

- 4. Complete TWO additional Supernova activity topics, one each in the two STEM areas *not* completed for the Dr. Sally Ride Supernova Award. (Note: The intent is that upon completion of the Wright Brothers Supernova Award, the Venturer will have completed one Supernova activity topic in each of the four STEM areas.)

STEM areas of topics previously completed (for the Dr. Sally Ride Supernova Award)

- Science Technology Engineering Mathematics

STEM areas of topics completed for the Wright Brothers Supernova Award

- Science Technology Engineering Mathematics

- 5. Participate in a local, state, or national science fair or mathematics competition OR any other equally challenging STEM-oriented competition or workshop approved by your mentor. An example of this would be an X-Prize type competition. (Note: The intent is that upon completion of the Wright Brothers Supernova Award, the Venturer will have participated in two such events.)

Competition:

Date:

- 6. Working with your mentor, organize and present a Nova awards or other STEM-related program at a Cub Scout den or pack meeting. Be sure to receive permission from the appropriate unit leader. If a Cub Scout den or pack is not available, your presentation may be given to another group. (Note: The intent is that upon completion of the Wright Brothers Supernova Award, the Venturer will have completed two such presentations.)

Date: Group:

Subject:

- 7. Research a scientific, technical, engineering, or mathematical breakthrough or invention of the past 100 years that has affected our society in a meaningful way. Develop your hypothesis on how this invention might further affect our society during your lifetime. Present either a 30-minute oral report or a 1,500-word written report to your mentor.
- 10. Submit an application to the district Nova or advancement committee for approval.

Important excerpts from the [‘Guide To Advancement’](#), No. 33088:

The *‘Guide to Advancement’* (which replaced the publication *‘Advancement Committee Policies and Procedures’*) is the official Boy Scouts of America source on advancement policies and procedures.

- [Inside front cover, and 5.0.1.4] — **Unauthorized Changes to Advancement Program**
No council, committee, district, unit, or individual has the authority to add to, or subtract from, advancement requirements. (There are limited exceptions relating only to youth members with disabilities. For details see section 10, “Advancement for Members With Special Needs”.)
- [Inside front cover, and 7.0.1.1] — **The [‘Guide to Safe Scouting’](#) Applies**
Policies and procedures outlined in the *‘Guide to Safe Scouting’*, No. 34416, apply to all BSA activities, including those related to advancement and Eagle Scout service projects. [Note: Always reference the online version, which is updated quarterly.]
- [7.0.3.1] — **The Buddy System and Certifying Completion**
Youth members must not meet one-on-one with adults. Sessions with counselors must take place where others can view the interaction, or the Scout must have a buddy: a friend, parent, guardian, brother, sister, or other relative—or better yet, another Scout working on the same badge—along with him attending the session. When the Scout meets with the counselor, he should bring any required projects. If these cannot be transported, he should present evidence, such as photographs or adult certification. His unit leader, for example, might state that a satisfactory bridge or tower has been built for the Pioneering merit badge, or that meals were prepared for Cooking. If there are questions that requirements were met, a counselor may confirm with adults involved. Once satisfied, the counselor signs the blue card using the date upon which the Scout completed the requirements, or in the case of partials, initials the individual requirements passed.
- [7.0.3.2] — **Group Instruction**
It is acceptable—and sometimes desirable—for merit badges to be taught in group settings. This often occurs at camp and merit badge midways or similar events. Interactive group discussions can support learning. The method can also be attractive to “guest experts” assisting registered and approved counselors. Slide shows, skits, demonstrations, panels, and various other techniques can also be employed, but as any teacher can attest, not everyone will learn all the material.

There must be attention to each individual’s projects and his fulfillment of *all* requirements. We must know that every Scout—actually and *personally*—completed them. If, for example, a requirement uses words like “show,” “demonstrate,” or “discuss,” then every Scout must do that. It is unacceptable to award badges on the basis of sitting in classrooms *watching* demonstrations, or remaining silent during discussions. Because of the importance of individual attention in the merit badge plan, group instruction should be limited to those scenarios where the benefits are compelling.