

Time in Thai: *Employee shares tales from International Space University*

After spending ten weeks in Thailand, studying with more than 80 other "students" from 24 countries, JSC's Mike Machula learned more than the obvious lessons one would expect from the International Space University – he also learned the momentous impact that cultural differences can have, no matter how noble the project.

Machula plans to give an informal presentation about his experiences at noon December 16 in Bldg. 4N, room 1042. The presentation is open to anyone interested in more information on ISU or Machula's trip adventures, where he says, he was given the chance to think about the big picture of space exploration.

"Within the current NASA space program, we are used to communicating easily," explained Machula. "But as our ISS activities and assembly ramp up, communication will become more of a challenge. The opportunity to interact with people from different countries and learn more about their cultures is invaluable – you can't underestimate the role that these cultural differences play in such a large endeavor as the space station."

With that in mind, the students convened at Suranaree Institute of Technology in Nakhon Ratchasima for 10 weeks as part of ISU's prestigious Summer Session Program. The locale may seem an unlikely site for the study of space sciences, but the change of venue is in keeping of the international spirit of ISU. Plus, rationalizing the pursuit of space exploration amidst the poverty of a developing country was a challenge that added a new dimension to the students' objectives.

"Imagine if the Queen of Spain never gave Columbus the jewels to finance his legendary expedition?" said Machula. "Space exploration is an investment – not a luxury."

In fact, one of the purposes of the ISU, is to use the time and resources of the attendees to investigate ways space technology can be translated into improvements on Earth. After the students took in four weeks of academic lectures, covering everything from law and management to satellite applications and space in society, they were divided into two groups to work on a design project. One, entitled, *Disaster Management in South East Asia*, examined ways that space-derived technologies, such

as remote sensing and the global positioning system, may address the issue.

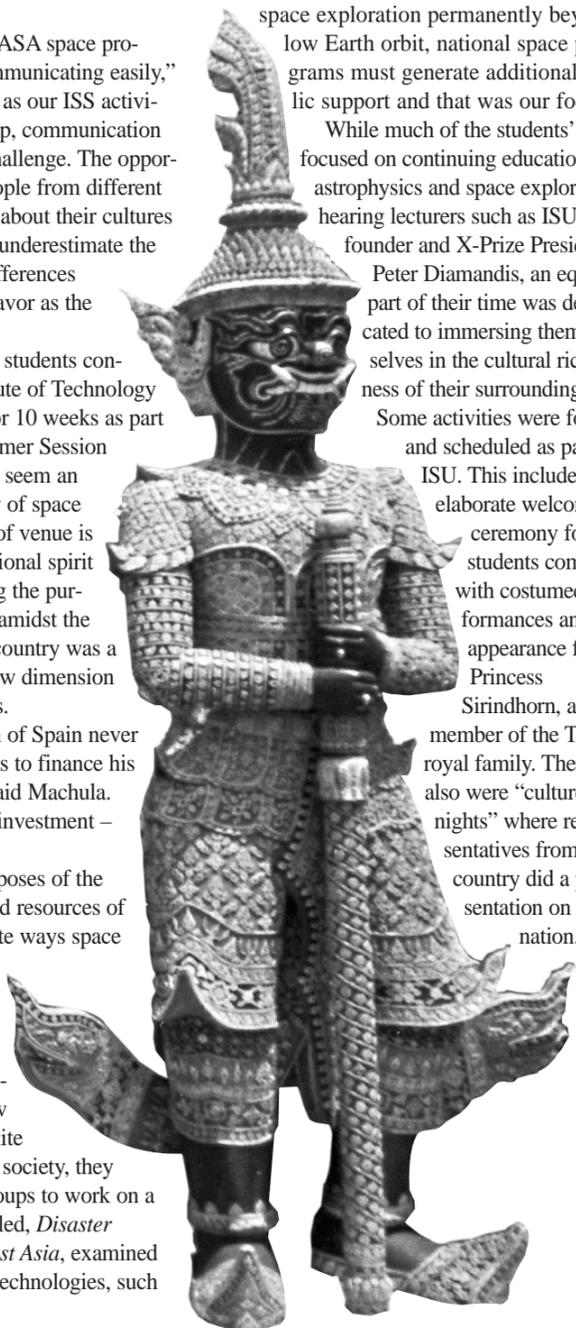
Machula worked on a separate project entitled *International Strategies for Human Exploration Away from Earth*, which was a broad-scale examination of future space pursuits.

"I chose the exploration project because, even though we just started building the ISS, I feel we need to start looking ahead and formulating a solid plan for how we can best explore the remainder of the solar system," said Machula. "Our team agreed that the shuttle will play a significant role in future exploration programs but we also concluded that to truly move space exploration permanently beyond low Earth orbit, national space programs must generate additional public support and that was our focus."

While much of the students' time focused on continuing education for astrophysics and space exploration, hearing lecturers such as ISU founder and X-Prize President Peter Diamandis, an equal part of their time was dedicated to immersing themselves in the cultural richness of their surroundings.

Some activities were formal and scheduled as part of ISU. This included an elaborate welcoming ceremony for the students complete with costumed performances and an appearance from Princess Sirindhorn, a member of the Thai royal family. There also were "culture nights" where representatives from each country did a presentation on their nation.

This statue represents a spirit guardian protecting the gates to the temple at the Grand Palace in Bangkok. ISU visitors learned about different cultures worldwide, as well as that of their host country, Thailand.



Mike Machula, left, and Steve Topliss, far right, a Ph.D. student at the University College – London, immerse themselves in the Thai culture at the International Space University.

"We found it difficult to prepare an American cultural presentation because of the sensitivities most other countries have about Americans," explained Machula. "To pull it off, we made the presentation interactive and light-hearted using parodies such as 'Americans have solved the Mars food issue! We've already developed the ideal space food call the Twinkie, which has a shelf life of seven years!'"

But during off-hours, students were free to partake in the ethnic treasures as they wished, and in Thailand, the options were very exotic.

"We were able to do a lot of exploring because you could rent a ten-person van, with a driver, for only \$40 a day," explained Machula.

Machula spent a day with a local host family who ensured that he saw the best of Thailand. According to Machula, the most exciting day included a trip to the floating market and a visit to a crocodile farm. Likely

the most exciting, and daring part, was when he was pulled as a volunteer from the audience for a demonstration with the elephants.

"At the end of the floating market day, we went to my host family's parents house and had a large Thai dinner," said Machula. "It seemed like everybody in town was there

because they all wanted to meet the American who worked for NASA. After dinner we all crowded into one of the rooms and talked for about two hours. Speaking Thai, supplemented with a lot of sign language, I told them about my day's experiences, such as getting a massage from an elephant!"

"One of the unforgettable moments in my life was when the great grandmother, the elder of the house, announced to everybody that I was to be treated as family and welcome back anytime. I had worked hard to blend into the culture as much as possible and this night I was truly

successful," said Machula.

According to Greg Hayes, JSC human resource academic coordinator, the experience gained in the international environment is a true asset for JSC's future leaders.

"With the global responsibilities and relationships challenging NASA and JSC today, this is an invaluable opportunity for us to participate in this multinational, multidisciplinary space education and research program," said Hayes. "Learning and understanding other cultures is necessary to advance the space program and work with our international partners."

The Human Resources Development Branch is accepting nominations for the 2000 ISU summer session, which will be held in Valparaiso, Chile. Directors should submit nominations by December 17. ■

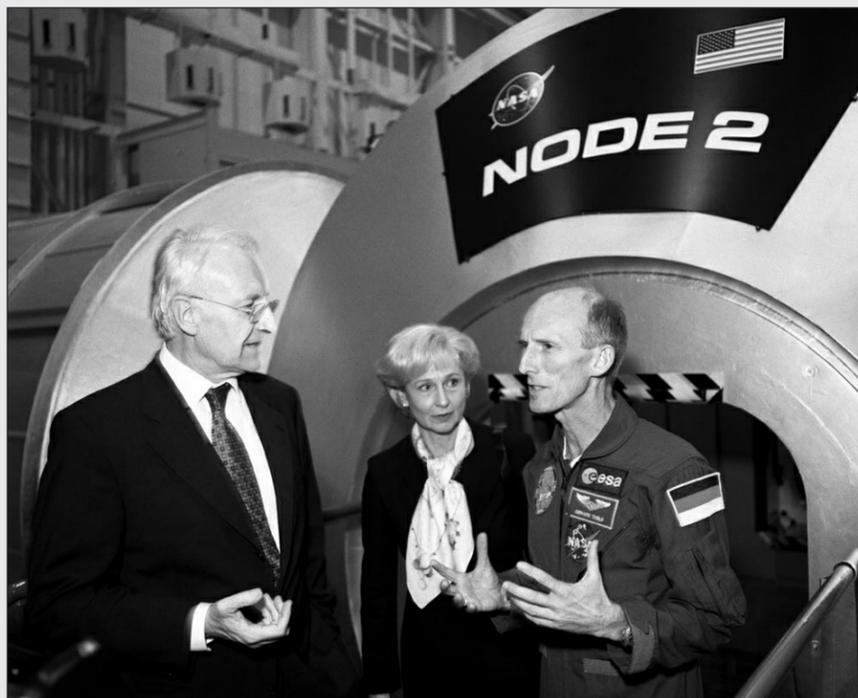
Learning and understanding other cultures is necessary to advance the space program and work with our international partners.

– Greg Hayes

Bavarian Minister-President Stoiber visits center

Dr. Edmund Stoiber, the Minister-President of Germany's oldest and largest state, toured JSC in October as part of a recent visit to the U.S. Stoiber and a delegation of 40 assistants and staff began their visit with a greeting by JSC Deputy Director Capt. James Wetherbee. The contingent also received a personal tour of the X-38 project in Bldg. 220. Col. Robert Cabana, manager of international operations for the ISS Program Office, and ESA Astronaut Gerhard P. J. Thiele, Ph.D. guided the group through the ISS and space shuttle trainers.

"Dr. Stoiber was very receptive to Colonel Cabana's remarks about the future of the international cooperation in space," said Gerhard. "Bavaria invests a lot of money in space-related activities - on top of what the federal government in Berlin spends. Therefore it was very valuable for Dr. Stoiber



to personally see some of the products and developments that result from such investments."

The delegation's tour was capped by a visit to the Mission Control Center, old and new, with a briefing by Milt Heflin, Flight Director Office deputy chief.

Bavaria is Germany's southernmost state and home to more than 12 million Germans. Many of Germany's prominent aerospace companies are located in Bavaria, as is the German Space Operations Center.

Dr. Stoiber has served as the Minister-President of Bavaria since May 1993. Prior to that appointment, Dr. Stoiber presided as State Minister of the Interior and State Minister and Head of the Bavarian State Chancellery. ■

Dr. Edmund Stoiber, Minister-President of Bavaria, and wife Karin visit with ESA Astronaut Gerhard Thiele, Ph.D. near the ISS mockups.