

**AIRCRAFT ELECTRONICS**  
**ASSOCIATION**

# Why Choose an FAA-Certified Repair Station



**Y**ou don't want just anyone working on your airplane, right? You want the most capable and meticulous hands on your machine, as if your life depends on it. So, how do you find those gifted and qualified hands?

You find these qualities at facilities displaying the Aircraft Electronics Association (AEA) logo. But don't take it as a matter of faith; you should know what is behind this logo. You also should know what AEA member shops represent in terms of real value to aircraft owners, and understand their membership means more to them than a nice membership plaque.

The AEA is a professional organization upholding the highest international standards. It is an association of professionals who care about what they do and care about their customers.

Few get wealthy in avionics, but most are satisfied at a personal and professional level with their careers. And that's saying something, especially because the job often entails hanging upside down in a pilot's seat, in a hangar, and reaching into a dim recess filled with sharp tie-wraps to remove a balky instrument.

### What Qualifies a Shop as a Certified Repair Station?

The fundamental requirement for an AEA member facility is certification from its civil aviation authority, such as the FAA, Transport Canada Civil Aviation or the European Aviation Safety Agency. A certified repair station brings with it a degree of oversight that can't be matched in the private sector. The certification standards, which now are higher than ever, guarantee

specific capabilities and functions must be fully and continuously implemented for a facility to be, and remain, approved.

All regular AEA members must be approved as a certified repair station or maintenance organization by their respective aviation agency. By using this as a benchmark requirement, the AEA is able to validate certain qualifications universally proven to make a capable organization.

Receiving a repair station certificate is a time-consuming and lengthy process, taking months or years.

Sometimes, a company can't even begin work until

it achieves certification, which certainly presents an obstacle to entering the business.

To attain certification — and hang the AEA plaque on the wall — the facility must create and get approval for all the necessary manuals and put their process in place. The

initial training must be completed and documented for everyone who is working there, including any specialized training needed to qualify the technicians to work on avionics or airplanes.

### Upon Further Inspection

You, personally, cannot audit your avionics shop every year and find compliance with the regulations; however, the FAA (or another agency) can — and does. On a regular basis, aviation safety inspectors visit the approved facilities and conduct comprehensive evaluations of their compliance with the regulations.

Although the FAA can't regulate businesses practices, hourly rates or productivity, the agency can say if an

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avionics shop meets the regulatory requirements, as well as maintains standards of competence and safety in its work. Because all AEA regular members are certified repair facilities, you can be certain they have the routine oversight of their regulatory agency. If the FAA finds deficiencies, the shop will make corrections, or face being shut down if anyone's safety is compromised.

### Trained Technicians

The focus of both the FAA and the AEA is the training process. Effective training is the key, from how the radios work to how the repair station and regulations work together to enhance safety and productivity. Airplanes and avionics are complicated and bridge many disciplines, from sheet metal, structures and kilowatt transponder transmitters to software, barometric and gyroscopic instruments.

Avionics technicians can be specialized at a large facility or a jack-of-all-trades at a small shop. But the central concept is for each individual to be properly trained to perform the tasks assigned — all tasks, every day. To the aircraft owner, this means the job will be done correctly and in accordance with the best practices, the manufacturer's instructions and the regulations.

When a technician takes his or her place at the bench or the installation shop, the technician is adequately trained to perform the tasks (or certainly under the direct supervision of someone who is). But today's avionics industry is a dynamic environment, and what was learned last year or last week probably has evolved. This is why there is a regulatory mandate for recurrent training.

### All the Right Tools

Installing or maintaining avionics in airplanes is a complicated and specialized business. Certified avionics shops, as representatives of avionics manufacturers, have access to all the necessary technical data needed to work on your airplane. This is not necessarily true of an A&P, or even an IA, who is not working for a repair station.

It is an easy thing to buy a transponder from the

Internet or a classified ad, but another thing entirely to get access to the current installation manual, or maintenance manual, necessary to legally test and install the unit in an airplane.

Many times, an installation is not just a simple wire-up and bolt-in job; it requires interface to several other avionics or airframe systems. The installer must have access to the technical data, approved by all manufacturers and regulatory agencies, to make a safe installation.

### The Support Network

When an avionics shop is approved for AEA membership, it has access to an organization working for the shop, which helps maintain a healthy industry. And a healthy avionics industry pays dividends to the aircraft owner com-

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**SURE....**  
technically it's **FIXED**, but would  
**YOU SIT** on it

Are you using a government-certified avionics shop for your avionics installation and maintenance needs?

As a member of the **AIRCRAFT ELECTRONICS ASSOCIATION**, we have the opportunity to receive continuous training and educational opportunities on the latest avionics technologies.

Look for this symbol when looking for a shop to maintain or upgrade your cockpit.

**AIRCRAFT ELECTRONICS ASSOCIATION**

**WE ARE PROUD TO BE AN AEA MEMBER!**

[www.aea.net](http://www.aea.net)

## AEA MEMBER SHOPS

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munity in terms of qualified technicians, stable business practices and safe operations.

Through a global staff at the association's headquarters outside of Kansas City, Mo., and offices in Washington, D.C., and Europe, as well as a board of directors elected by the membership and standing committees comprised of a dozen or more volunteers, the Aircraft Electronics Association is a powerful force for the general aviation electronics industry as a whole.

The organization takes on regulatory and industry issues affecting a scope beyond wires and gadgets. Avionics is a small industry, but its roots are wired deeply into the airplanes of the customers and must function as a complete system to get anywhere.

During its annual convention, at its regional meetings, in conjunction with IA refresher seminars, and in its purpose-built, 100-seat training facility at its headquarters, the

Aircraft Electronics Association provides hundreds of hours of training to members and other industry professionals each year, often at a reduced cost.

The training includes everything from entry-level installation basics for new technicians to specialized training on integrated avionics suites provided by avionics manufacturers. During the 2010 AEA International Convention & Trade Show, more than 75 hours of specialized training was offered.

AEA regular members who participate in these training sessions and programs, including the annual Technical Training Exam published in the AEA's monthly magazine, *Avionics News*, qualify for the Avionics Training Excellence Award. This award further signifies an avionics shop's commitment to providing the best service to its customers.

### Follow the Rules

In the work-a-day world of running an avionics shop, the critical events, such as completing a customer's airplane on time or fixing a leaking static system, naturally take priority compared to what's happening in Washington, D.C.; Cologne, Germany; Ontario, Canada; or Canberra, Australia.

To help them stay abreast of current regulations, AEA members count on the association's vice president of government and industry affairs, a team of international regulatory consultants, and a volunteer committee of member shops and manufacturers — all of whom consistently monitor regulatory agencies around the world.

This crew interacts with the regulatory authorities



*More than 75 hours of specialized training was offered during the 2010 AEA International Convention & Trade Show.*

and others to ensure all sides understand the impact of proposed and enacted rulemaking, and they make comments in the interests of the industry (which means in the best interests of pilots and aircraft owners, too). In this multi-faceted and global business, the AEA also works with the Transportation Security Administration, the Department of Commerce, import and export regulations, environmental/hazardous material regulations, and more.

For example, many people don't realize an altimeter removed from an aerial application aircraft could have been contaminated and should be treated as hazardous when transported to the instrument shop for overhaul, or that an RVSM air-data computer contains technology that could be considered vital to national security; therefore, selling one as part of a package to a foreign-registered aircraft can land you in jail. The AEA's membership receives this type of information and much more from the association.

Not only does accurate, timely access to regulatory updates keep AEA members from running afoul of the law, but it also ensures all of the work done will be in compliance and your airplane will be airworthy to the letter of the law.

### Experts In their Fields

Exposure to rules, regulations, training and other resources means an AEA member stays current both professionally and technically. Isn't this the type of shop you want working on your airplane?

Few aircraft owners or pilots are also avionics experts, but finding a qualified avionics professional doesn't need to be a daunting task. The Aircraft Electronics Association, in partnership with its membership and the regulatory agencies, makes it easy to tell when an avionics facility has met the grade as a provider of competent, effective service with an emphasis on safety.

Sure, others might say they "fixed" it, but would you fly it? ☐

Contact the AEA at [www.aea.net](http://www.aea.net) or 816-347-8400.