



AVIATION WEEK MRO EXECUTIVE ROUNDTABLE:

GLOBAL MRO CAPACITY AND SUSTAINMENT

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AVIATION WEEK'S MRO Executive Roundtable convened for its fourth U.S. focused meeting on April 14, 2008, the day prior to the 2008 MRO Military event. This roundtable, which follows an effort begun in Brussels, Belgium in September 2007, focused on how to more efficiently focus U.S. MRO and sustainment efforts in support of the warfighter – from capacity and capability perspectives.

Held in Fort Lauderdale, FL, this roundtable was the largest MRO Executive Roundtable ever, bringing together members of the military (uniform and civilian), as well as leaders from industry. Chairman for this year's roundtable was Marillyn Hewson, Executive Vice President-Global



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Sustainment, for Lockheed Martin Aeronautics.

The 2008 AVIATION WEEK MRO Executive Roundtable, hosted by Siemens PLM (formerly UGS), brought together individuals from the U.S. Air Force, U.S. Navy, U.S. Marine Corps, U.S. Army, Lockheed Martin, Boeing Integrated Defense Systems, Pratt & Whitney, Northrop Grumman, AeroStrategy LLC, Stork Fokker Services, AgustaWestlandBell, Battelle Institute, HEICO, Timken Bearings, and L-3 Communications. The agenda for the meeting was formed around four central issues:

- Where/how do industry and the government move toward enterprise level MRO operation vs. program specific capabilities?
- How do legacy aircraft fit into a new global sustainment capability?
- How can we capture/share lessons learned to stimulate improvement enterprise-wide?
- Are performance-based sustainment contracts working and what needs to be done to improve this process?

Frank Jackman, editorial director of *Overhaul & Maintenance* magazine, opened the discussion by challenging individuals to move forward in the pursuit of substantial process improvement, a requirement given the budgetary pressures and spiraling cost of operations that exist beyond maintenance and fuel.

Hewson then challenged the group to take action. “The people in this room have the ability to change the way we do business and the ability to redefine how we sustain our nation’s assets. We’re facing macro forces that are shaping our industry and taking us to a place we’ve never been before,” she added. These differences include coalition operational concepts, as well as coalition product development, production and maintenance. “We’ve done international business, but in a sense our industry is playing catch up to the commercial world in terms of global business. We must be more than one industrial base with activities on multiple shores.”

Hewson’s challenge was followed by a review of the U.S. Air Force enterprise initiatives. Brig. Gen. Francis Bruno, Air Force Material Command Logistics, provided the update. Among the key aspects of this plan are:

- ELog 21. This technology backbone combines 400 to 500 legacy software systems into a single expeditionary combat support system. Included as part of the implementation is blueprinting of critical processes feeding the combined data base/enterprise system.
- USAF is moving sustainment funds from the varied command structures to a centralized pool of sustainment monies. This centralized asset management capability is designed to provide more flexibility to the Air Force as it fields new and aging systems around the globe.
- The third aspect of the plan is the Global Logistics Support Center, which was stood up at Scott AFB (Ill.) in late March. The GLSC provides an answer to the question, “who owns the supply chain?”

- The final aspect of the plan is determining the configuration of the Air Force's global repair network. Bruno says the global network includes better than 100,000 people and significant monies to generate air power for the United States. However, the exact configuration of capabilities and capacity is unknown. The USAF is conducting a survey of this now.

Not surprisingly, the MRO Military Executive Roundtable participants found that the U.S. Air Force plan reflected many of the issues existing across all service branches and in partnership with our allies. The action requirements emanating from the participants include:

1. Identify what is required in terms of common standards

This applies to terminology used, technical data required to sustain weapon systems, and processes used to acquire maintenance, repair, overhaul and sustainment. While this is critical from a U.S. operating stance, it is viewed as even more critical as systems are developed and sustained by allies and coalitions of governments/industry around the globe. This element of the roundtable's action planning for a global enterprise was echoed during the April 15-16 MRO Military Conference in terms of making the sustainment of U.S. based systems more efficient. The impact on this lack of a common language multiplies when operating in a multi-country environment. Among the most critical needs is that a common definition of "true cost basis" is needed to assure that options can be compared in a quality and credible manner.

2. Establish common funding pool for improvement investment

In terms of legacy weapon systems and transition to performance-based contracts, the roundtable participants recommend a common funding pool to enable investment in shared improvements to MRO. This action item is related to distinct policy change and links to decisions as varied as replace/repair, obsolete parts, and the ability to continue sustainment of aging aircraft fleets. As noted in the USAF four-point effort, the funding pool would provide a common asset management capability that currently does not exist.

3. Apply LEAN to contracting processes

Establish a team of government and industry experts to apply LEAN concepts to develop a performance-based contracting process that allows for flexibility and complexity but drives down waste (in terms of time, resources). This action item will be referred as part of the MRO Military Action Plan to senior military leaders. Roundtable participants acknowledge the need to carefully craft PBL contracts and to build in flexibility and adequate risk management. However, there is currently no consistent process that allows for a fluid, repeatable process. Roundtable participants agreed that such a process would allow contracting teams to focus on truly critical issues that differentiate systems and requirements instead of on the "how".

4. Complete shift from consumption to readiness mentality

Roundtable participants encourage a shift to establishing metrics based on the operator's perspective. As with several of these action items, this item also was a critical need identified during the MRO Military event and will be carried forth as part of that action plan with senior military leaders. One example, provided by Brig. Gen. Bruno, provided clarification: "Does

the warfighter value having spare engines or does the warfighter want the ability to repair engines at the air field?" Once the measure of "what" is known, the MRO organization can meet requirements in a rational manner. (In this example, the warfighter actually wanted spare engines – not a repair capability. The five spare engines on location versus the full repair capability represented a cost savings and increased mission-capable readiness.)

5. Understand and rationalize worldwide MRO capacity and capability in support of U.S. weapon systems

Roundtable participants believe there is a need to rationalize the MRO capacity and capability across the enterprise. There is no current data-based understanding of the enterprise capability. Military leaders attending the roundtable agreed with this concept. In fact, one executive noted the need to question whether depot-level activity is a core competence for the military. Rationalizing this system will be a political and policy issue but is required to assure effective cost-benefit analysis. Again, this is captured in the USAF four-point plan. Some work in this area has already been accomplished through the US Navy Readiness Centers Division and the Army depot system. However, there is also much discussion of offering MRO capacity from government facilities to industry – which prompts a question of over-capacity.

"The discussions during the roundtable were candid and thought-provoking," Hewson said, "providing us with some new ideas in aircraft maintenance and support. To achieve the full benefit that performance-based outcomes provide, we must continue working together to develop more streamlined and flexible contracting processes that minimize the stovepipes that drain our collective resources. I am confident that the collaboration of industry and government best practices will yield increased aircraft availability and lower operational costs for our nation's aviation assets. Aviation Week's role in establishing this forum will allow us to continue the dialogue required to redefine the way the aerospace community supports its aircraft on an enterprise level."

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