

"Human Exploration of Space: Past, Present, and Future"

Presented by



Mr. Michael Lutomski, ISS Risk Manager
NASA Johnson Space Center

Date: April 27, 2009

Time: Social/dinner: 5:30 p.m. – 6:30 p.m. – Pizza and refreshments will be provided

Presentation: 6:30 pm to 7:30 pm

Cost: Free

Place: WHTC 111, Texas A&M International University

Who is invited: TAMIU students, staff, and faculty; middle and high school students, the general public

Abstract – America has again committed itself to exploring the stars. NASA's new vision for exploration will take us back to the moon for the first time in nearly 40 years and then on to Mars. NASA has stated that we are going back to the Moon, "but this time to stay." To succeed and to accomplish a sustained presence, NASA and its astronauts will have to find ways to live off the land like the early pioneers exploring the west. Humans will be mining resources off the Lunar and Martian surfaces to exist. How did we get to where we are today in manned space flight to these grand destinations? How will we learn enough there to go beyond?

This presentation will explain the past and present activities in human spaceflight and how these activities are setting the stage and building the capabilities necessary for exploration.

About the Speaker – Mr. Lutomski has spent over 20 years working on Manned Spaceflight at the Johnson Space Center in Houston Texas working in various positions within Operations, Engineering, and the International Space Station Program Office.

Mr. Lutomski spent two years working in NASA's International Space Station's Moscow Office. While in Russia he worked in the Mission Control Center supporting early ISS Operations development just outside of Moscow, in Korolev, Russia during the Shuttle/Mir program, known as "Phase I" of the International Space Station.

Currently Mr. Lutomski is the Risk Manager for the International Space Station (ISS) Program. The Risk Manager he is responsible for defining and implementing the Risk Management process across all the organizations and participants of the ISS Program to assist management in making the sound risk informed decisions. Mr. Lutomski manages a Continuous Risk Management (CRM) process for the ISS Program that provides a systematic method for identifying, tracking, and controlling not only technical, but also cost, schedule, and safety risks that affect program objectives.

As part of managing risk Mr. Lutomski is also responsible for building and maintaining a Probabilistic Risk Assessment (PRA) model of the ISS used by management to quantify and compare relative risks to the crew and vehicle associated with designing, building, and operating the ISS with it international partners spanning 16 countries.

About the International Space Station (ISS) - The most complex engineering and construction project in the world is taking place in space. The first two modules of the ISS were launched and joined together in orbit in 1998. Other modules soon followed and the first crew arrived in 2000. November 2, 2005, marked a major milestone in space exploration: the fifth anniversary of continuous human presence in space aboard the ISS. The ISS orbits the earth at an altitude of approximately 225 miles above earth.

ISS Facts –

Weight: 404,069 pounds

Habitable Volume: 15,000 cubic feet

Width Across Solar Arrays: 240 feet

Length: 146 ft from Destiny Lab to Zvezda; 171 ft with a Progress docked

Height: 90 feet

To help us plan properly for this event, we ask that you please RSVP to Ms. Juanita Villarreal at sjv@tamiu.edu (Ph: 956-326-2440) or Dr. Ruby Mehruabeoglu at ruby.mehrubeoglu@tamucc.edu by April 23, 2009.

This activity is co-sponsored by the Department of Engineering, Mathematics, and Physics at TAMIU and the IEEE Corpus Christi Section (IEEE-CC). The event is funded by IEEE-CC and a grant from the Texas Space Grant Consortium (TSGC).

Hope to see you there!!