

# Sac Girl Scouts gear up to talk to space station

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SACRAMENTO BEE

All systems are go!  
Sacramento Girl Scouts Troop 1089 worked this weekend in preparation for reaching outer space — using radio communication to talk with astronauts orbiting 250 miles above the Earth.

The team of 14 Senior Girl Scouts, ages 14 and up, is one of 11 educational groups in the nation chosen this winter for NASA's STEM program called ARISS, or Amateur Radio on the International Space Station. The program challenges students to build a ham radio, giving them a chance to talk with astronauts aboard the International Space Station, something ham radio operators have delighted in doing for years.

"What is the strangest thing to happen to you on the ISS?" said Alana, one of the scouts, on Saturday afternoon as the team rehearsed questions using the radio they've built and that they'll use to connect with outer space this week.

"What are you most looking forward to when you return to Earth?" asked another, as the team eagerly lined up in the STEM center at the Girl Scouts Heart of Central California



LEZLIE STERLING/SACRAMENTO BEE

Kennedy, a member of Sacramento Girl Scouts Troop 1089, uses microphones Saturday to practice a question she will ask an astronaut on the International Space Station next week. The scouts were testing out the ham radio they built with the River City Amateur Radio Communications Society after being selected for the STEM program by NASA.

Council headquarters in East Sacramento.

The council's STEM center has "a maker space and a fabulous fabrication laboratory," along with a greenhouse area, said Amanda Banks, Troop 1089 co-leader, who has been guiding the girls' project along with members of the River City Amateur Radio Communications Society.

How does the NASA program work?

The goal of ARISS, a joint project with other space agencies around

the globe, is to "inspire an interest in science, technology, engineering and math," known as STEM subjects. That, in turn, could be the gateway to a career in science and technology, Banks said.

And the project allows the scouts and other youth to learn about space exploration and how easy it is to reach the ISS, even if it's over the amateur radio band — a technology with roots in the early 20th century. Amateur radio operators, who are licensed by the federal government in

the U.S. and elsewhere, span the globe and use shortwave radio bands to broadcast messages and talk to each other.

ARISS opens up proposal periods several times a year for students as young as kindergartners, but building out a radio post requires the knowledge (and patience) of high-schoolers.

At the end of the project, the teams are rewarded with a time slot to talk with an astronaut for about 10 minutes as they whiz above or near the team's location.