

# Perspectives

## IN STEP WITH MAJ GEN ROBERT H. MCMAHON

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Maj Gen Robert H. McMahon

*ER: This summer ER edition addresses transformation. What do you believe are major initiatives that will transform Air Force logistics?*

**MAJ GEN MCMAHON:** Air Force Logistics transformation is being driven first, by a reorientation around the core processes of the Air Force; and second, by the need to simultaneously reduce weapon system total ownership cost while improving operational readiness and combat effectiveness. For logistics, there are major initiatives covering Life Cycle Management; the creation of enterprise Materiel Distribution (Global Logistics Support Center, Global Ammunition Control Point) and Repair Networks (Repair Network Transformation); centralized resource forecasting and execution (Centralized Asset Management); the establishment of objective support levels (Aircraft Availability Improvement Program), and finally wing-level reorganization including the new process-aligned LRS. At the wing level we also have a myriad of AFSO21 initiatives being conducted to increase the efficiency of existing processes.

As part of this transformation, Air Force aircraft maintenance embarked on its first true transformation in 50+ years. We will step away from the concept of self-sufficient wing maintenance organizations and instead organize around two of the ten Air Force core processes: Conduct Air, Space, and Cyber Space Operations, which we support through Mission Generation; and Develop and Sustain Warfighting Systems, which we will support through our Repair Network. As we move down this transformational path, the aircraft maintenance done at wings will reduce to those key activities required for mission generation. We have begun the first steps on this journey through our Repair Enterprise for the 21st Century (RE21) initiatives and by transferring the responsibility for wing fleet health and mission generation in fighter, bomber and rescue groups to the Operations Group Commander. Other maintenance and repair services will ultimately be provided by the Repair Network.

Under our Repair Network Transformation (RNT) initiative, the rest of maintenance, from depot-level PDM lines to wing-level avionics shops, will transfer to a centrally planned network. This network will be comprised of existing Air Logistics Centers (ALCs) and emerging Centralized Repair Facilities (CRFs). Our vision is for CRFs to lose their unit/region/MAJCOM affiliations and instead, all network elements will support AF enterprise requirements. Finally, the capabilities and capacity of the network will be centrally planned and managed to reduce unneeded redundancy and improve effectiveness.

*ER: There are inherent risks of not only falling short of objectives but also of creating unforeseen and unintended consequences when transforming large organization. What can we do to ensure that the current transformational initiatives will be successful?*

**MAJ GEN MCMAHON:** All endeavors have the twin risks of failure and unintended consequences, but we have a process in place to periodically evaluate the maintenance landscape and ensure that we are achieving the right effects as we drive towards our vision.

In 2006, Air Force maintenance developed a strategic planning process, Air Force Maintenance for the 21st Century (AFMx21), to identify and update the maintenance vision of the future. In 2007 we published a strategic plan which details nearly 200 task and sub-tasks we feel are necessary to bring about our vision by 2016.

Today, we aggressively track our progress and update our goals. Twice a year, Air Force Senior Maintenance Leaders meet to review progress on, consider and approve changes to, and prioritize the upcoming work for AFMx21. Between sessions, I hold 60-day VTCs with the MAJCOMs to discuss progress and resolve issues on our annual priorities.

There will be set-backs and surprises on this journey. But we put in place a process to identify problems and correct both our current actions, and if necessary modify the route we are taking to achieve the vision. The detailed involvement of maintenance leaders at all levels, and their commitment to creating a system that meets our needs to provide combat power will help ensure that the set

backs will be minor, and the surprises, hopefully few.

**ER:** *Several years ago you led the Depot Maintenance Review Team that reviewed the depot policy and processes. What initiatives spun off from the review which have been successfully implemented?*

**MAJ GEN MCMAHON:** A similar question might be, “What drove the dramatic improvements in the performance of our Air Logistics Centers, especially in the area of depot maintenance?”

I think there were two factors. The first was the ALCs’ recognition that if they didn’t become more competitive—improved cost, quality, and schedule performance—they would become irrelevant. This required a cultural change in the work force, but more importantly, in ALC management. The change was based upon creating a culture of continuous process improvement with particular emphasis on LEAN principles. The revolution began at Warner-Robins ALC and spread through all three ALCs. LEAN evolved from a “four letter word” to a way of life for the ALCs. The results were astounding. In a matter of less than five years, our three ALCs went from near irrelevancy to being benchmarks within the Maintenance, Repair, and Overhaul business sector. Whether in terms of internationally recognized awards such as the Shingo Award, or in terms of internationally recognized commercial certifications such as ISO, ASI, or CMMI, our ALCs all achieved a new level of excellence.

The second factor was the Air Force’s recognition that it had to properly invest in the ALCs to create “world class” operations. To that end, the Air Force committed to revitalizing the infrastructure and building capabilities through investment of \$150M per year for fiscal years FY04-09. This investment enabled major process reengineering efforts that have resulted in repair flow-day reductions of aircraft and commodities, and drastically increased on-time delivery rates, further contributing to the new levels of excellence. Further, Congress recognized the Air Force initiative by codifying a “6% of sales” investment requirement into Title 10 statute.”

**ER:** *In the 1990s, General Merrill McPeak, then Air Force Chief of Staff, attempted to reorganize the Air Force into the Objective Wing structure, transferring flightline maintenance responsibility to a flying squadron with a rated squadron commander. Within 10 years General Jumper decided to reorganize maintenance back to the Maintenance Group with maintenance commanders. Did the Objective Wing concept fail, and if so, why?*

**MAJ GEN MCMAHON:** The Objective Wing concept did not fail and many of its hallmarks remain in the Combat Wing Organization (CWO). But with 20/20 hindsight, we can see where we made mistakes in how we assigned responsibilities for maintenance. In the Objective Wing structure, we assigned the Logistics Group the responsibility for fleet health, but assigned most of the resources and authority to accomplish it to the Operations Group commander. This created a cross-functional accountability resulting in friction and ambiguity at the tactical level—precisely where we need clean and lean lines of command in our current reorganization effort.

**ER:** *After achieving record-high mission capability (MC) rates of 85.2 percent in 1991 following the “Reagan Build-Up” years, MC rates plummeted in the 1990s to an all time low with an average of 74.4 percent in 2000. What do you think were the driving factors that caused such a rapid decline in fleet wide MC rates in the 1990s?*

**MAJ GEN MCMAHON:** There were many factors that drove the decline. One of the primary drivers was the Air Force’s resourcing decisions. Chronic under funding of spares budgets drove Total Nonmission Capable for Supply (TNMCS) rates up over the decade of the 90’s. Concurrently, reduction in end-strength in the early 1990’s hit maintenance particularly hard and resulted in manpower and experience drains.

Further, the way we executed the Objective Wing organizational structure contributed to the decline. First, we created cross-functional accountability for the fleet. We moved the resources for maintaining fleet health to the Operations Group, but held the Logistics Group Commander accountable for the fleet’s condition. Second, we created a DOGM position but didn’t clearly define their authorities or responsibilities. Third, we did not always properly resource the DOGM and SMO positions. Too often, we substituted a major for a lieutenant colonel DOGM, and a captain for a major SMO.

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**ER:** *Today those MC rates have steadily improved to 78.5 percent. Do you think the shift back to maintenance leaders in 2002 contributed to the improved MC rates?*

**MAJ GEN MCMAHON:** As was the case in the decline, I believe there were a variety of factors that led to improved aircraft readiness. The recovery began in 1999 principally due to an Air Force decision to resource spares and depot operations at a higher level. Additionally, phenomenal process improvements in the field and depots contributed to more aircraft available to the warfighter and higher MC rates. Furthermore, the CWO organization realigned accountability for fleet health with those responsible for sustaining fleet health. In doing so, a single organization—the Maintenance Group—had the responsibility and the resources to properly care for long-term fleet health, maintenance training, and adherence to standards...all of which contributed to the overall health of the maintenance complex.

**ER:** *Many field Maintenance Group Commanders cite the erosion of experienced 5-level and 7-level Airmen as a major concern from both safety and efficiency perspectives. Do you foresee any specific initiatives tailored to improving the manning and experience levels of this critical segment of our force?*

**MAJ GEN MCMAHON:** We are implementing AFSSO21 initiatives to mitigate manpower reductions and exploring intuitive performance support systems to enhance experience levels. This initiative develops a troubleshooting database based on input by experienced technicians and manipulates the data to provide technical help to inexperienced technicians. We are initiating Repair Network Transformation to optimize our existing repair chain, while freeing up critical maintenance authorizations to support direct mission generation activities. Finally, we are assessing the entire maintenance training enterprise, identifying where there is redundant activity, and streamlining the training process to ensure every minute a maintainer is in training is value-added.

**ER:** *You are universally recognized as a tireless advocate for AFSSO21 and a process improvement culture in general. Total Quality Management (TQM), another innovative management initiative implemented in the early 1990s to again address budget and personnel savings, failed to meet planned objectives and was discarded. Why did TQM fail, and how does TQM differ from AFSSO 21?*

**MAJ GEN MCMAHON:** In the early to mid-1990s the Air Force tried to implement TQM or Quality Air Force (QAF). To many of us, this effort fell short of expectations and some people are concerned that AFSSO21 will become TQM. I don't think this will happen. While the two efforts may be similar in intent, they will differ in implementation and impact. Very simply, AFSSO21 is focused on results while QAF was focused on process. The best analogy I can use deals with ending a drought by utilizing a rain dance...AFSSO21 is focused on creating rain while QAF would have been focused on perfecting the rain dance.

When we adopted TQM, we tended to focus solely on processes in isolation, without regard for the ultimate output. In other words, we failed to build an architecture that flowed directly from process to product to combat capability. Combat power is our ultimate product - we can't forget that. In TQM, we spent much of our effort tracking metrics for sub-processes and lost sight of the overall mission. We needed an architecture that tied process to product, and we never developed it. In addition, instead of incorporating TQM into our already highly effective governance and compliance structure, we created a separate one for TQM. We had a successful inspection system within the Air Force that we nearly abandoned in favor of TQM assessments. Operational Readiness Inspections took a back seat to assessments of our TQM maturity and implementation. We lost our focus on the mission and failed to effectively engage the chain of command. As we move toward continuous process improvement, we have to retain our reliance on our chain of command and our existing inspection system to provide the governance and compliance needed.

**ER:** *There is a major shift from the decentralized organizations proposed by General Creech in the 1990s to today's centralized enterprise initiatives such as Global Logistics Support Center, regionalized C-5 inspections and the Repair Network. What is creating the shift towards centralized enterprise organizations?*

**MAJ GEN MCMAHON:** First, I believe that the actions we are taking directly align with what General Creech espoused. We execute our Conduct Air, Space, and Cyber Space Operations core process through the flying squadron commander. The current wing reorganization ensures each flying squadron commander has all the resources and authorities necessary to effectively execute his or her mission.

Our focus is to create a much more integrated network to support those flying squadron commanders than we have today. Having large stocks of supplies at every base, along with an extensive organic repair capability does not make sense in today's world of limited resources. More importantly, it does not match the way we sustain combat operations. Rather, we need to ensure that the resources we dedicate to sustaining our forces are sized to support the entire enterprise, not just a small segment. That means we need to measure repair capability and capacity not at the base level, but at the enterprise level. In doing so, we can assure the same level of supply chain effectiveness (likely an even higher level) in a much more efficient way.

**ER:** *You were instrumental with the highly successful C-5 regionalized isochronical inspection concept at Dover AFB with future locations at Westover ARB and Martinsburg ANG. Do you foresee similar aircraft regional inspection programs?*

**MAJ GEN MCMAHON:** Over the next five years, many wing-level maintenance activities will transfer to CRFs, and that includes phase and isochronal inspection activities. For example, AFSOC has also centralized its global C-130 iso-inspection docks at Hurlburt Field. In the near term, the Air Force is considering each MDS to determine if inspections should be consolidated, and if so, the number and locations of where those inspections should take place. At the same time, we are looking at our policies and data systems to determine where changes are necessary to better support enterprise-managed inspection activities.

**ER:** *Any final thoughts for our ER readers?*

**MAJ GEN MCMAHON:** Many are asking, "If we're the world's greatest air, space, and cyber space force, why the need for so much change in logistics?" I think it's a fair question because, quite frankly, change is not easy. Simply put, we need to continue to transform to ensure we remain the world's greatest air, space, and cyber space force. As our operating environment continues to evolve, we need to constantly adapt to those changes or we'll find ourselves outdated and ultimately irrelevant. The good news is we're blessed with the world's greatest Airmen—officer, enlisted, civilian, and contractor—who understand the need for change and more importantly, can make it happen.



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