



AOC Educational Foundation

OpMan 41 – EMS STEM Operations

Draft: [July-September 2025](#)

1. **PURPOSE:** To outline the processes, expectations, and responsibilities for planning, funding, and executing the Foundation's STEM initiatives, including [international and](#) national-level partnerships, support for chapter-based STEM efforts, and development of centralized resources to encourage youth engagement in Electromagnetic Spectrum Operations (EMSO).

This policy applies to all EMS STEM-related activities funded or coordinated by the Foundation, including [international and](#) national partnerships, competition participation, and support of chapter-driven initiatives globally.

2. **RESPONSIBLE PARTY:** The STEM Committee shall be responsible for the affairs of the STEM Programs, subject to the direction of the BOG. The STEM Committee shall include at least two BOG Members as well as at least two Chapter Officers and volunteers from the general membership. The Foundation Director shall be the staff liaison

3. **OPERATIONS:**

1. ~~National~~ [International](#) STEM Engagement

- ~~ISEF~~ [Partnership with International Science Fairs \(currently ISEF\)](#)
 - Maintain annual engagement with the International Science and Engineering Fair (ISEF), including:
 - Hosting an exhibit booth to engage students and educators.
 - Providing a Foundation-sponsored EMSO prize.
 - Coordinating AOC members to attend and represent the organization.
 - The Foundation Director will manage booth logistics, prize coordination, and necessary travel arrangements.
- [NSTA-Partnership with Schools and Teachers \(currently NSTA\)](#)
 - Sustain and grow collaboration with the National Science Teachers Association (NSTA), including:
 - Recruiting volunteers to present EMSO-related educational topics at NSTA's annual national conference.
 - Providing session development support to presenters and ensuring messaging is age-appropriate and aligned with K–12 standards.
- **Other [International and](#) National Competitions**
 - Set aside [funding to support special events \(currently \\$7,500 annually\)](#) for other high-impact STEM events such as:
 - World Robotics Olympiad
 - Amateur Radio (HAM) youth contests
 - Other emerging or chapter-proposed STEM events
 - The Foundation Director will vet and recommend funding for additional events with final approval from the Executive Director.



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2. Chapter Support and Oversight

- **Central Coordination**
 - Serve as liaison between chapters and headquarters for STEM-related efforts.
 - Offer strategic and administrative guidance on program design, funding opportunities, and best practices.
- **Resource Database Development**
 - Establish and maintain a resource repository on the AOC website, to include:
 - Sample STEM project templates
 - Contact lists of local STEM partners
 - Lesson plans and presentation decks for K–12 outreach
 - Interactions with Universities and Colleges in promoting EMS curriculum.
 - Reports on past successful chapter programs
- **Chapter Reporting & Recognition**
 - Develop a reporting form for chapters to submit updates on their STEM activities.
 - Feature outstanding programs in newsletters and annual reports to encourage replication and reward initiative.

3. Funding and Budget Management

- The Foundation shall budget annually for:
 - [ISEF International Science Fair](#) participation and prize
 - [NSTA School and Teacher](#) engagement and presenter support
 - Discretionary spending for additional competitions
 - Website and resource database development
- The Foundation Director is responsible for preparing an annual STEM budget for review during the budget cycle and tracking actuals throughout the year.

4. REPORTING & EVALUATION: An annual STEM impact summary will be presented to the Foundation Board, including:

- List of events supported
- Number of students reached
- Number of local Chapter members who act as an AOC POC with outstanding EMS STEM Student(s).
- Chapter participation metrics
- Budget vs. actual expenditures

Evaluation metrics will include engagement data, quality of chapter submissions, and presenter feedback from partner organizations.