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Astronomy Campers to Communicate Live with the International Space Station

Students and faculty at the Beginning Teen Astronomy Camp in Tucson, Arizona are preparing for a rare event that will allow them to talk directly via amateur radio with astronaut Chris Cassidy aboard the International Space Station (ISS). The event is open to the public and will take place Saturday, June 8 at 12:55 pm local time in the auditorium (N210) of Steward Observatory on the campus of The University of Arizona.

The 10-minute live forum enables individual students to ask questions and receive Mr. Cassidy's answers as he orbits 250 miles above Earth. The event is made possible through Amateur Radio on the International Space Station (ARISS), a cooperative venture among NASA and other international space agencies, that coordinates scheduled radio contacts between astronauts aboard the ISS and schools.

The Camp's 14 boys and 16 girls will arrive in Tucson on June 5, from 14 different U.S. states and four Arizona cities. Twelve of the thirty students received scholarships to attend including five students from the Coronado K-8 school funded by the local Sun City Vistoso Astronomy Club. The Camp's students are mentored by University astronomers, educators, and graduate students as well as by Camp alumni now pursuing a variety of careers at colleges around the world.

The Astronomy Camp program provides authentic experiences in science, technology, engineering, and mathematics. During the week, Campers will reside at Kitt Peak National Observatory, located approximately 50 miles southwest of Tucson on the Tohono O'odham Indian Nation, and will record celestial objects day and night using professional telescope equipment. Dr. McCarthy, the Camp's Director and former astronaut candidate, is enthusiastic about the upcoming radio contact, "The ARISS contact opportunity supports our mission and will help inspire students to continue studying these subjects in school, perhaps as potential career options."

Even before the start of Camp, the 30 students began preparing questions to ask the Expedition 36 astronaut crew of the ISS. After arrival at Camp, they will build their own crystal radios to learn about the nature of light and radio instrumentation, perform experiments to understand the physics of space flight, and learn about the opto-mechanics of telescopes and electronic cameras. They will also tour the campus station of the University's Amateur Radio Club (K7UAZ). At night the Campers will take electronic pictures of nebulae using a HyperStar telescope system manufactured at Tucson's Starizona company which collaborated with NASA to build the Earth-looking camera known as the International Space Station SERVIR Environmental Research and

Visualization System (ISERV). The ISERV camera will take a picture of the Campers during an orbital pass over Kitt Peak.

During Saturday's event, as many as twenty Campers will ask questions of Mr. Cassidy while the ISS orbits over ground station VK4KHZ in Queensland, Australia. Former Camper, Ms. Dayanara Sixkiller, will represent the Tohono O'odham Nation. Camper Ms. Alexis Duca will represent a partnership between the Girl Scouts of the USA and the University's NIRCcam project for NASA's future James Webb Space Telescope (JWST). NIRCcam is led by Dr. Marcia Rieke who will also be present. Students from Tucson's Coronado K-8 school will also be communicating with Mr. Cassidy. The event will be carried live over amateur ("ham") radio internet links (Echolink and IRLP) and will be heard by ham stations worldwide.

The ARISS radio contact is one in a series, with educational activities in the U.S. and abroad to improve teaching and learning in science, technology, engineering and mathematics. It is an integral component of [Teaching From Space](#), a NASA Education office. The office promotes learning opportunities and builds partnerships with the education community using the unique environment of human spaceflight.

Kitt Peak National Observatory is a division of the National Optical Astronomy Observatory, which is operated by the Association of Universities for Research in Astronomy Inc. (AURA) under a cooperative agreement with the National Science Foundation.

Since 1988, Astronomy Camp has been sponsored by The University of Arizona Alumni Association. For more information regarding the Camps and the scheduled radio contact, visit the Camp's Web site at (astronomycamp.org) or contact the Camp's Director and event organizer (Dr. Don McCarthy) at dmccarthy@as.arizona.edu.