

# Portable Radio Contest Rules

## Background

Emergency communications requires portable equipment that can be brought into position and made quickly operational. The effectiveness of this equipment is a combination of ease/speed of deployment, the capabilities (bands/modes/power) and the skills of the operator to make the system reliably perform under less-than-ideal conditions (wind/rain/cold/heat). A well designed portable package will offer power versatility, multiple antenna options and be simple to operate. Ideally, these system could be left at critical locations and be made functional by the first available operator although it is likely more sophisticated features may require special training.

In an effort to encourage amateur radio creativity and preparedness, a “contest” format has been created to allow hams to display their results. Although many of these packages will be designed to solve specific needs, there should be some common areas that can be judged. Ideally, each designer will see features in other designs they will want to incorporate in future revisions and spectators will be encouraged to design and build their own.

## Rules

All units should be on display throughout the duration of Communication Academy to allow time for all attendees to view them and vote. Although all entries should allow power input from batteries or AC mains, power supplies and batteries need not be displayed unless they are integrated or part of the portable system. Similarly, antenna systems need not be displayed unless they are integrated with the package.

Photos of the unit deployed in the field, feature descriptions and construction notes are encouraged but be aware space will be limited. A single or two page “flyer” would be ideal. Any included documentation should have the name and call sign of the entrant, the goal of the project, a description of how it meets the judging criteria below and any other interesting project notes (such as package cost, time to build, etc).

Ballots will be accepted from attendees until noon on Sunday to allow tabulation and a prize to be awarded at lunchtime on Sunday. Overall scoring will be weighted 50% from the attendees and 50% from three judges chosen from the amateur community. Attendees can score up to two entries and the judges will vote on all submissions.

### **Scoring will be a 1-10 scale in the following categories:**

- **Capabilities vs. size/weight of package**  
It is simple to add features and functionality by increasing the size and weight of the package. The goal should be to optimize the combination.
- **Ease of deployment and use**  
How easily can the package be transported into place, powered, wired to antennas and operated by a novice operator?
- **Clever features and design**  
Ham radio operators pride themselves on being resourceful. How well has the designer accomplished the design goal?
- **Professional construction and layout**  
The packaging should be attractive and neat with dressed cabling and clear color coding. Are details such as mike clips included?
- **Robust design**  
Will the package withstand the rigors of transport to a potentially hostile environment? Will it and the equipment operate in heat, cold, wind and rain?

The judges’ and attendees scores in each category will be averaged and combined. A total score will be the sum of the averages in each category. This total score will determine the winner. In the event of a tie, the raw sum of all the ballot entries will be the tie-breaker (the most popular wins).