



**STEM – NOVA Award Program:** The **NOVA** Award program consists of individual activity elements in various **STEM** (Science, Technology, Engineering and Mathematics) topics structured for either Cub Scouts or Boy Scouts/Venturers. These topics are designed to encourage participation and to increase interest in **STEM** by making it relevant and fun.

Current Topics available for the Cub Scout NOVA Award

- SCIENCE EVERYWHERE (Science)
- TECH TALK (Technology)
- SWING! (Motion – Engineering)
- DESIGNED TO CRUNCH (Mathematics)

Current Topics available for the Boy Scout and Venturing NOVA Award

- SHOOT! Projectiles & Space (Science)
- START YOUR ENGINES (Transportation Tech)
- WHOOSH! (Motion – Engineering)
- DESIGNED TO CRUNCH (Mathematics)

The **NOVA** award will be a distinctive pocket patch with a separate pin-on device awarded for each individual topic completed by the youth. If a youth completes a significant number (to be determined) of the available **STEM** topics, then he/she will be presented with a Certificate and Bronze Medal on neck ribbon (different design from **SUPERNOVA**).

**STEM – SUPERNOVA Award Program:** The **SUPERNOVA** Award program is similar to the BSA Hornaday Award Program. The basic requirements are to earn certain Academic Pins (Cub Scouts), Activity Badges (Webelos) and Merit Badges (Boy Scouts) plus complete various other more rigorous **STEM** related requirements. The Venturing requirements are based on more independent achievement and teaching activities. **SUPERNOVA** is designed to encourage and recognize more in-depth achievement in **STEM**. The awards are medals on neck ribbons plus a square knot for uniform wear.

Cub Scout

- Cub Scout: Dr. Luis Walter Alvarez Award Certificate and Bronze Medal on neck ribbon
- Webelos: Dr. Charles H. Townes Award Certificate and Bronze Medal on neck ribbon

Boy Scout

- Basic: Dr. Bernard M. Harris Award Certificate and Bronze Medal on neck ribbon
- Intermediate: Thomas Edison Award Certificate and Silver Medal on neck ribbon
- Advanced: Albert Einstein Award Certificate and Gold Medal on neck ribbon

Venturing

Sally Ride Award Certificate and Bronze Medal on neck ribbon

Adult Scouter

Paul A. Siple Award Certificate and Bronze Medal on neck ribbon

The Adult **NOVA** and **SUPERNOVA** awards are designed to recognize achievement by an Adult Scouter in promoting and encouraging youth in Scouting to participate in the **STEM – NOVA** and **STEM – SUPERNOVA** award programs.

## What is the Boy Scouts of America Science, Technology, Engineering and Math (STEM) Initiative?

**A partnership with ExxonMobil:** ExxonMobil Corporation has an ongoing commitment to support a variety of programs that encourage active interest by youth in the fields of science, technology, engineering and mathematics (**STEM**). EOM has generously agreed to fund the development of such a program within Scouting through a special multi-year grant. The **BSA STEM** initiative is designed to bring a Scouting focus to skills that are relevant and needed in our competitive world, increasing the value of Scouting to families and communities as it supports the development of these critical skills in our youth. The **BSA STEM** initiative will provide opportunities for youth at all levels of Scouting to develop an enhanced interest in Science, Technology, Engineering and Mathematics and recognize youth STEM achievement.

**Honorary Chairman and National Spokesperson:** **Dr. Bernard Harris**, entrepreneur and former Boy Scout and NASA space shuttle astronaut has agreed to serve in this capacity on an active and engaged basis through 2013.

**A new series of youth awards and adult recognitions:** To be called **NOVA** and **SUPERNOVA**, these awards are designed to increase interest in science, technology, engineering and mathematics among Cub Scouts, Webelos, Boy Scouts and Venturers and to recognize achievement and superior achievement in these areas. Adults will be recognized for promoting the **BSA STEM** initiative and for mentoring youth to earn the **NOVA** and **SUPERNOVA** awards.

### **Other Components of the BSA STEM Initiative:**

- Design and introduce potential new Cub Scout activity pins and Boy Scout merit badges or modifications to existing merit badges to incorporate skills in science, technology, engineering and mathematics.
- Develop specialized programs that a den, troop, crew or post might use to learn more about science, technology, engineering and mathematics. Some of these programs would connect with another aspect of Scouting. For example: Pinewood Derby, various merit badges, etc.
- Develop partnerships with non-Scouting entities who could offer specialized programs in some aspect of science, technology, engineering and mathematics to our Scouting youth.
- Develop a framework by which a council might offer a “**STEM**” summer camp or day camp.
- Create council sponsored merit badge universities that offer **STEM** related merit badges.
- Develop and implement appropriate adult and youth leader training in conducting specialized science, technology, engineering and mathematics events.
- Investigate the possibility of specialized science, technology, engineering and mathematics programs at our existing and future national high adventure bases. For example: Philmont **STEM** Trek, SeaBase **STEM** Adventure, Summit **STEM** Experience.
- Include **STEM** exhibits, displays and/or competition at the 2013 Summit National Jamboree.
- Increase the sponsorship of Exploring Posts by companies whose core business is based on some application of **STEM**. For example: engineering companies and research labs.
- Investigate developing some type of award (or grant) for teachers who participate in these new Scouting **STEM** programs. This could possibly recruit new volunteers or even enhance our relationship with the public school systems in our councils.
- Develop a Scouting **STEM** scholarship program.
  
- **Bottom line: To make it “cool” (and also rewarding) to be a Scout who is interested in doing science, technology, engineering and mathematics.**

**IMPLEMENTATION TIMELINE:** The **NOVA-SUPERNOVA** award program will be introduced at the BSA Annual Meeting in May 2011. All other components to be developed and introduced 2011 through 2013.