



# Defense Maintenance Competition

The Aerospace Maintenance Council, a non-profit organization, promotes and supports the maintenance community. The council's inaugural defense event, the Defense Maintenance Competition (DMC), is being held this year in conjunction with the SAE 2017 Defense Maintenance and Logistics Exhibition, December 4-6 at the Calvin L. Rampton Salt Palace Convention Center in Salt Lake City, Utah. The competition recognizes and celebrates the maintenance technician, and raises awareness of the knowledge and skill required to maintain safe vehicles, worldwide.

The competition provides an opportunity for current and future maintenance professionals to showcase their abilities and see how they stack up against peers across the country. Three-member teams compete in maintenance events intended to test skill and knowledge required of a defense maintenance technician. Competitors will compete in a range of events that will highlight their technical prowess in maintenance.

## Competitive Events

**Event #1 - Fuel Quantity, sponsored by Barfield:** This event will test a participant's ability to troubleshoot and repair a mockup of an aircraft AC capacitance fuel quantity indicating system. The team will be given a problem report, a Barfield DFQ40K Test Set, System and Tank Wall Adapter Cables, a Wiring Diagram and the Procedures used to test, troubleshoot and verify the system.

**Event #2 - Pitot Static, sponsored by Barfield:** This event will test a participant's ability to troubleshoot an aircraft Pitot-Static system. Successful participants will fully understand a basic aircraft Pitot-Static system and potential issues that could be found. The faults found during this procedure will test this knowledge.

**Event #3- Safety Cable, sponsored by Wire and Cable Specialties, Inc. and Snap-On Industrial:** This event will test a participant's ability to accomplish a series of safety cable patterns.

**Event #4- Safety Wiring, sponsored by Wire and Cable Specialties, Inc. and Snap-On Industrial:** This event will test a participant's ability to accomplish a series of safety wire patterns.

**Event #5 - Hydraulic Test Stand, sponsored by Fluid Power Training Institute:** This event will test a participant's knowledge of hydraulics on three levels: safety, fundamental theory, and setting the operational sequence of an aircraft's nose wheel and main landing gear.

**Event #6 - Oil Test Analysis, sponsored by Spectro Scientific, Inc.:** This event will test the participant's ability to successfully test an oil sample on the FieldLab 58 oil analyzer and produce a test report with automated maintenance recommendations.

## Rules:

- 1) Each team must consist of three team members.
- 2) Each event will be completed by one team member, the team will assign a member of its choice to compete in each event.

- 3) Competitors must be either certificated by a national aviation authority (e.g., the equivalent of an FAA mechanic certificate), enrolled in a certificated aviation maintenance technician school, employed by a certificated repair station or manufacturing facility, or a member of the armed forces.
- 4) For each event, team members must stop activity when 15 minutes have lapsed.
- 5) Each team member must sign a release of liability to participate, completed at check-in.
- 6) Each event will have at least one judge, event sponsors typically provide the judges for that event.
- 7) Problems and/or questions may be addressed during an event at the discretion of the judge. If the judge deems it necessary, he/she may stop the clock to remedy the situation or answer a question. Appeals to a judge decision may be brought to the AMC chairman.
- 8) Scores provided verbally at the completion of an event are not official until properly recorded.
- 9) Scores provided to the scoring committee are considered final once received. The AMC chairman reserves the right to modify final scores.
- 10) Event scores are calculated by adding the total amount of time used to any penalties assessed in the form of minutes. The sum of all individual event scores is the team's final score.
- 11) The AMC chairman reserves the right to remove any team member(s) from the competition for, but not limited to, unprofessional behavior, etc.
- 12) The AMC committee reserves the right to alter events and/or rules prior to or during the competition and will make best efforts to notify all team members of the change.
- 13) Teams that enter in the school category must consist of three students. Instructors are not eligible.
- 14) Participants are expected to observe personal protection equipment (PPE) requirements throughout the competition. Failure to observe safety practices could result in penalties.
- 15) All required tools are provided by event sponsors. Personal tools are not allowed. Other personal materials, such as mechanic gloves, may be brought and utilized by competitors.

### About

The Aerospace Maintenance Council's Aerospace Maintenance Competition and the **Defense Maintenance Competition** recognize and celebrate the aviation/defense maintenance technician, and raises awareness of the knowledge and skill required to maintain safe, airworthy aircraft, worldwide. More information about the council's premier event is available at <https://www.aerospacecompetition.com/>.

The SAE 2017 **Defense Maintenance and Logistics Exhibition** emphasizes industry leading companies involved in military and commercial maintenance technology, information systems, and management processes. Do not miss this significant opportunity to showcase your products and services to those who shape the current and future state of defense maintenance and logistics. The Defense Maintenance and Logistics Exhibition is co-located with the DoD Maintenance Symposium. For more information, visit [www.sae.org/dod](http://www.sae.org/dod) and [www.sae.org/defexpo](http://www.sae.org/defexpo).

To participate in the Defense Maintenance Competition, Ken MacTiernan at [jetdoctor69@gmail.com](mailto:jetdoctor69@gmail.com) or Jim Sherman at [james.sherman@sae.org](mailto:james.sherman@sae.org) or 724-612-3214