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Do You Want to Be an ODA?

By Charlotte Adams

After spending at least a decade studying its organizational delegation system, [FAA](#), on Nov. 14, 2005, established a new Organization Designation Authorization (ODA) program. The system promises industry more autonomy and efficiency. Although the current organizational designee programs in the engineering arena will expire in November 2009, [FAA](#) has tried to make the new regime as attractive as possible.

Not everyone buys it, but many big players, including [Boeing](#), are putting themselves through the rigorous application process.

"FAA raised the bar with ODA," claimed David Grossman, a 30-year agency veteran who now heads ODA Consultants, in Aurora, Colo. The ODA procedures manual, for example, is much more detailed and process-oriented regarding how approvals are done than it was under the previous delegation systems. The procedures manual, with its common set of requirements, along with rigorous audit processes, is designed to allow FAA to keep its finger on the pulse of the industry.

ODA involves "systems oversight," a term which can mean either more or less scrutiny, depending on the circumstances. According to Grossman, FAA will be doing a higher level of oversight. "They're going to be doing less certification work," but "if they find issues, they will get into it deeper," he said. The aim is a data-driven system that enables FAA to spot trends, identify anomalies, and fix problems before they become safety issues. The FAA essentially will offload routine surveillance onto the ODAs and free itself to focus on challenges, risks and trouble spots.

Internal and external audits are a prominent feature. "If you put yourself in the FAA's shoes — with more delegation, you have less visibility," said Vasant Gondhalekar, Cessna Aircraft's director of engineering and lead ODA administrator. Audits are the way the agency "makes sure that the applicant is not deviating from the norm." The ODA, which is responsible for the annual internal audits, then, has to think about itself "as though we are the FAA," he said. "The FAA position is, you are our eyes and ears, so we expect you to do everything that we would do." Cessna has received type certificate (TC) and production certificate (PC) ODAs for both Part 23 and Part 25 aircraft.

American Airlines, which received major repair, alteration and airworthiness (MRA) and supplemental type certificate (STC) ODA approvals last October, agrees about the rigor of the internal audit process. The airline had to beef up its procedures to meet the requirement, as it transitioned from Designated Alteration Station (DAS) and SFAR 36 delegations.



In the case of ARINC's Aircraft Integration and Modification group, which moved from DAS to STC ODA status in late 2007, the self-audit requirement includes review of 10 percent of the STCs issued in that period. "We look at the data to make sure it's adequate to show compliance and that we followed the certification plan" agreed to with the FAA for the project, explained John May, ARINC's ODA administrator. The audit findings are reported to the company's Organizational Management Team (OMT) — a group of FAA officials assigned to monitor a particular designee — within a week after work is completed.

FAA Viewpoint

FAA believes ODA will increase the efficiency of government oversight. Under this system, FAA can provide "oversight without having to do everything personally," explained David Hempe, manager of the Aircraft Engineering Division in the agency's Aircraft Certification Service.

While ODA will increase FAA's discretion and focus its resources, making ODAs more independent, "at the start here, they're going to keep a pretty close eye on things," May suggested. Systems oversight, to be sure, does not mean handing over the keys to industry. FAA retains the right of first refusal on designees' projects. "Every activity they do [is preceded by] a letter of intent" to the company's OMT at the agency, Hempe said. The FAA examines the risk factors and indicates the areas, if any, it will be involved in.

But change has occurred. Cessna and FAA, for example, are "constantly in communication" with each other, Gondhalekar said. And Cessna still has to send its certification plans to FAA, explaining what changes it wants to make and how it wants to do them. But if the company has shown that it has done a certain type of certification testing many times before, the FAA can delegate that activity. "It becomes a good partnership — we are using resources on the right things."

Under the previous regime, "even if we had done that certification [activity] many times before, we would still have to get [FAA] involved, and they would have to spend time looking at things they have looked at so many times before," Gondhalekar said. But if there is anything new and novel, FAA will always be involved, he explained.

American has had similar experience. The agency "does not review our data on a daily basis," said Chuck Williams, manager of engineering support and lead ODA administrator for American's Maintenance and Engineering organization in Tulsa, Okla. If FAA has a question, they contact the airline. Otherwise, the ODA unit files quarterly reports, summarizing work done in the previous three months and describing the status of ongoing projects. "They have really gone to a higher level of oversight," he said.

ARINC tells much the same story. Every project still requires the submission of a certification plan and a program notification letter, May said. The administrator is responsible for audits, certification plans, training and coordination with the FAA and among ODA members. Still, the new system allows ARINC to better manage its schedules and respond to customer needs, said Rob Moore, director of business development. The agency "is starting to relinquish approval authority to companies that are qualified to make certain approvals and decisions at the company level." Straightforward, noncomplex mods, for example, receive more delegation than complex work involving areas of interest to FAA.

The big benefit is schedule flexibility, Cessna's Gondhalekar agreed. "Before we had to bake in up to 30 days required for FAA review and approval, whereas now we can just do it."

Procedures Manual

The most time-consuming part of an ODA application is writing and approving the procedures manual. Many of the companies had to redo their manuals, Hempe said, to include things like the steps the FAA wanted to see in approving ODA unit members. Writing a single manual to cover multiple sites can incur the additional task of standardizing processes within the company.

But the manual is key to oversight. First and foremost, systems oversight means that, through the procedures manual, "we are now going inside the halls of a company and helping to define the processes and expectations by which that company needs to work," including quality and technical procedures, Hempe said. The second part of the system is the "everyday interaction that we have with them," he said. The third piece is the FAA

biennial audits. If issues arise, the onsite visits can become much more frequent. All three allow the agency to "go through the barrier" formed by the previous individual designee system and "be more involved with the company." FAA will manage the managers, so to speak, rather than manage all the individual designees. Instead of being "individual-centric," oversight is "systems-centric," as Hempe put it. Because the agency will have a better idea of the big picture, it "can pick and choose the most critical areas and pay attention to those."

As the agency evaluates organizations, the manual provides a basis for comparison. FAA can "gather data and look [for trends]," Hempe said. "We can look at best practices, critical issues, identify critical risk, and adapt our policies." Because companies will be working to the same standard, FAA will be able to look across parts manufacturing approval (PMA), STC and MRA ODA holders, for example. ODA will allow FAA to "move to more of a safety system model," allowing "SMS [safety management system] functions of trending."

ODA, in the long run will be a "huge benefit to safety," Hempe asserted. As FAA gets smarter about trends, it will be looking for hidden precursors and failure modes. These could be things like assumptions made during certifications, equipment trends, reliability issues and human factors issues. Spotting these trends could help to adjust policy, improve oversight and reduce risk.

Other Advantages

ODA holders cite other advantages, as well. American pointed out that its ODA organization can manage its own members. Under the DAS system for alterations, for example, if American needed to bring on a qualified designated engineering representative (DER) in a highly specialized area like 16-g seat testing, the company still had to go to FAA and get their permission and concurrence in order to bring that person aboard, Williams said. The process could take several days.

"Under ODA, we manage all of that," Williams said. The ODA organization sets up the interview panel, reviews the credentials, hires the ODA unit member and then informs FAA. Before ODA, American had six DERs on staff for major repairs, but they essentially worked for FAA: the agency evaluated their work and monitored their currency. Now the ODA does "100 percent audits for DER repairs," Williams said.

The ODA unit has brought on an administrative person to help manage the audit activity, and may add other engineering and technical resources to oversee projects. "A lot of the project management and oversight that used to be at the FAA is now within the ODA unit," he said.

Under the ODA, American can also issue experimental airworthiness certificates for temporary flight testing of new installations such as inflight entertainment systems. And it can replace a damaged standard airworthiness certificate document without hiring a consultant designated airworthiness representative (DAR).

American's ODA unit currently includes five administrators — one lead and two assistant administrators, as well as three MRA administrators — plus 34 unit members. Twenty-four of the 34 are airline employees. The remaining 10 are contractors, typically in some very specialized area such as smoke evacuation testing.

American has completed a number of projects under its ODA. For example, it removed the first-class seats on an old MD80, which it then retired and donated to an aviation maintenance school in Puerto Rico. Under its MRA ODA, the airline was able to make this change and approve the data. The MRA ODA also covers repairs for damage or corrosion that go beyond the limits of the aircraft manufacturer's structural repair manual. "We have the authority to approve those repairs," Williams said.

This means that the ODA holder is, in a sense, less tethered to the original equipment manufacturer (OEM), Williams agreed. Without the authority to approve repairs, the airline previously would have gone to either the OEM, FAA, or individual designees for approval.

There is "absolutely a price to this [ODA status]," Gondhalekar said, referring to tasks such as internal auditing and the need to maintain a lot more information. Cessna's ODA unit includes about 150 members, most of whom are company employees, and five ODA administrators — the lead, Gondhalekar, and administrators for Part 23, Part 25, standardization and procedures, and quality.

ARINC's ODA unit includes 20 members, three of whom are full-time employees. Much of the work, such as the approval of technical data, the issuance and amendment of STCs and the approval of airworthiness certificates, is similar to that of a DAS, May said. Among the new features, however, is the ability to issue experimental certificates and ferry permits.

A recent ARINC ODA project for the South Korean Civil Aviation Authority added a flight inspection system to a Cessna aircraft so the CAA can validate their landing aids. Other activity under the ODA includes satcom projects, a transponder upgrade and avionics modifications.

The FAA also tried to make the ODA concept more flexible than previous designations and to "expand the scope" to repair stations, airlines, PMA's, and small entities, Hempe said. PMA's, for example, can set up an organizational structure permitting them to conduct examinations, testing and inspections on behalf of the FAA, Hempe said. Instead of having every document approved sequentially, the PMA ODA holder can apply for approval at the end of the project. They can also work multiple projects and submit them together.

All told, there are six flavors of ODAs: TC, PC, STC, MRA, PMA and technical standard order (TSO) authorizations. The delegations being phased out by November 2009 include DAS, SFAR 36, Delegation Option Authorization (DOA) and Organizational Designated Airworthiness Representative (ODAR).

Downside?

The FAA's Organization Designation Authorization (ODA) program raises questions, as well. For one thing, the authority is not transferable, pointed out Sarah MacLeod, executive director of the Aeronautical Repair Station Association (ARSA). That means, if the company is sold, the ODA does not go with it. FAA officials agreed that ODAs are not transferable and have "no property right," but argued that the designation has "tremendous appeal for those that use it effectively to benefit their business and the FAA."

Another point is that ODA is a privilege, not a certificate, so if FAA decides to withdraw it, the ODA holder would not have the same due process rights a certificate holder would have, such as a certificate action before the National Transportation Safety Board (NTSB). "If you want to be fully at the whim of the [FAA] administrator — more than you are now — go get an ODA," MacLeod said.

FAA pointed out that although ODA holders aren't entitled to due process under the law, they "certainly are afforded fair and equitable treatment and are entitled to the FAA following established processes for managing and removing ODAs."

MacLeod also raised the question of objective standards. "You really need to have an objective standard that you are required to meet," she said. But "once we get into this nebulous area of approvals, as opposed to certificates, we get further and further away from an objective standard."

Protection of proprietary data is also a question, she said. For example, what happens to an ODA's data if FAA pulls the approval? Interestingly, American's experience so far under ODA has been that less, rather than more data, has been exchanged with FAA. Prior to ODA, all of the data relating to major repairs was sent to the agency, said Mark Boes, managing director of engineering and support. Under the ODA, by contrast, American maintains that data — basically for as long as the airplane is in service. Now as before, however, data provided to FAA is protected by a standard legal statement regarding confidentiality.

MacLeod doesn't rule out ODAs completely. If a company has a strong enough organization, tight discipline, and data protection, ODA authority can help make business deadlines. But even in the best of delegations, FAA retains certain approvals, she said.

Under ODA, the FAA delegates more of the steps leading up to final approval, rather than overseeing every move along the way. But suppose a company with a certification almost within reach has a whistleblower issue. The entire process could become suspect and subject to FAA review, MacLeod warned.

Bottom line, she said: ODA is "very attractive — candy is always attractive, but you get rotten teeth." — *By Charlotte Adams*

Gulfstream in the Vanguard with ODA

Savannah, Ga.-based Gulfstream Aerospace obtained approval for its initial organization designation authorization (ODA) in March 2008, becoming the first aircraft manufacturer to achieve the FAA approval. The initial ODA applies to design and production operations in Savannah. The company is nearing expanded ODA approval for all final phase and service center sites in Savannah and Brunswick, Ga., Appleton, Wis., Dallas, Texas and Long Beach, Calif. General Dynamics Aviation Services (GDAS) locations in Las Vegas, Nev., Minneapolis, Minn., Westfield, Mass. and West Palm Beach, Fla. are being considered for future ODA expansion.

The ODA office manages type certificate (TC), production certificate (PC) and major repair and alterations (MRA) activities under a single organization. When the approval expands to other locations, supplemental type certificate (STC) and parts manufacturer approval (PMA) will be included in the authorization.

Gulfstream originally decided to pursue ODA approval to replace existing FAA Designated Alteration Stations (DAS) and Organization Designation Airworthiness Representatives (ODAR) and establish new ODA authorities across the company. The process to approve the Savannah design and production center took approximately two years, and the effort to expand the authority to other sites is expected to take around 18 months.

For the Savannah site, the office was established to develop ODA procedures and create an organizational structure, which was a significant effort, according to Bill Whitton, vice president of Gulfstream's ODA office. Existing FAA designees required ODA training, interviews (in some cases) and approvals. The agency also carried out review iterations and coordinated the transition of existing FAA projects into the ODA office.

Led by Whitton, the current makeup of the office consists of 13 full-time employees, split between ODA project managers/approvers and administrative support. There are also around 50 part-time ODA "designees," or engineering personnel, and around 20 inspectors. Full-time staff is projected to grow to 20 with the expansion of the authorization, as well as the number of designees.

Whitton says that the ODA processes at Gulfstream "have stabilized in the first year of operation. Like any process change, there is a cultural change. We have encountered some challenges to assimilate the old methods into the new procedures. With that, there have been lessons learned with the ODA implementation."

Seeking the multi-ODA type involving numerous locations "created several unique procedural decisions that are believed to be first-time decisions for the ODA initiative," Whitton points out.

"Overall, the ODA implementation is becoming part of normal operations in Savannah

design and production. The challenges typically surface with new projects that have unique parameters that have not yet been exercised by ODA procedures," he adds.

The current authority allows Gulfstream, on behalf of FAA, to approve amended type certificate projects, such as design changes to aircraft systems or structures in Savannah. A recent revision to the ODA procedures manual gives Gulfstream the ability to manage new aircraft projects, although its latest aircraft program, the G650, remains under FAA oversight. The authorization also grants Gulfstream the ability to approve aircraft production status and certain repairs. FAA continues to oversee all certification projects and participates directly in some.

"Eventually, the ODA will allow Gulfstream to improve the certification cycle time," Whitton says. "The FAA remains involved with the ODA approval process. As the ODA stabilizes, matures and demonstrates reliable, repeatable and robust processes and deliverables, the FAA will gradually delegate more to the Gulfstream office."

Some "real opportunities" for the growth of the program include areas such as cross-site utilization of ODA methods, personnel and common projects, simplified communication with FAA, and the benefits of standardization, he adds.

"There are focused efforts today within Gulfstream and the FAA to achieve this go-ahead in the next few months," Whitton says, referring to the additional sites. He adds that going through the process with Savannah design and production has given the office "a significant benefit in understanding what is required for ODA expansion."

While the current ODA approval is limited to aircraft manufactured in Savannah, long-term plans call for expansion to alterations of both mid-cabin aircraft and those made by other manufacturers. Whitton notes that there are several advantages to having in-house ODA personnel. Under FAA oversight, Gulfstream has been able to approve documents previously restricted to direct FAA approval, which has reduced cycle times. Document reviews associated with conducting flight tests, for example, have created opportunities to boost efficiency. The expansion of authority "will continue to provide these benefits, with the standardization across multiple sites driving further resource, procedural and project completion efficiencies," Whitton says.

Obtaining ODA is also consistent with a company objective "to continually enhance our relationship with the FAA," he explains. The manufacturer's Partnership for Safety agreement with FAA, established in 2000, has been a "cornerstone" in the relationship with the agency. "This foundation has been a spring board for the development, review and approval of ODA initiatives. Gulfstream views the effort as the next opportunity to strengthen the relationship," he adds. — *Andrew D. Parker, Managing Editor*

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