

Raumfahrt CONCRET

Euro 7,00
US\$ 8,00

AUSGABE 4/5/ 2005

W E L T A L L + E R D E + M E N S C H

Zurück zum Mond!



Heft 39/40

Finally Moscow

Cosmonaut-students in Star City

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the Team of Mission 1 with space-education-ambassador Yvonne in front of the MAI in Moscow

(translation by Michael Pescht & Alexander Gerlach, Team Germany, Mission 1) After a practical and extracurricular training of 6 months 10 grammar school students from Leipzig, Chemnitz and Nordhausen were prepared for the visit of Star City in Moscow in autumn half-term. Physical training, flying lessons, a diving course, parachuting, scientific works, public appearances and a special to this project geared marketing training and identity training lay behind them.

Since this first mission the project "Spacepass" adducts high-school graduates practically to the possibilities of high-graded university education. The project bases on international astronautics, as a fundament of "Space-Education-Institute" which was newly founded in Chemnitz and Leipzig (Saxonia, middle germany).

At present 50 sustaining members (consisting of skilled personnel, pedagogues and enthusiasts), an advisory council (consisting of

international scientists of NASA, MAI and the IMBP in Moscow) and a board of managers see abouth an annual experimental-educational journey to Roskosmos (Russia) and to NASA (USA), which is combined with a prior training.



meeting with ESA-astronaut Thomas Reiter

16.10.2005, The First Day

Finally Moscow, it's rainy and cold. But this is our goal. Our plane lands early in the morning.

We settle ourselves down in the student hostel. A little bit sleepy we are starting our program at 11.00 am with sightseeing in Moscow. The Metro leads us to the centre of Moscow, where we visit the Kremlin, the Red

Square and the famous St. Basils Cathedral with its colourful domes; we also go for a walk in the GUM, which accommodates the most famous stores in Moscow. Later we arrive tired and exhausted at our hostel and we are going earlier to bed this day.

The Second Day: The MAI

We spend the next day at the MAI. First we meet Prof. Dr. Malozemov, the dean of the professorship 607 life support and environmental control systems. He shows us the first ORLAN Space Suit developed at his institute and an equipment to recover water from urine. We also meet the rector of the MAI. He shows a film about the history of the MAI to us.

The next station is the chair 602 from Mr. Prof. Zotov, who explains us something about missiles and fatigue analysis. Inside this building you can see dozens of aircrafts took apart for studying, everything is very clean. Several students tell us even they aren't allowed to enter these areas. It is unbelievable! We enter the chair 601, the Cosmic Laboratory. The building is very high. Inside lies a Wostock Rocket, 120ft long. Between the R1, the upper stage of the N1, several Soyuz Capsules and the Russian Lunar Lander starts out third lesson this day at completely normal school benches. It is already difficult to keep everything in mind, so I take photos and write some notes on my cell phone. At 17.00 pm we are tired and nearly drop dead.

The Third Day: Star City

The bus takes us to Star City. Outside it is still darkly and very cold. We are really excited about will come next. Everything is very mysterious. The entrance is guarded by military, but we are allowed to pass through. It is an honour for us. This place is exciting, but



Lessons at MAI, fotos: Lutz Wabnitz (2), Ralf Heckel

still functionally. We visit the Hydro Lab. It is enormous, about 33 ft deep a 66 ft in the diameter. Under water inside are Mockups of the ISS modules.

Then they show us the centrifuge. It is 60 ft long weights over 330 tons. The highest velocity is 180 mph. The maximum load on material is 30 g and 12 g on humans. We are impressed.

The teachers and Yvonne explain everything to us. At the vestibular training we can prove ourselves. On the vestibular chair the function of the organ of equilibrium is tested. Marco and Yvonne are invited by Dr. Alexejew to test the chair. Dr. Alexejew trained even Sigmund Jähn. After 2 minutes on the chair Marco is feeling sick. So we have something for laughter. In the so-called "Nutella glass", the connection between eye and organ of equilibrium is examined. I take part in that. But I did not feel anything at all; this could keep going for even an hour.

On our way to the Soyuz simulator we meet Thomas Reiter, probably the first German on the ISS. Very friendly and calm he answers all of our questions. A person who is "down to earth", but wants to go in space. He said to us: "I will probably see you again." I am impressed. After a great lunch we take a look at the ISS simulator, which is full-functionally in front of us. We can already feel how the 2 astronauts are working hundreds of miles over our heads. Everything is explained to us. I would like to know more about the docking mechanism,

Ariane is interested in the kitchen and the toilet.

Our last stop at this day is the ORLAN spacesuit which cosmonauts wear outside the space station. A space suit this small costs about 10 Mio. €. Never before a student was wearing this suit, they are telling us. Yvonne and Christian climbed into the suits after long explanations. The suits were filled with air and they were lifted up with a crane. It was fun to see how they handle ropes and a hatch. It was hard but they did their job very well. At the end of this day at Star City we all receive as little gifts cosmonaut food.

Still impressed about everything we saw this day and overwhelmed how hard everybody at the Star City and the MAI worked to make this possible for us; we bring this day to an end in a cool atmosphere. For the first time I meet other students in Moscow. They are friendly and about 60% are from Asia.

The Third Day: Ziolkowsky and the BURAN

Rested and recovered we stand in front of the enormous Russian space shuttle BURAN, unbelievable! We never thought to get this close to a spaceship. Then we see the enormous and legendary Ziolkowsky Monument. It is very impressing, the largest titanium monument on earth. On top you can see the R1 quite similar to the German V2. At this size it is very difficult to get the whole picture in one single photo. On Thursday the biggest event of the whole program is going to happen. The NASA headquarters confirms to Ralf our interview with the ISS works. The whole evening we discuss our 5 questions we would like to ask to the 12th crew of the ISS. At the Mission Control Centre we recognize our responsibility, hopes and the possibilities we have while speaking to the ISS. There are also tears of realization. We sit

together discuss our questions till 4am. Now there are only 5 hours of sleeping left.

The Fourth Day:

Good morning ISS

Our bus takes us to Energija and nobody knows what is going to happen today.

In the company museum we see Gagarin's Capsule and even sit in a Soyuz. We learn much about the Russian Space Program, Laika and Koroljow. As we arrive at the ZUP, the Mission Control Centre everybody feels the strain and tension. Everybody knows this is something you can do only once in a lifetime. They are preparing us. Then the video connection to McArthur and Tokarev is prepared. They seem to be very calm and open-minded. They both invite us Houston, which we accept with joy. The most impressive sentence is: "You are the reason why we are up here!" They say good-bye with somersaults. We talked for 25 minutes and are enthusiastic, overwhelmed and cannot seize what happen minutes ago. We are simply speechless. Even Prof. Dr. Malozemov and our companions have tears in their eyes. This evening there is a small celebration with sparkling wine, to this successful day. The NASA placed the video at our disposal. We published the file on:

www.spacepass.de/ZUP.wmv

The Fifth Day

Invitation to Mars

We thought nothing can make these days better – we thought. On Friday we go to the IMBP (Institute for Madiko biological problems). The last day still affects us. The brain is at maximum load. But we all are anxious to see what comes next. Finally we meet our first real cosmonaut Dr. Poljakow. He is the record owner in long duration space flight. He was in space for 438 days and celebrated 2 birthdays in orbit around earth. He even takes

the time to explain us the medical and psychological support of the cosmonauts. The whole time he stays calm and businesslike. He also shows videos about the life on MIR to us, so we may understand this better and we are astonished. But then he continues to tell about current simulations to the preparation of the Mars program. We would like to know more about it, so he calls for the rector of the IMBP Prof. Baranov. It is a man with grey hair and an elegant suit. Straight ahead he comments the presentation. We learn something about the crew, the schedule, and amounts of energy, the duration of stopover on Mars and the landing 2016. However these naked facts, spoken by this very respectable man, as if it is daily work are hard to believe. We get information from medical preparations to complex technical details of the Mars mission.

On our request, "Can we participate? ", he answers cool: "You have to write your application in to languages, learn Russian and send it to us. Then go to an institute and get a good diploma. Everything else will follow by itself, if you believe in it. You are the generation, which will be on the spaceship." Martin asks: "I do not believe this, may we see the spaceship?" Whereupon Baranov leans on his arms, looks everyone into the eyes and says: "However excuse it is still a building site." We see the Mars Exploration Simulator under construction. It will be finished in 2006 and in autumn the first crew will board and stay for 500 days. Gigantic my future has started.

The Certificates

On the last day we receive certificates, with the seminar hours and signatures of all the deans who took care of us and the rector of the MAI. Everyone

gets a certificate with two big stamps on it, which means we were official guest students of the MAI, registered on October 16th. This will get a special place in my room and I will put a copy into my application documents.

It was an unbelievable and overwhelming experience! Now there is no doubt about my way I am going to go and my profession, for me they are dreams no more. I want to reach for the stars.

Ariane Brandenburg and Martin Hohlweg
Members of the Team
Germany Mission 1
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Each student writes its own experience report. These are going to be published in book form. At present the mission 2 prepares for a journey by invitation of NASA. They will experience a shuttle start, train as astronauts and see the production of SRB's.

