

# Relying on third-party MROs to rein in costs

Airlines and aviation service organizations are dramatically cutting costs by sourcing replacement parts from third-party repair centers and rotatable exchange pools.

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Slashing maintenance costs has become a critical skill for airlines' survival around the world, thus creating a rapidly increasing need for airline management teams to find effective innovations in the aviation maintenance aftermarket.

At the same time, there is a growing and widely accepted and effective alternative to reduce the cost of aircraft maintenance: the use of certificated, third party MRO (maintenance, repair and overhaul) centers. FAA/EASA-certified independent suppliers provide expert repair services on highly utilized or failed parts. These services not only significantly reduce maintenance costs, but also minimize the need for airlines to inventory replacement parts at many service points.

Of course, price is not the only qualification. Wary of reliability and other performance issues, the carriers are looking for suppliers who are certified and have a track record that demonstrates the ability to meet urgent delivery requirements. Additionally, small independent businesses have proven time and again to be a driving force behind the creation of new highly reliable service offerings in aviation MRO.

A qualified repair / exchange supplier offers airlines, parts suppliers, and other aviation maintenance service providers the opportunity to evaluate their needs in order to minimize costs and delivery times through DER (designated engineering representative) approved repairs, PMA (parts manufacture authorization) or cooperative engineering initiatives.

## Exchange Parts Savings

To further improve on efficiencies and savings, some third-party MROs offer rebuilt or surplus components and assemblies through rotatable parts exchange programs, whereby rebuilt or surplus components are made available to airline and aviation services in exchange for salvage parts.

Certified, third-party rotatable parts exchanges offer substantial cost savings over purchasing and maintaining an inventory of new parts at service points along



the carrier's routes. By providing quick delivery of parts to destinations worldwide, the rotatable exchange supplier can also significantly reduce inventory requirements, thereby saving customers potentially millions of dollars annually.

For some of the leading MROs, aggressive development of new parts and service coverage is a critical differentiator in a highly competitive environment. With the requisite expertise and staff, an MRO can find a piece part or subcomponent inside of a unit that the maintenance manual will say to replace, and find a way to repair it. On multiple component levels, this approach can save airlines additional savings measured in tens-of-thousands of dollars annually.

By way of example, a major airline was looking for an autotransformer that goes into a strobe light. While some suppliers were projecting availability of a new part in six months, a repair station was able to present a repair service option in 11 days. The program allowed the airline to reduce the cost on the replacement of a sub-component from \$110,000 to \$55,000. In another instance, a repair on an LCD reduced cost of replacement by 60 percent and increased delivery efficiency from an average of 90 to 120 day delivery for new parts, to a 14-day delivery of exchange.

Third-party MROs are not limited to aircraft component maintenance. Precision test equipment calibration and repair services are also available through in-house metrology laboratories for calibration and repair of air data, fuel, quantity, pressure, dimensioning, tensioning, torque, and RF.

## Competency is Key

Choosing an MRO with solid experience is important to the sourcing of quality parts and assemblies. The more experienced suppliers are more likely to have established a

network of parts sources among aftermarket and OEM suppliers.

Aftermarket sources should not be disregarded by MROs, and in some cases, should be tapped into heavily. For instance, in situations where an MRO or airline

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Designed to accurately test and report on batteries ranging from 10 AH – 50 AH. Test 12/24 volt Lead Acid batteries from 10 – 50 AH.

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### BC-7000 Battery Capacity Tester

Designed to accurately test and report on batteries ranging from .5 AH – 50 AH. Test 12/24 volt Lead Acid or Nickel Cadmium batteries.

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### Activator 282 Battery Charger

This fully-automatic, 2A constant current charger switches to constant potential mode when the battery voltage reaches the pre-set limit. The 282 offers three voltage settings depending on the battery type you are charging (vented lead-acid, sealed lead-acid or nickel-cadmium) and mates with the MS-3509 battery receptacle.



### CA1550 Charger/Analyzer

Charge or Discharge 12 or 24 Volt lead-acid or nickel-cadmium batteries with the easy to use, dual-featured CA1550. Charge with constant current or constant potential from 1 to 35 amps or discharge constant current from 1 to 50 amperes. This rugged unit has a digital ammeter and volt-meter as well as a digital electronic timer display.



### D50 Discharger/Analyzer

Capacity check 12 or 24 Volt lead-acid or nickel-cadmium batteries with a constant current discharge from 1 to 50 amperes. The D50 offers a selection of pre-set cut-off voltages and digital meters that record end of discharge readings for elapsed time, ampere rate and end-point voltage.



### C25 Battery Charger

Charge two batteries at once with the C25 Battery Charger. The C25 is ideal for charging 12 or 24 Volt lead-acid or nickel-cadmium batteries from 1 to 25 amps. It allows for constant current or constant potential charging and features a preset time limit for charging with digital electronic display.



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sources replacement parts directly from an OEM, deliveries often take 90 days or longer. However, in many instances aftermarket suppliers will purchase large inventories from OEMs and make those inventories available to MROs with very quick turnarounds, perhaps even the next day. That can make an enormous cost difference to the airline. So, it is important that the MRO have a solid aftermarket network and solid OEM supplier relationships.

At the same time it is vital that MROs do continuous research on their suppliers and adhere to high quality standards. CASE (Coordinating Agency for Supplier Evaluation) standard and the FAA Part 145 quality management standard are good examples. It is also a very positive sign if the MRO has personnel dedicated to maintaining the traceability of parts, which is critical when premature failures or other warranty issues occur. And, it is extremely helpful if the MRO has a close relationship with the local Flight Standards District Office, the FAA authority that governs parts suppliers. This office is a vital source of information, including rulings and updates regarding quality procedures and other standards.

With economic conditions stressing budgets even further, airline officials will continue to scour third-party suppliers for even greater savings on parts and service in the future.

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