



Student Experimental Payload Program

P.O. Box 1934 • Huntsville, Alabama 35807 • (205) 230-0353

18 February 1994

To: SGT Thompson, J.E.
I MEF/G-2, 1st SRIG
Box 555321
Camp Pendleton, CA 92055-5321

Dear Sgt. Thompson;

Thank you for your recent inquiry into the Student Experimental Payload Program. I would like to take this opportunity to introduce you to one of the most unique hands-on learning experiences available in the education arena today. The SEP Program is the largest nationwide non-profit organization whose purpose is to assist teachers and students in learning more about math and science, and put that knowledge to use. By working in conjunction with aerospace contractors across the country, the SEP Program has established two main objectives:

1. Serve as a source of information for teachers in the areas of science, technology and math by providing workshops, curriculum, classroom activity outlines and access to publications.
2. Promote cooperative learning for all grades by getting students involved in aerospace science activities, ranging from art contests to launching experiments onboard actual rockets.

The information contained in this packet is only an introduction to our services. Since the SEP Program is a non-profit organization sustained by grants, we do not promote only select vendors or resources, but rather make it our job to inform educators of every possible source of technical information and products involved in rocketry and aerospace education services.

In addition, the SEP Program sponsors a very unique hands-on learning opportunity for students in grades 5 through 12. These students are invited to design and build experiments, send them to the SEP Operations Center for evaluation, and assist in having their experiment launched onboard an actual sounding rocket to an altitude of several miles. The experiments are recovered when the rocket returns to earth by parachute, and students perform a post flight analysis on their particular payload. Imagine what an impact this has on young minds interested in science and technology!

After reviewing the information contained in this packet, if you would like to get involved in the SEP Program or some of its various activities, we highly recommend you consider purchasing the Teacher Resource Kit. This custom package is the most complete collection of information pertaining to educational aerospace technology, rocketry, curriculum, activities and resources on the market anywhere. Including a rocket kit and video workshop, the SEP Teacher Resource Kit is receiving high marks from educators in every grade. You will find a detailed flyer about the kit in this packet.

Thank you again for your interest in the SEP Program. We are here to help you, the educator, bring a most unique learning experience to your students. By requesting this packet you have taken the first step in demonstrating your willingness to go beyond the call of duty in educating America's youth, and our leaders for tomorrow . . . don't stop now.

Sincerely,



Greg Warren
SEP Program Director

"A non-profit organization dedicated to hands-on aerospace education."

How the SEP Program Works

Tier I (Observing) - If you are reading this information sheet, you are participating in Tier I. The SEP Program provides you, as an educator, with brief information about the program, about model and high power rocketry, and about safety/guideline organizations such as the National Association of Rocketry and the Tripoli Rocketry Association. Also included in the package is information about services and publications offered free of charge, or for a minimum charge, in addition to useful references about who (and how) to contact various sources for more detailed information.

Tier II (Launching an Experiment) - If you want your students to actually design and build an experiment to be launched onboard one of the SEP rockets, it will be necessary to purchase a **Payload Certification Kit**. The cost of the kit is \$10.00 (including shipping and handling) and covers all the information, design parameters, registration forms and waivers necessary for students to create an actual experiment designed for rocket flight. Once completed, the experiment may be delivered or mailed to the SEP Operations Center for integration into the flight manifest. You and your students are invited to attend the launch, but if that is not feasible the SEP team will video tape the launch prep, flight and recovery of the rocket containing your experiment, and send you a copy of the tape along with returning your experiment.

Tier III (Educator) - This is the level designed for teachers who really want to delve into the aerospace education potential for their students. In addition to the **Information Package** you receive in Tier I and the **Payload Certification Kit** listed in Tier II, this level includes the **Teacher Resource Kit**. At a cost of \$29.95 (including shipping and handling), the kit covers every aspect of rocketry from model rockets up to and including NASA programs. Also included are classroom activities, science labs, and curriculum for all grades. The kit also contains a model rocket (some assembly required) and instructions, along with a video workshop for building and launching the rocket. See the flyer included in this literature for more information.

And then there are the Options . . .

Option 1 (Newsletter) - If you wish to stay in contact with the SEP Program after receiving your information package, you may consider subscribing to the **Flamethrower**, the official newsletter of the Student Experimental Payload Program. Each issue covers the activities, launch schedules and updates of SEP events as well as up-to-date information on rocketry activities around the country, and with NASA. The 12 page newsletter is published every two months, with a 4 page update published between issues. Cost for subscription is \$10.00 and if you sign up after the school year has started, the subscription includes back issues for the current school year at no charge.

Option 2 (N.A.R.) - While it is not mandatory to join the National Association of Rocketry in order to participate in the SEP Program, we strongly recommend it. In addition to a subscription to **Sport Rocketry** magazine, membership entitles you to access a wide range of activities conducted by rocket clubs across the country including workshops, contests, insurance, national meets and latest developments. See the enclosed flyer for additional information on the National Association of Rocketry and why you should consider joining thousands of other rocketeers. You may contact the N.A.R. Headquarters at:

National Association of Rocketry • P.O. Box 317 • Shakopee, MN 55379

SEP²

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"Hands-On" Rocketry in the Classroom ... And On the Launch Pad

The Student Experimental Payload Program (SEP²) is a unique learning experience for both teachers and their students. Designed to promote interest in advanced science and math courses, the SEP Program offers students the opportunity to design and build experiments and have them launched on-board a Class B scale tropospheric sounding rocket. After the flight, students must conduct a post-flight analysis to retrieve and confirm data.

For teachers of advanced science and math classes, SEP² offers an extensive list of space science classroom activities and experiments. Prepared with the cooperation of NASA, teachers and engineers this volume offers suggestions on activities, experiments, contests and lesson plans designed for middle and high school students.

To obtain additional information about the SEP Program, please contact the SEP Operations Center weekdays from 8:00 a.m. to 5:00 p.m. at (205) 230-0353*. An information packet will be sent to you free of charge.



* Currently, the SEP Program is a division of Advanced Concepts and is located within their facilities. To reach the SEP Operations Center call (205) 230-0353 and ask for a SEP staff member.

The SEP Program is a non-profit organization operating in the Alabama/North Florida area, and is funded by grants from various corporations and institutions. Any costs expressed in the Program are necessary to cover printing expenses. This flyer may be reproduced and distributed.

Cut along dotted line and send to: SEP Program; P.O. Box 1934; Huntsville, AL 35807

SEP²

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At Last . . . A Complete Kit that Enables You to Use Rocketry as a Teaching Tool.

If you have ever wanted to use rocketry as a teaching tool, provide an exciting hands-on learning experience, or capture the curiosity and imagination of your students, this kit is for you. The package contains much more than a rocket kit and instructions. In fact, this kit could accurately be titled

Everything You've Ever Wanted to Know About Rocketry and Aerospace Resources But Didn't Know Who to Ask!

The SEP Program Teacher Resource Kit (as it is officially known) contains the following items:

- Detailed information about model rocketry, its history, activities, and educational applications.
- Detailed information about high power rocketry and how it differs from model rocketry.
- Detailed information on how your students can participate in the SEP Program, including designing and building payloads to be launched onboard the SEP sounding rockets.
- Model Rocket Kit including annotated workshop instructions and enough supplies for 3 flights.
- Video Workshop on assembling and launching your model rocket, and class participation.
- *Science and Model Rockets*, a complete curriculum including classroom activities, vu-graph masters, activity sheets and certificates for grades 5, 6, 7 & 8.
- *Physics and Model Rockets*, a complete curriculum including classroom activities, vu-graph masters, activity sheets and certificates for grades 8, 9, 10 & 11.
- *Rockets*, a teacher's guide for a science unit on rocketry (elementary grades).
- *Microgravity*, a teacher's guide with activities (secondary level).
- *Suited for Spacewalking*, a teacher's guide with activities (all grades).
- *NASA Educational Guide*, including an overview of educational programs, research internships, opportunities for students, and opportunities for professional educators.
- *NASA Information Summaries*, including aerospace technology careers, various publications, science updates, and questions & answers about aeronautics and space.
- *Vendor Information*, including addresses, phone numbers and specific items carried by all major manufacturers and vendors concerning model and high power rocketry kits and supplies.

- PLUS -

Discounts when you order educator materials, rocket kits, and supplies through the SEP Program!

Price for the SEP Program Teachers Resource Kit \$25.00
(Please include \$4.95 for shipping and handling)

Make checks payable to SEP Program • P.O. Box 1934 • Huntsville, AL 35807

(The SEP Program is a registered non-profit organization designed to promote cooperative learning in math and science.)