientists and physicians. Najjar has come to Cologne to be whirled around in a centrifuge after which doctors take blood samples for analysis. With every spin he turns a shade paler yet still keeps grinning like someone who’s just won a season ticket for a rollercoaster. At midday he wolfs down a huge plate of French fries.

OCTOBER 2013, GAGARIN TRAINING CENTER, RUSSIA

The jet in which Najjar will take his zero gravity training is nicknamed the “Vomit Comet”. It flies in waves: every time it climbs, there’s a period of weightlessness which lasts for about 30 seconds. Najjar tries to take photos but only succeeds in spinning on his own axis. This time he learns that “Trying to change the objective on the camera in weightlessness is next to impossible.”

DECEMBER 2013, MUNICH, GERMANY

Najjar’s in high spirits talking about his last meeting with Richard Branson. The spaceship’s almost ready and this summer Branson and his children will take it on its maiden flight. The technology’s still causing a few minor problems but the real headache is permits and authorizations: space tourism is still, in the literal sense, virgin territory for government agencies. Najjar talks about how spaceships

are still officially classified as rockets and as such are subject to stringent testing by the U.S. Department of Defense. But finally, the most important question of all: why does he bother to deal with all this - the waiting time, the training, the bureaucracy? Najjar thinks for a moment, grins, and says "It's a childhood dream." Then he shows me a photo of his little son's room. Najjar's painted a three meter high picture on one wall. The picture of an astronaut.

TILL KRAUSE spent so much time with Michael Najjar that he's now caught the space travel bug himself. Our author would also dearly love to fly into space – sadly though, so far he's failed to find a willing sponsor.

Photo Captions

Hobby astronaut and artist **Michael Najjar** in a spacesuit suspended over the water tank. This part of the astronaut training program gives at least some idea of what it's like to be weightless.

Artworks created during Michael Najjar's **astronaut training**: "liquid gravity" (above, 202 x 132 cm) shows him in the deep water tank at Zvyozdny Gorodok near Moscow. Below: "kinetic drift" photographed during his flight in **the reduced gravity aircraft** in Russia when Najjar got to experience near weightlessness.

"spaceport" shows the **spaceport** in New Mexico, the starting point for Najjar's journey into space. The building was designed by the famous architect Norman Foster. Below "gravitational rotator" a shot of a centrifuge at the **Gagarin Cosmonaut Training Center** in Russia.

Clockwise from top left: **During his flight in a fighter jet** Michael Najjar is crushed into his seat by 7x the force of gravity. **Looks like a spaceship** but in fact it's a short-armed centrifuge which spins Najjar on his own axis at a speed of up to 45 revolutions a minute. The centrifuge is designed to investigate the impact of space tourism on the human body. **Near-zero gravity**: Najjar with his camera in a weightless moment on his flight in a reduced gravity aircraft – impossible to change the objective when you're trying not to spin all over the place. **Richard Branson** (on the left) shows Michael Najjar the space plane that will soon shoot the first space tourists into space.

The flight with Virgin Galactic won't last more than two hours – and there are no plans for passengers to leave the space capsule. Undaunted Najjar still practices a **space walk** at Zvyozdny Gorodok in Russia. The technology in the Russian training facility dates from the 1960s. Look closely and you can see the cable ties holding the tubes together. Najjar says it's a "cozy" vibe.