

SuitSat: A Unique Satellite for Kids

STUDENT FEATURES

Hearing Voices From Space

01.04.06

A space suit floats alone through the empty space above Earth. It floats away from the international space station. It sends radio signals to the planet below. On the ground, people get the signal and hear a voice. The voice they hear from space belongs to a child!

This may sound like a science-fiction story. But it will really happen in February 2006. Don't worry though. There won't really be a student lost in space. In fact, no one will be in the space suit. The voices will be recordings.



Image above: Suitsat-1 will use a Russian Orlan space suit like the one pictured here. Credit: NASA

Right now, an extra space suit is on the international space station. This Russian Orlan suit can't be worn anymore. When the crew members throw it away, they will actually be sending it on one last mission. They will push the suit into space and turn it into a satellite. It will be called Suitsat-1.

Suitsat-1 is a project of a group called Amateur Radio on the International Space Station. ARISS is a partnership between Amateur Radio groups and space agencies around the world, including NASA. The main goal of ARISS is to help people talk to the astronauts on the space station through radio.

Even though no one is in the suit, it won't be empty. It will carry a radio to send signals to Earth. It will also carry sensors to keep up with how it is doing. And it will carry recordings and a computer disc containing over 300 items sent in by children around the world. These include such things as creative artwork, student names, class and group pictures, and logos of schools or scout troops.



Image above: A control panel on the outside of the space suit will let the crew activate Suitsat-1 when it's deployed. Credit: NASA

NASA hopes students on Earth will listen to the signals. You can listen to them with special amateur, or "ham," radios. They pick up different channels than the radios in your home or car. Ask a teacher, a club leader or a parent about finding one of these special radios. A voice report will tell you what is happening to the suit itself. You can listen to the recordings from the students, or receive a picture from the suit if you have or borrow ham radio equipment.

continued ...

So, how will you prove to your friends that you've been hearing voices from space? If you do hear the voices or get the picture, you can receive a certificate. The signals will also contain special words. If you hear those words, you can win an award. Because the students sending the messages were from different countries, they recorded the words for Suitsat-1 in different languages -- English, French, German, Japanese, Russian and Spanish. To get the award, you may have to work with people who speak those languages.

The crew will "launch" Suitsat-1 by pushing it by hand into space. They will put it on a path that will take it closer to Earth. After a while, it will fall too close and burn up. No one knows exactly how long Suitsat-1 will be heard. It all depends on how long the batteries last and how fast the suit heats up. Mission planners guess it will take a week or two. It could be just an hour, or it could take several weeks.



Image above: Students from all over the world contributed materials for the Suitsat-1 CD. Credit: NASA

So, if you want to listen to Suitsat-1, you need to be ready as soon as it launches. Tell your teachers, club leaders or parents about ARISS. With their help, maybe you can hear voices from space, too!

Related Resources

Tools for Tracking Suitsat-1

<http://www.amsat.org>

<http://www.amsat.org/amsat-new/tools/>

<http://science.nasa.gov/Realtime/jtrack/>

ARISS Web site

<http://spaceflight.nasa.gov/station/reference/radio/index.html>

David Hitt/NASA Educational Technology Services



- + Freedom of Information Act
- + Budgets, Strategic Plans and Accountability Reports
- + The President's Management Agenda
- + NASA Privacy Statement, Disclaimer, and Accessibility Certification
- + Inspector General Hotline
- + Equal Employment Opportunity Data Posted Pursuant to the No Fear Act
- + Information-Dissemination Priorities and Inventories



Editor: Shelley Canright
 NASA Official: Brian Dunbar
 Last Updated: January 4, 2006
 + Contact NASA

This page came from:

http://www.nasa.gov/audience/forstudents/k-4/home/F_Hearing_Voices.html

with minor edits here by Mr. P. Kilroy, a NASA Engineer in Greenbelt, Md.