“I’m from AMSAT and I’m here to help”

Prof. H. Paul Shuch, N6TX
AMSAT Director of Education

4th Annual CubeSat Workshop
Logan, UT, 11-12 August 2007
Teeners Reach Outer Space

Baltimore, Md., high school senior Perry Klein, 17, tunes his amateur
radio set on to pick up signals sent from New Yorker Rafael Sailer, also
17, via outer space Feb. 9. Youngsters are among leading scientists
who say that contact by bouncing radio signals off the ionized trails of
U.S. Explorer VII satellite and Soviet Sputnik III.

Story on page 3
The Orbital Classroom

Project OSCAR
Promoting Amateur Satellites since 1959
The Orbital Classroom
AMSAT is a non-profit volunteer organization which designs, builds and operates experimental satellites and **promotes space education**. We work in partnership with government, industry, **educational institutions** and fellow amateur radio societies. We encourage technical and scientific innovation, and promote the **training** and development of skilled satellite and ground system designers and operators.
The Orbital Classroom

AMSAT’s Educational Initiatives

- OSCAR
- SAREX
- ARISS
- CubeSats
- Publications
- Conferences
- Curricula
The Orbital Classroom

- OSCAR

Australis OSCAR 5
University of Melbourne
Launched 1970
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• SAREX

Owen Garriott, W5LFL
STS-9
December 1983
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• ARISS

Susan Helms, KC7NHZ, Aboard the ISS
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- CUBESATS
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- PUBLICATIONS
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• CONFERENCES

Space Day at NASM
AMSAT EDUCATOR’S SURVEY

All AMSAT members currently or formerly involved in training and education are encouraged to complete this survey form, to assist the Director of Education in assessing resources and capabilities available to accomplish AMSAT’s educational mission. Qualified individuals returning this survey will be designated official AMSAT Educators, and invited to participate in various upcoming educational initiatives.

NAME: ___________________________ CALL: ___________________________ EMAIL: ___________________________

ADDRESS: ___________________________ MEMBER #: ___________________________ GTY: ___________________________ STATE/PROV.: ___________________________ ZIP: ___________________________

PLEASE CHECK ALL THAT APPLY:

EDUCATIONAL POSITION:
☐ Classroom teacher
☐ College Professor
☐ School Administrator
☐ Curriculum Developer
☐ School Librarian
☐ Industrial Trainer
☐ Instructional Support
☐ Parent / Mentor
☐ Other

GRADE LEVEL:
☐ Primary / Elementary
☐ Junior High / Middle School
☐ High School / VocTech
☐ Junior College / Community College
☐ Undergraduate University
☐ Graduate University
☐ Other

TYPE OF INSTITUTION:
☐ Public
☐ Private
☐ Charter
☐ Magnet
☐ Parochial
☐ Home School
☐ Government / Military
☐ Business / Industry
☐ Other

SUBJECTS TAUGHT:
☐ Math
☐ Social Studies
☐ Physical Science
☐ Social Science
☐ Language Arts
☐ Fine Arts
☐ Other

PLEASE ANSWER THE FOLLOWING QUESTIONS BASED UPON YOUR PRESENT OR PAST EXPERIENCES. YOU MAY ATTACH SUPPLEMENTAL INFORMATION AS REQUIRED.

Have you any experience with using satellites or space technology in the classroom? Please elaborate:

__________________________________________________________________________________________________________________________________________

__________________________________________________________________________________________________________________________________________

Have you developed curriculum or lesson modules incorporating satellites or space technology? Elaborate:

__________________________________________________________________________________________________________________________________________

__________________________________________________________________________________________________________________________________________

Do you anticipate incorporating satellites or space technology into your teaching in the future? Specify:

__________________________________________________________________________________________________________________________________________

__________________________________________________________________________________________________________________________________________

ARE YOU INTERESTED IN:
☐ Developing such materials and resources
☐ Sharing such materials and resources
☐ Receiving such materials and resources
☐ Other

COMMENTS:

__________________________________________________________________________________________________________________________________________

__________________________________________________________________________________________________________________________________________

__________________________________________

PLEASE RETURN COMPLETED SURVEY TO:

Dr. H. Paul Shuch, NETX, AMSAT Director of Education
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Cogan Station PA 17728 USA (nsbx@amsat.org)
The Orbital Classroom

Ham Radio on Cubesats

- Science Mission
- Educational Mission
- Telemetry
- Tracking
- Telecommand
- Communications
- Frequency Spectrum
Ham Radio Licensing

- No Morse Code
- Simple Written Test
- Ten Year Licensing
- Licensing Courses
- Frequent Exams
Ham Radio Constraints

- No Commercial Traffic
- Not a Broadcast Service
- No Music/Entertainment
- Positive Control
- Orbital Debris Mitigation
The Orbital Classroom

• CONTACT:

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