



Outsourcing: A look at some of the industry practices

Aircraft maintenance being performed by those other than the primary owner/carrier generates a slew of words, for and against the practice

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Webster's definition seems harmless enough, "to procure (goods or services needed by a business or organization) under contract with an outside supplier," but this word has become a blanket banner for all things wrong with the aviation industry. Deserved? There are those in the industry who think so, but there are others who are trying to change the mindsets, as well as the vocabulary, of the industry and the flying public.

The whys of contract maintenance

Why send away work when you've got perfectly capable people in the first place?

"A couple of reasons," answers Bill Brinkley, a veteran technician who is now in maintenance safety with American Eagle Airlines at DFW in Dallas, TX. "First, is money. It is often cheaper to outsource maintenance to a third party. This can be because of labor costs, equipment costs, parts cost, or other factors."

He continues, "Second is speed. When a company specializes in one thing, they tend to get very good at doing it and can accomplish it quickly. Occasionally, an operator will outsource something because of a backlog in their own shops, even when it might cost a little more to get the work done. An aircraft on the ground is a liability — not an asset. Airlines can't afford to have extra liabilities."

Brinkley shares that both American Airlines and American Eagle Airlines are making a concerted effort to keep as much work in-house as possible.

"We do outsource some component parts and some specialized engine work," he says, "but for the most part, our work is done in-house, and there are no plans at present to change that — other than to possibly increase the amount of work we keep in-house."

“Airlines are in a crisis,” says **Brian Hirshman**, principal with Mercer Management Consulting in Boston, MA. “To avoid bankruptcy, they have to find every possible way to reduce cost — including labor rates. Since some outsourced service providers can offer the same services for less than \$40 per hour, airlines cannot afford to pay more than \$80 per hour if they are to survive in this revenue environment.”

A former line mechanic, **Hirshman** adds, “I think there are several types of MRO services that make sense to keep ‘in-house.’ While low-tech, high-labor jobs (such as airframe maintenance) will not stay in-house, certain high-tech, low-labor positions (engines and avionics repair) could remain in-house if unions relax certain work rules to allow airlines to run more productively.”

According to **Hirshman**, business has never been better for MROs.

“Our recent study of the MRO industry showed that two-thirds of MROs expect their revenues to increase over the next three years,” he says, “and nearly all airlines surveyed plan to increase outsourcing or keep it constant. Latin America, Asia, and Eastern Europe continue to have very impressive labor rates and will continue to attract new work.”

Safety first

While the main concern with the outsourcing of maintenance is safety, the definition of safety differs for the various groups involved. Does contract maintenance affect safety?

“I personally think not,” answers Brinkley. “Although there have been a couple of widely reported instances of technicians with fraudulent documents working at overhaul facilities, those pale in comparison to the number of fully legal and successful operations out there that don’t get noticed. As for safety, you have to remember that these outsource facilities are required by regulation to have FAA-certificated personnel on staff. Although the FAR does not require each person employed there to be certificated, they do require oversight by certificated personnel.”

Hirshman says that his group has seen no correlation between the level of outsourcing and a decline in safety and offers that safety and quality can be directly controllable by two factors: how well the airline selects and transitions to a supplier and how the airline manages the supplier on an ongoing basis.

Marshall S. Filler, managing director and general counsel for the Aeronautical Repair Station Association (ARSA) in Alexandria, VA, says the safety record and safety responsibilities of repair stations have not changed and that repair stations have expertly supported the aviation industry for many decades.

“Today, as the industry continues to build on its remarkable safety record, air carriers are relying on contracted maintenance as a critical component in continuing to ensure high-quality workmanship while controlling costs,” he explains. “Unfortunately, it appears that labor organizations’ economic agendas, and not actual safety problems, are influencing much of the media coverage of contract maintenance.”

Across the Potomac River from ARSA, a different viewpoint is offered by Linda Goodrich, regional vice president representing FAA safety inspectors for the Professional Airways Systems Specialists (PASS) organization in Washington, D.C.

“Safety is going to the lowest bidder and to a certain degree, it’s not unreasonable,” she says. “When the flying public wants \$49 fares, something has to give in another area to grant that wish.”

Goodrich continues, “Our responsibility is to monitor safety. We have seen what I consider serious degradation in safety because of the wheeling and dealing on the maintenance side. We don’t have enough controls in place to monitor who is doing what and how.”

Span of control

“The span of control is out of control,” warns Goodrich. “We can do very little oversight already and we’re losing more people.”

Goodrich explains that an inspector follows the bouncing ball from location to location. Safety inspectors are obligated by law not to impact carrier schedules. Quick turnarounds cause chaos with this obligation.

“You look at the thousands of flights per day and we’re able to get on about maybe 1 percent of those flights,” says Goodrich. “We also don’t have the budget to stay overnight so whatever flights we take, we have to make sure we can get back home at the end of the day.”

“It’s the incredible integrity of maintenance personnel that is keeping aircraft in the air,” says Goodrich, who is also an A&P and IA. “They do a fantastic job.”

Inspector General’s report reactions

The Inspector General’s report FAA Safety Oversight of an Air Carrier Industry in Transition from June 3, 2005 states that the FAA is expected to lose some 300 safety inspectors this year and has asked for only 97 inspectors for FY 2006. (Note: The Inspector General’s report can be viewed at www.oig.dot.gov/item.jsp?id=1575.)

“FAA is being told that they cannot budget for more inspectors and they haven’t justified need,” says Goodrich. “They are looking to designees to do the job.

“There were 2,727 field inspectors as of Oct. 1, 2004,” she says. “We’re probably a good 200 below that right now. They are attempting to get rid of 300 this year and 200 more in 2006. The FAA has asked for 97 inspectors but has no idea whether they will get them. There’s no more money so they [FAA] can only allow people to leave.”

Goodrich says that the QA control system is the carrier and certified repair station. “We are only interested in compliance with systems,” she says. “We are at the point to have them provide their own self-policing.”

Brinkley concurs, “FAA is giving the operators more and more ‘self-policing’ of the FARs,” he says, “but I am not saying that this is necessarily a bad thing.”

Brinkley adds that back in the “old days,” the FAA had to sign off on all major repairs and alterations and all annual inspections of aircraft as the aircraft fleet was small and somewhat localized. When the tasks got too big, the FAA came up with “designees” to take some of that load. This was the origin of the Inspection Authorization (IA) system.

“FAA delegating responsibility and authority to operators is not new,” says Brinkley.

ARSA’s reaction to the report’s findings on FAA inspection priorities was that the association has always called for sufficient FAA funding — including an adequate inspector workforce. Filler explains that at the airlines, certificated A&Ps frequently perform work that does not require an individual to be certificated — a consequence of carriers’ traditional staffing practices and not a safety, quality, or regulatory requirement. Certificated persons supervise non-certificated maintenance personnel at repair stations, which is both appropriate and in accordance with the regulations. Certificated persons approve the maintained product or component for return to service. Regulations require that repair stations function very closely with customers as a part of the customer’s quality system.

FAA oversight overseas

What about oversight and security? Is it an issue with foreign MROs?

“We have seen no issues here,” replies **Hirshman**. “In fact, we were recently involved with an MRO in the Middle East and it employed tighter security than any MRO in the United States that I have seen.”

Goodrich explains that oversight of overseas operations is spread over a very wide area. A few inspectors are assigned to the international field office in Singapore for oversight of facilities all over the Far East.

“There is no way we can possibly cover it all,” she says. “We normally do not have the time to even provide this kind of support to the States because we are seriously backed up for certifications and re-certifications of foreign repair stations.”

However, Filler says ARSA is comfortable with the airline and FAA oversight of foreign repair stations as the rules for U.S. and foreign repair stations are substantially similar.

“The foreign repair station is required to renew its certificate 12 months after initial issue and every 24 months thereafter,” he explains. “Because they are typically certificated by multiple NAAs (National Aviation Authorities) and are audited by the same types of entities that audit U.S. repair stations, the level of oversight of foreign repair stations is substantial. Of course, U.S. air carriers are held responsible for overseeing any repair station that performs work on their behalf, whether U.S. or foreign.”

Filler adds, “Popular media reports suggest that repair stations do not receive enough oversight. Repair stations are commonly audited by the FAA offices responsible for the repair stations’ certificates, the FAA offices overseeing the carrier, NAAs that have certificated the repair station, the airline customers, and various auditing and quality organizations. ARSA members tell us they are experiencing as many as 40 to 60 audits annually.”

According to Filler, TSA is expected to issue a Notice of Proposed Rulemaking (NPRM) this summer, outlining a security audit procedure and proposing additional security measures for foreign and domestic repair stations.

Lasting impressions

“Corporate culture is huge, especially the negative culture fostered by most of the union shops out there,” says Brinkley. “The union guys keep on complaining about the trend toward more outsourcing and jobs being lost, but management has no choice. The unions have created such a negative culture of wasted time and inefficient procedures that performing maintenance in-house is almost always more expensive than at a third-party facility.”

“It’s been about 14 years since I’ve been a line mechanic, and wow, have things changed,” says **Hirshman**. “I think this industry has built a cost structure (labor, capital, fuel, taxes) that it can’t sustain in this revenue environment. I also think the revenue

environment is permanent, not temporary, which means, labor is going to have to fundamentally change the way it thinks about jobs (i.e. pay rates, work rules, job protection) in order to protect them for the long term.”

He continues, *“I believe outsourcing will only grow going forward because the airlines have no choice if they want to survive. If unions can’t find ways to be more productive and competitive, once-sacred areas such as line main tenance will be the next to go. Once thought to be core, we are now seeing examples of hub and line outsourcing in the areas of ground operations and line maintenance.”*

Brinkley adds, “The problem is, once a negative corporate culture creeps in to the workplace, it is very hard to turn around. It is like a battleship that is going full-speed ahead. You can turn it around, but it won’t happen immediately because of all the momentum that has built up.”

Percent of Outsourcing for 14 Air Carriers in 2002, 2003, and the First Three Quarters of 2004*

Air Carrier	Percent of Maintenance Expense Outsourced			
	2002	2003	2004**	Change (2002 to 2004)
Jet Blue	39%	51%	63%	24%
United	33%	41%	54%	21%
ATA	22%	20%	43%	21%
Air Tran	31%	46%	46%	15%
Frontier	20%	27%	33%	13%
US Airways	50%	58%	60%	10%
Northwest	44%	56%	51%	7%
American	38%	38%	42%	4%
Alaska	79%	75%	80%	1%
Continental	65%	65%	65%	0%
Southwest	65%	65%	64%	(1%)
Delta	38%	37%	35%	(3%)
America West	77%	75%	72%	(5%)
Spirit	NA	34%***	30%	Unknown

* To determine outsourced maintenance percentages, we compared the amount of direct maintenance expense air carriers incurred for outside repairs to the amount the carriers

incurred for total direct maintenance expense as shown on Form 41 financial data that air carriers submit to the Department's Bureau of Transportation Statistics. This is the best source currently available for data on air carrier outsourcing.

** First three quarters only

*** Percent for Spirit Airlines based on FY 2003 fourth quarter data only.

Source: DOT Form 41 data

From the Inspector General's Report: Safety Oversight Of An Air Carrier - Industry In Transition, Federal Aviation Administration

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<http://www.oig.dot.gov/item.jsp?id=1575>

Nearshoring

Like the outsourcing trend, many companies are choosing to offshore operations to save money. Puerto Rico is trying to capture some of that business in what it refers to as "nearshoring." Last October, Puerto Rico celebrated the grand opening of Infotech, a Pratt & Whitney joint venture that will provide technical services to Pratt & Whitney, Hamilton Sundstrand, Sikorsky Helicopters, and United Technologies Corporate Procurement. Puerto Rican officials pitch Puerto Rico as "The advantages of going offshore. The security of being home." Some of the advantages touted are:

- **Corporate income tax rate of 7 – 0 percent, with no withholding tax on dividends or distributions**
- **No U.S. federal income taxes**
- **Profit center under foreign corporation structure**

By Joe Escobar

Additional ReSources

[Aeronautical Repair Station Association \(ARSA\)](#)

[Inspector General's report: FAA Safety Oversight of an Air Carrier Industry in Transition, June 3, 2005](#)

[Mercer Management Consulting](#)

[Professional Airways Systems Specialists \(PASS\)](#)

