Larry Mize, Chief of Space and Ground-based Midcourse Defense Education Training gives a presentation to students during the Space and Missile Defense Conference Education Day.

Space and Missile Defense Conference Education Day

BY LENNY GEHRKE, FWC DCD TRAINING

The Eleventh Annual Space and Missile Defense Conference and Exhibition took place at the Von Braun Center in Huntsville, Ala., from Aug. 11 – 14, 2008. During the Conference, an Education Day was established for 7th and 8th graders from the local community. The afternoon venue featured a competition where four teams competed in a robotics competition. This demonstration identified the different responsibilities of each member of the team in order to make their individual robots competitive. There were many different facets of the competition not only with the students but also with their teachers and mentors. The winning robot wasn't necessarily the best or the toughest, but success depended mostly on the winning strategies.

A variety of exhibitors participated in morning session or Education Day which was held in the Von Braun Complex Arena on Aug. 13. Exhibitors included Space and Missile Defense Command Future Warfare Center Directorate of Combat Development (FWC DCD) Education and Training Division, NASA, UAS (Unmanned Aerial Systems), UGV (Unmanned Ground Vehicles), Rocket Boys, Space Camp, Lego Robotics featuring "Damsels in Charge" team, the U.S. Army, Raytheon featuring "Math Moves You" exhibit, and the four local FIRST (For Inspiration and Recognition of Science and Technology) Teams. The morning activities involved students rotating throughout the exhibitors. Education Day exhibitors demonstrated a 15-20 minute presentation of their programs — some had hands-on, interactive exhibits. Students also had a chance to walk through and visit the main exhibits in the South and East/West Halls of the Von Braun Complex.

The FWC DCD exhibit provided a video vignette of what it takes to get a satellite in orbit, how to maintain the satellite while in orbit, power, station keeping and pointing considerations. A hands-on practical demonstration activity was provided for students on satellite spin stabilization. Students were turned into a human gyroscope using a rotating platform and a bicycle wheel. The satellite overview DVD vignette was provided to the students along with a CD which included an orbital mechanics Computer Based Training module and other helpful educational material.

The focus of Education Day was to visit the different booths and technologies to spark interest in students to examine careers in the sciences, math and or technology. Any of these students could be our next astronaut, scientist or inventor of an innovative futuristic technology. All middle school students invited to Education Day received a bag full of exhibitor tokens and memorabilia including some educational material.

In talking to some of the students, it was discovered that several said they plan to change their majors to a math or science field simply from being inspired by Education Day. It was amazing to see how smart, talented and mature today's students are. Our future lies on what the next generations do with their lives and with the decisions they make.

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