



Global Friendship Through Space Education

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ASTRO

The Partner School Science Program Newsletter

Videoconferences between Partner School and NASA

Four planned videoconferences with NASA made last week one of the busiest weeks for partner schools. These videoconferences took place successfully despite some technical difficulties. Next week there will be four more videoconferences. We invite you all to share your encouraging experiences and photos with us to mention in the next Astro. Enjoy it!



Isikkent College (Izmir, Turkey) and MS324 – 702 (Murfreesboro, TN)

The first *Meet and Greet* videoconference between Isikkent Schools (Izmir, Turkey) and Middle School 324 -702 took place on January 22, 2010. Students were able to see and speak to their partners for the first time. The students introduced themselves, talked with their partners, and asked questions to one another. Turkish students explained the sights and historical parts of Izmir. They also shared some information about traditional Turkish foods with their partners.

Right after the *Meet and Greet* videoconferences, students participated in another videoconference with NASA. The subject of the videoconferences was Solar System. Students shared their projects with their partner school and NASA.

There were other schools that held videoconferences with NASA and their partners. Before the videoconferences, all students worked hard on the topic 'Toys in Space' and did some experiments and collected data to find engineering solutions to play with toys in space.



Turk College (Izmir, Turkey) and Hobgood NASA Explorer School (Murferesboro, TN)



Discovery School (Murferesboro, TN) and Acarkent Doga College(Istanbul, Turkey)



Students from Discovery School (Murfreesboro, Tennessee) were very excited about the NASA videoconference. They learned a lot about Toys in Space, and were excited to learn that their predictions were correct! They enjoyed discussing ideas and had lots to share about ways of conducting the experiments. It was a terrific success! They are now eager to learn about careers in space!

Endeavour to Deliver a Room With a View

The International Space Station has been moving steadily closer to completion for the past several years. But what house is complete without a utility room, a gym and a picture window?

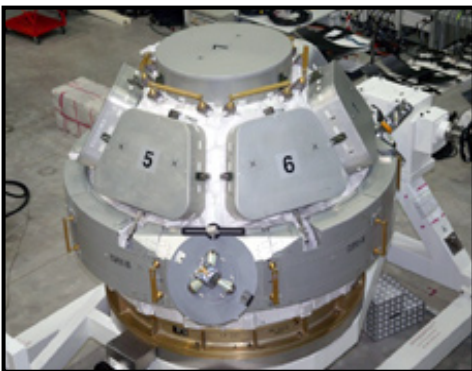


A computer generated scene gives the perspective of a crew member looking through the Cupola on the International Space Station. Photo Credit: NASA

During the STS-130 mission, space shuttle Endeavour will deliver the Tranquility node and its cupola, a dome-shaped extension from Tranquility made up of seven windows. They will be the last major U.S. modules to be added to the space station, and together they'll help clear out premium workspace in other areas of the station.

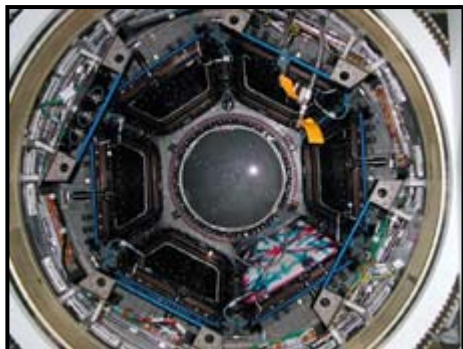
At 15 feet wide and 23 feet long, the Tranquility node will provide a centralized home for the station's environmental control equipment: one of the systems that removes carbon dioxide from the station's air, as well as one of the station's bathrooms and the equipment that converts urine into drinkable water. And there's enough room left over to house the station's new treadmill and its microgravity equivalent of a weight machine.

Though the node has an intensely practical function, there are still fanciful aspects to Tranquility (its name, for example). It harkens back to the Sea of Tranquility, where humans made their very first tentative landing on the moon - it was at the very limits of what human beings could do. From that beginning, we're now putting up a node that will house the majority of the life support equipment for the station, where we're going to have a permanent presence in space.



A slightly high-angle view of the International Space Station's Cupola in the Alenia Spazio clean room in Turin, Italy. Photo Credit: NASA

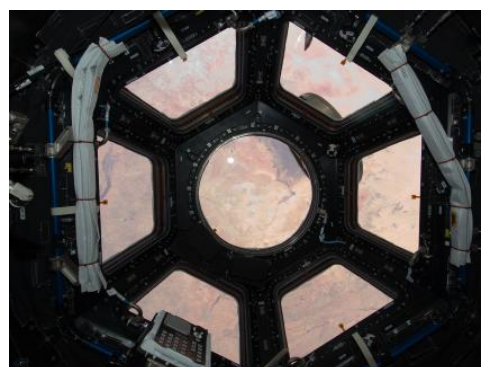
Everyone agrees that the real scope for the imagination will be provided by Tranquility's 6.5-by-5-foot annex: the cupola. Its true purpose will be to provide a true view of robotics operations on the station's exterior. "Out the window is the truth," Commander George Zamka said. "The video views that we use now, you're trying to stick together and have a mental image of where things are. When you look out the window, you don't have to imagine. It's all right there for you."



The cupola will be like a mini control tower sticking out from the Tranquility node, as opposed to the other station windows, which are flush with the station's exterior. Its seven windows will provide the only views of the outside of the station from the inside.

A low angle view shows the interior of the International Space Station's Cupola in the Alenia Spazio clean room in Turin, Italy. Photo Credit: NASA

So in addition to the robotic operations and Earth views it will provide, it will also give astronauts a good look at some of the space shuttle fleet's finest handiwork as the program comes to an end. And that provides its own cause for reflection. "We've come a long way in human spaceflight because of the shuttle's capability," Zamka noted. "We've launched and retrieved satellites, we've done medical research, and now we've built this huge space station. We're almost to the point of passing the baton from the space shuttle to the space station in terms of what our human spaceflight experience will be now."



In two weeks you will receive your last Astro for the 2009-2010 school year. This will be your last chance to submit photos of your school and your projects. Send information to tyildirim@gftse.org.