

Monitoring Meteor Showers

Meteors can be detected by monitoring radio signals that reflect off meteor trails in the atmosphere. The signals can be detected by a radio in your classroom. The Sky Scan website www.skyscan.ca serves as a learning resource for schools and students around the world.

- Information on how to set up an FM radio meteor monitoring site
- Background information on many aspects of radio astronomy
- Links to other amateur science projects
- Results of actual FM radio observations of meteor showers



Itty-Bitty Telescope

FAST Facts about the IBT:

- The IBT is made from a common satellite dish.
- It is a great introductory radio telescope system that can be used for outreach.
- It can detect the sun.
- It can detect blackbody radiation such as 300K trees, buildings and people when viewed against cold sky.
- You must use it outside, or through a large window.

<http://www.gb.nrao.edu/epo/ibt.shtml>

About the Society of Amateur Radio Astronomers

The Society of Amateur Radio Astronomers (SARA) is an international society of dedicated enthusiasts who teach, learn, trade technical information, and do their own observations of the radio sky. This organization is an education and scientific, non-profit group founded for the sole purpose of supporting amateur radio astronomy.

SARA members are committed to bringing science and radio astronomy to the classroom. SARA offers grants for teachers and students to learn radio astronomy through hands-on opportunity to make scientific observations.

www.radio-astronomy.org

Become a Member

We would appreciate the following information included with your check or money order, made payable to SARA:

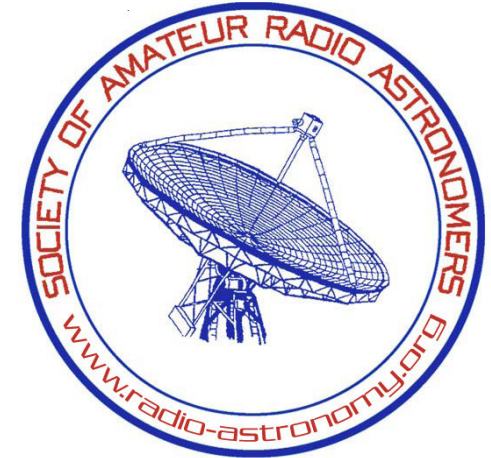
Name: _____
Individual \$20__ Classroom \$20__ Student \$13.33__
Email Address (required for electronic Journal delivery)

Ham call sign: _____ (if applicable)
Address: _____
City: _____
State: _____
Zip: _____
Country: _____
Phone: _____

Please include a note of your interests. Send your application for membership, along with your remittance, to our Treasurer: Melinda Lord, PO Box 915, Washington, IA 52353 or make payment thru PayPal to:

treasurer@radio-astronomy.org

Society of Amateur Radio Astronomers Teacher and Student Grants



Teachers, are you interested in bringing hands-on, data collecting radio astronomy projects into your classroom? Students, are you looking for a science project that challenges you? It's easy to get started! And the Society of Amateur Radio Astronomers (SARA) wants to help.

SARA has enthusiastic mentors willing to help you select a project and learn what you need to know to get started. Find a mentor by going to <http://www.radioastronomy.org/node/28>

And, SARA offers grants for radio astronomy projects.

Download an application form now at <http://www.radio-astronomy.org/?q=node/32>

Radio Jove: Jupiter, the Sun & our Galaxy



Radio JOVE at a Glance

- Build your own 20.1 MHz radio telescope
- Teaches planetary and solar radio astronomy, space physics, electronics, and the scientific method
- Target Audience - Teachers and students of high schools, middle schools, college science courses, and interested individuals
- Provides participants with a hands-on radio astronomy experience for the classroom or for special projects
- Gain experience in electronics construction and testing
- Interact with other Radio Jove participants to exchange data, ideas, and experiences

For further information go to:
<http://radiojove.gsfc.nasa.gov>

Inspire: Very Low Frequency Natural Radio

The INSPIRE Project, Inc. is a non-profit scientific, educational corporation founded in 1989 by Dr. William W.L. Taylor, former Chief Scientist for Space Station Freedom at NASA Headquarters and a pioneer in science education and public outreach.

INSPIRE began by providing engaging opportunities for students of all ages to observe Very Low Frequency (VLF) waves and gain hands-on, real world experience in the physical sciences. It also seeks to enhance educators in their knowledge in the field of space science to encourage our next generation of scientists. INSPIRE's educational platform serves a wide range of Science Technology Engineering Mathematics (STEM) topics and programs.

www.TheINSPIREProject.org



For more information on Inspire kits, opportunities, events and programs, contact Kathleen Franzen at President@TheINSPIREProject.org



SuperSID: Monitoring the Ionosphere

Earth's ionosphere reacts strongly to the intense X-ray and ultraviolet radiation released by the Sun during solar events and by lightning during thunderstorms. The Stanford Solar Center SuperSID monitor utilizes a simple pre-amp and high definition sound card to track sudden ionospheric disturbances to monitor the signal strength from distant very low frequency (VLF) transmitters.

These units provide students, scientists and teachers with an understanding of the effects of solar activity and thunderstorm phenomena on the Earth's ionosphere.

The Stanford SuperSID utilizes a simple loop antenna which can be mounted indoors or outdoors. Order kits from supersid@radio-astronomy.org.

Educational Resources

Curriculum materials designed and tested by Master Teachers have been developed by Chabot Space & Science Center in Oakland, CA USA. A centralized database is being supported by Stanford Solar Center at <http://sid.stanford.edu/database-browser/> for sharing data. A user group is available for communications amongst teachers, students, researchers and amateurs worldwide. http://tech.groups.yahoo.com/group/Super_SID/