

Contact: Jordan Friedman, The Clarion Group  
(212) 931-5704  
[jfriedman@clarionpr.com](mailto:jfriedman@clarionpr.com)

## **Oliver Wyman Study Reveals That Airlines Rely More on MRO Providers to Manage Supply Chain and Risk Responsibilities**

NEW YORK, April 24, 2006 – Airlines are pushing more maintenance, repair, and overhaul (MRO) responsibilities to external vendors as the quality of outsourced work improves, according to a new study by Oliver Wyman. However, each party will need to develop more sophisticated management processes in order to realize lower costs and increased value from such deals.

The study explores ways that airlines and MRO providers are seeking to build on the strengthened economics of the air travel industry, as well as the new cost-control, revenue, and risk models they have implemented over the past several years.

Oliver Wyman, in conjunction with *Aviation Week & Space Technology*, surveyed 97 executives in airlines and MRO firms mostly in North America and Europe, with some from Asia, South America, Africa, and the Middle East. Respondents to the survey came from all levels of management, with over half at the director level or above.

Highlights of the study:

- Most survey respondents expect increased MRO spending by airlines over the next three years. As a result, 85% of MRO providers expect their revenues to increase as well.
- Airlines are pushing more supply chain responsibilities to their suppliers through more cost-per-hour agreements.
- Overall, respondents said that the quality of outsourced work is improving.
- 14% of survey respondents have seen dramatic financial benefits from lean tools and techniques. However, another 47% have tried lean programs with varying degrees of success.
- Survey participants are increasing the size and scope of the alternate (PMA) parts market through innovative joint ventures and development.

### **MRO spending is expected to rise over the next three years; outsourcing is also growing but at a slower pace**

Most survey respondents expect increased MRO spending by airlines over the next three years. 56% of airlines plan to increase their spending over the next three years, and 85% of MRO providers expect their revenues to increase. (The global commercial MRO market has reached \$37 billion in revenues, while the military MRO market is \$52.7 billion, according to *Overhaul & Maintenance* magazine.)

Financial pressures have prompted many airlines to adjust maintenance schedules in ways that delay more costly maintenance events such as heavy airframe and engine overhauls while still meeting safety requirements. "Now, the flexibility to further defer these particular maintenance events has simply run out," notes Brian Hirshman, a director at Oliver Wyman. "In order to continue flying these aircraft, the maintenance will need to be performed soon."

The growth rate of outsourcing will proceed at a slower pace than in the past few years, possibly until the next round of merger activity forces carriers to look to new areas for additional savings.

Andy Schmidt, a Oliver Wyman director, notes: "Carriers effectively using global supply sources have seen significant cost savings in labor-intensive areas such as airframe maintenance. However, suppliers need to be selected carefully." Airlines will likely take a closer look at working with lower-cost competitors in Asia, Latin America, and the Middle East. Many airline respondents already plan to send labor-intensive work to Latin America and higher-tech work to Europe and Asia.

Categories of continued outsourcing growth, according to the survey results, include engines and line maintenance. Although line maintenance remains a primarily in-house function, some airlines are beginning to selectively outsource specific line maintenance functions of non-hub stations; airline respondents reported an expected 3% increase in line maintenance outsourcing by 2009.

### **A new sophistication in supplier relationships**

Beyond the imperative of lower cost, airlines are looking for MRO vendors who can deliver consistent quality, meet guaranteed service levels and timeline commitments, and provide shorter turn-time.

With the tighter capacity and increased asset utilization in the airline industry currently, the slack once provided by abundant spare planes no longer exists. Carriers thus are relying more heavily on their MRO suppliers to take on supply chain management responsibilities and risk.

Many airline respondents said they are shifting away from the strategy of "pure cost savings, outsourcing as much as possible" (from 18% of respondents in 2005 to 8% in 2006) toward one of higher levels of service and product quality as the primary consideration, with cost a secondary factor (from 15% up to 23%, and expected to increase to 28% in three years).

To effectively address this situation, Schmidt argues that "airline supply chain organizations will need to shift from a transactional to a more holistic approach. This will entail major process redesign and organizational change."

### **Risk transfer deals are going mainstream**

In most segments, the industry is moving away from time and materials arrangements towards risk transfer deals, such as cost-per-hour agreements. Over 40% of airline respondents expect use of this type of contract to increase in the coming years, while only 17% will limit their use of such arrangements.

These deals include ancillary service requirements such as engineering support, technical publishing, and logistics. Successful deals will assign financial and execution risks to the party best suited to manage them, while still managing resources to ensure that recent cost reduction initiatives don't lose ground. Offering these additional services and performing them effectively will be critical to MRO providers succeeding with cost-per-hour and other more complex contracts.

Roger Lehman, a Oliver Wyman director, says that "Collecting and managing data is a core competency for most MRO providers, but most providers have not yet mastered how to turn that data into information used to take financial positions in the form of risk transfer or cost-per-hour deals. MRO vendors that develop this capability will be in a much better position to compete and tailor solutions to customer needs."

Lehman adds that, although certain risks have been contractually transferred, "It's still incumbent on the carrier to properly manage these complex deals through a more robust supplier management program."

### **Outsourced work rises in quality, but there's room for improvement**

Some 27% of airline respondents said that quality has improved (up from 19% a year ago) and 53% said it stayed the same (down from 63%). However, 20% or roughly the same as last year said that quality has

declined. One possibility could be the greater use of more complex contract types, such as cost-per-hour agreements. Not all airlines have sophisticated processes to manage a third-party contract of this type.

### **Returns from traditional cost removal methods are diminishing; lean techniques show promise**

Traditional cost savings programs for carriers and MRO vendors are reaching the point of diminishing returns. Fortunately, proven multidisciplinary methods for streamlining costs and efficiencies, such as lean techniques imported from a manufacturing environment to the remanufacturing environment of MRO, are showing signs of success. Some 14% of survey respondents have seen dramatic financial benefits from lean transformation. However, another 47% have tried lean tools with varying degrees of success.

The survey data shows that the financial impact of lean tracks directly with three characteristics: use of a lean champion, the range of activities across which lean tools have been used, and the adoption of lean tools throughout the company's value chain. Companies that have introduced lean tools into the factory, office, supply chain, and customer base have seen dramatically higher financial impact than those that restrict it to the factory.

Companies experimenting with lean on a tactical basis (i.e., limited set of tools on a small portion of the value stream) are seeing little improvement in overall financial performance, while those that are developing lean production systems (i.e., wide set of tools on the entire value stream) are seeing the impact on overall financial performance as well as on key operational indicators (i.e., reduced inventory, rework, floor space required, and cycle time, plus increases in capacity, labor productivity, and on-time delivery).

John Seeliger, head of Oliver Wyman's global lean practice, notes: "Transformational lean techniques can create significant value, such as a work-in-process inventory reduction of up to 50% or a labor capacity increase of up to 20%. But achieving these kinds of results requires significant expertise and a sustained effort."

### **PMA market developing in size and scope**

Another notable cost improvement method cited broadly by survey participants is the increased use of PMA parts, especially higher-value engine parts. Airlines and MRO providers reported strong involvement in developing the size and scope of the PMA market through purchase of globally sourced PMA parts (54% airline respondents, 48% MRO), joint ventures for PMA parts development (46% airline, 16% MRO), and development of PMA parts (35% MRO). This mirrors the trend of OEMs manufacturing alternative parts that once were proprietary for another OEM.

"PMA development is creating additional competition and shifting buying power in the aftermarket toward airlines," says Lehman.

### **What it will take to create value on both sides**

As airlines continue to look for opportunities to take out cost, they will have to create active supplier management organizations that go beyond managing contracts to managing supplier relationships and improving communication and planning information with MRO providers. This will require airlines to examine their organizational structures, skill sets, performance management systems, processes, and technologies.

MRO providers, for their part, should develop and implement strategies to quantify, price, and manage the new levels of risk that customers want them to take on. They will need to turn data into information that is useful for taking financial positions in more complex deals. This will also help them determine which ancillary services they should offer in order to create value for customers.

The most effective relationships will be based on close collaboration and an understanding of what changes are required to the organizational structure, business practices, and technical requirements of each party. That's what it will take to capture the value of these deals.