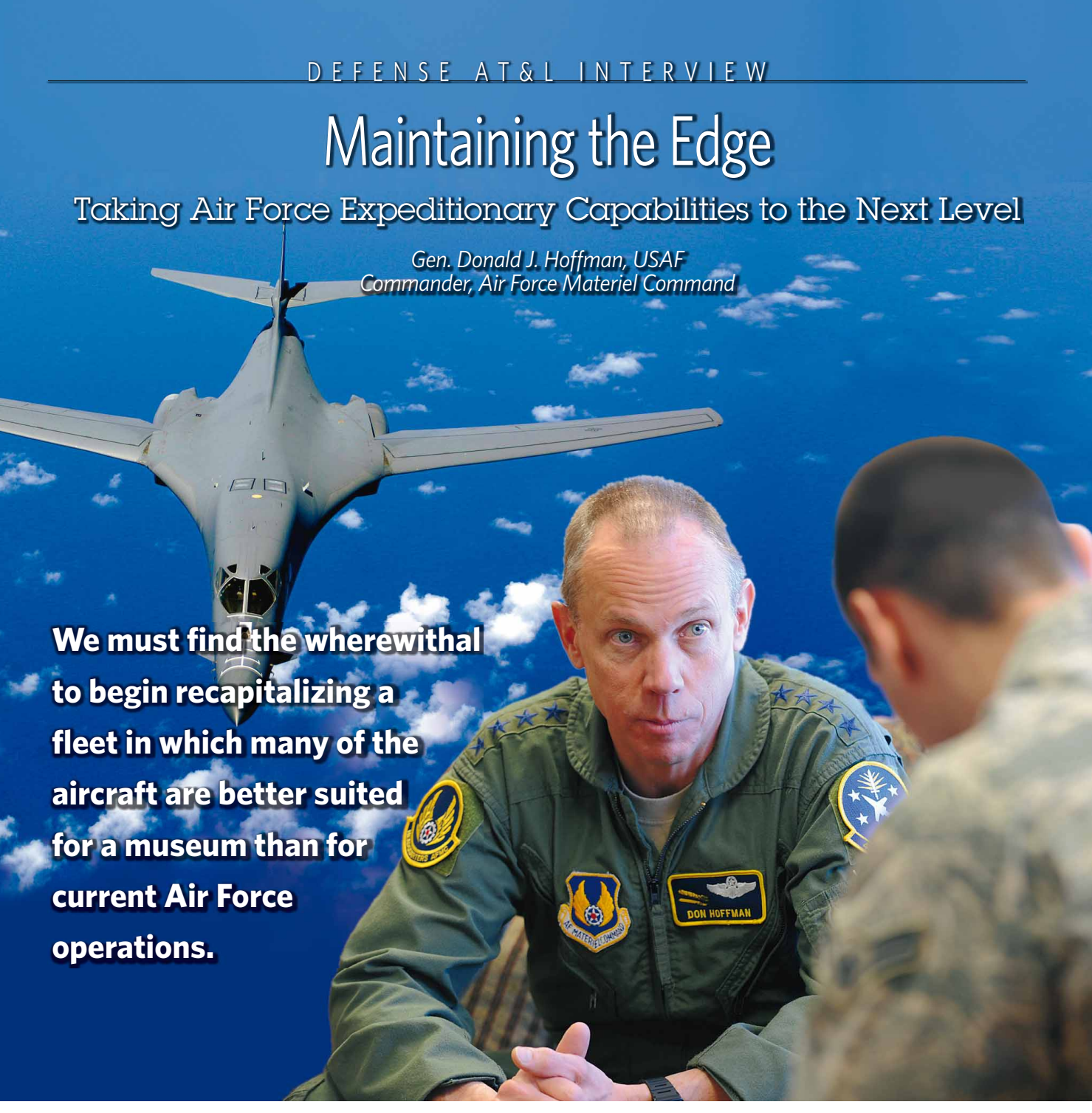
Maintaining the Edge

Taking Air Force Expeditionary Capabilities to the Next Level

Gen. Donald J. Hoffman, USAF
Commander, Air Force Materiel Command



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Gen. Donald J. Hoffman leads one of the most diverse and dynamic organizations in the Air Force. As the commander of Air Force Materiel Command, he is responsible for a workforce of 74,000 people—two-thirds of whom are Air Force civilians—as they engage in research, development, test and evaluation, acquisition management services, and logistics support for the Air Force. This breadth of responsibility is complex, but the AFMC mission is simply stated: deliver war-winning capabilities, on time and on cost. *Defense AT&L* caught up with Hoffman in April to discuss how AFMC is managing aging aircraft, workforce complexities, and sustainment missions, all while continuing to produce cutting edge battlefield technologies.

Q *What do you consider the most urgent requirements for the Air Force and AFMC, and how is the command meeting those requirements?*

A Above all, we have to recapture excellence in the support AFMC provides the Air Force nuclear enterprise. No mission is more important than safeguarding our country's vital

nuclear capabilities and maintaining nuclear deterrence. The AFMC pieces of this enterprise are acquisition and sustainment, but we didn't have unity of command for those responsibilities until we established the Air Force Nuclear Weapons Center at Kirtland Air Force Base, N.M. We're implementing more stringent tracking and control systems for nuclear weapons-related materials. In fact, we're improving supply chain management processes across the board.

Our command's senior leaders established five command priorities in February. Your question was about urgent requirements, and I think those priorities certainly fit the bill. In addition to what I just mentioned—reinvigorating AFMC's role in the nuclear enterprise—the priorities are to implement effective and efficient integrated life cycle management to support the warfighter; to support the Air Force by recruiting, training, and retaining a high-performing workforce; to nurture and protect our people and families; and to be good stewards of government resources.

I've charged our senior leaders with focusing on those priorities every day. If we're successful, we'll be supporting the Air Force as it tackles its overarching priorities. But it won't be easy. To meet the priorities, we have to overcome some long-standing challenges—including cultural and process changes related to nuclear sustainment and operations, the current high-operations tempo that's challenging both our troops and our aging fleets, and resource constraints that make it imperative we reassess our requirements and set priorities accordingly. On top of all that, we must find the wherewithal to begin recapitalizing a fleet in which many of the aircraft are better suited for a museum than for current Air Force operations.

We need to ensure we create a future force—I'm talking about 2030 and beyond—that can effectively fly, fight, and win in that environment.

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What do you see as AFMC's strongest points in supporting the Air Force and the warfighter? What are some of your biggest challenges?

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I am extremely proud of our acquisition workforce—military, civilian, and contractors—who work at our product centers, air logistics and test centers, and at the headquarters at Wright-Patterson Air Force Base, Ohio. Their contributions are critical to delivering capabilities to the warfighter, so I'm focusing intently on institutionalizing changes required to fully support our commitment to acquisition excellence.

Over the past year, we've strengthened the acquisition source-selection process by making changes to the three source-selection mandatory processes: training, reviews, and governance. We're also working with the secretary of the Air Force on improving the requirements-generation process throughout the entire weapons system life cycle.

And we're working to recapitalize the acquisition workforce itself. I'm personally committed to filling existing vacancies and creating additional billets. Then, we must properly assess whether we need to shift members of the workforce into different specialties—such as systems engineering, contracting, or cost pricing—to meet our acquisition excellence goals. Recapitalizing our acquisition workforce is a long-term, multi-year effort to rebuild, incentivize, and reward our professional workforce. And we must make sure the right people get promoted to senior and executive levels.

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If I could follow up on that point, Secretary of Defense Robert Gates has said that the Air Force acquisition workforce is seriously undermanned, which has contributed to some of the acquisition challenges seen over the last few years. You just mentioned shifting members of the workforce into different specialties—workforce shaping. Could you elaborate on how AFMC is handling that need?

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It's a priority, no question about that. We can't consistently provide acquisition excellence if we don't solve the workforce-shaping puzzle. I've asked leadership to fill their civilian employee vacancies to the maximum extent possible. Whether we're hiring from the outside or picking from a list of internal candidates, we must hire the best-qualified people.

The civilian workforce is an integral part of the Air Force's and AFMC's capability. AFMC is the only major command in which a majority of the workforce—a very large majority at that—is civil service. The active-duty member has a vital but different role. Researchers, systems maintainers, program managers, test and development experts, and business managers have helped secure our nation's freedoms, too. AFMC needs to retain a core of experts to teach and mentor a new generation of civil servants. And AFMC is looking for that next generation of employees. During the next five years, the command plans to add positions throughout many organizations and provide opportunities for career development and progression.

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You've said the Air Force needs to step up its purchases of new aircraft rather than continue to spend millions maintaining older planes with outdated technology. Other senior leaders say the aging fleet is a critical problem. Is it really that bad?

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Well, I wish you could put that question to some of the airmen I talked to last February when I visited several locations in the AOR [*U.S. Central Command's area of responsibility, including Iraq and Afghanistan*]. I sat in the cockpits of different aircraft, and it's fair to say they are all vintage aircraft. They have steam-driven gauges and round dials. The airmen over there who are operating and sustaining these weapons systems are keeping them in the air, sometimes through sheer force of will and ingenuity; but we, as a nation, owe them better. Providing our airmen with better weapons systems takes resources and modernization, and those are challenges right now.

It's maybe easier to appreciate the problem when you realize the Air Force has been in sustained combat operations for

more than 19 years. The average age of our aircraft is more than 25 years, with bombers averaging 33 years and tankers more than 44 years. Parts of the Air Force fleet are more than 40 years old; and some 2,000 of the 6,000 airplanes in the Air Force are now under some sort of a flight restriction, mainly because of aging. The urgency of recapitalizing the tanker fleet, I think, grows every day. Flying and sustaining this aging force has resulted in a 17-percent decrease in readiness across the board, even though flight-line and depot-maintenance crews work magic to keep many of our legacy aircraft flying.

Beyond the immediate needs, we have to reverse this trend. I think the nation has to make a renewed commitment to investing in the best technology the aerospace industry has to offer our armed forces. If we don't, the airmen—and really, all servicemembers of tomorrow—will inherit institutions that don't arm them with the best tools to do their jobs. We need to ensure we create a future force—I'm talking about 2030 and beyond—that can effectively fly, fight, and win in that environment. The rate of change in technology is increasing. Combine that with the dynamics of the modern world, and you get a very high-stakes game.

Q
If defense budgets are reduced, how will this affect AFMC's sustainment mission?

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The short answer is the sustainment mission will become more challenging than it already is. Over the last several years, our air logistics centers have shown a remarkable capacity to improve their processes and meet more challenging production goals. I hope we don't have to find out where that ceiling is, but regardless, we must avoid strategic or irreversible mission failure. Whatever our limitations, some things can never go on a backburner. We need a heightened emphasis on protecting, conserving, and responsibly consuming our resources to successfully accomplish our mission, not only now, but over the long haul. I tell our troops to treat every dollar, every taxpayer's dime, as if it were their own, because it is.

As we recapitalize, we have to acquire and develop cost-effective weapons systems. We know we can make combat-effective weapons systems, but they also need to be cost-effective in today's environment. We also have to sustain those new weapons systems while still sustaining—for decades, in some cases—the legacy weapons we have. We can't replace everything as fast as we'd like, so there's no choice but to figure out new and creative ways of sustaining our existing aircraft.

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You mentioned that the air logistics centers over the last few years have improved their processes significantly and have met increasingly challenging production goals. Could you give some examples?

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Commander, Air Force Materiel Command

Gen. Donald J. Hoffman was commissioned into the Air Force in 1974. He has served in various operational and staff assignments in Europe, the Middle East, and United States. Previous assignments include serving as chief, Aviation Section, Office of Military Cooperation, U.S. Central Command, Cairo, Egypt; executive officer to the commander, Headquarters, Air Education and Training Command, Randolph Air Force Base, Texas; commander, 14th Operations Group, Columbus Air Force Base, Miss.; special assistant to the supreme allied commander, Europe, Supreme Headquarters Allied Powers, Europe, Mons, Belgium; and assistant chief of staff for operations, Headquarters, Allied Air Forces Northwestern Europe, NATO, Royal Air Force, High Wycombe, England, and deputy commander for NATO affairs, Headquarters, 3rd Air Force, Royal Air Force, Mildenhall, England.

Hoffman has commanded at the flight, squadron, group and wing levels. Previous command assignments include serving as the commander, 52nd Fighter Wing, Spangdahlem Air Base, Germany; commander, 31st Fighter Wing and 31st Air Expeditionary Wing, Aviano Air Base, Italy; director of requirements, Headquarters Air Combat Command, Langley Air Force Base, Va.; and military deputy, Office of the Assistant Secretary of the Air Force for Acquisition, Washington, D.C.

Hoffman received his Bachelor of Science degree in electrical engineering from the U.S. Air Force Academy; and his Master of Science degree in electrical engineering from the University of California, Berkeley. He is a graduate of the Air Command and Staff College, the National War College, and the National Security Management Course.

Hoffman is a command pilot with more than 3,400 flying hours in fighter, trainer, and transport aircraft. His awards include the Distinguished Service Medal with oak leaf cluster, the Defense Superior Service Medal, the Legion of Merit with oak leaf cluster, the Defense Meritorious Service Medal, the Meritorious Service Medal with three oak leaf clusters, and the Combat Readiness Medal with oak leaf cluster.

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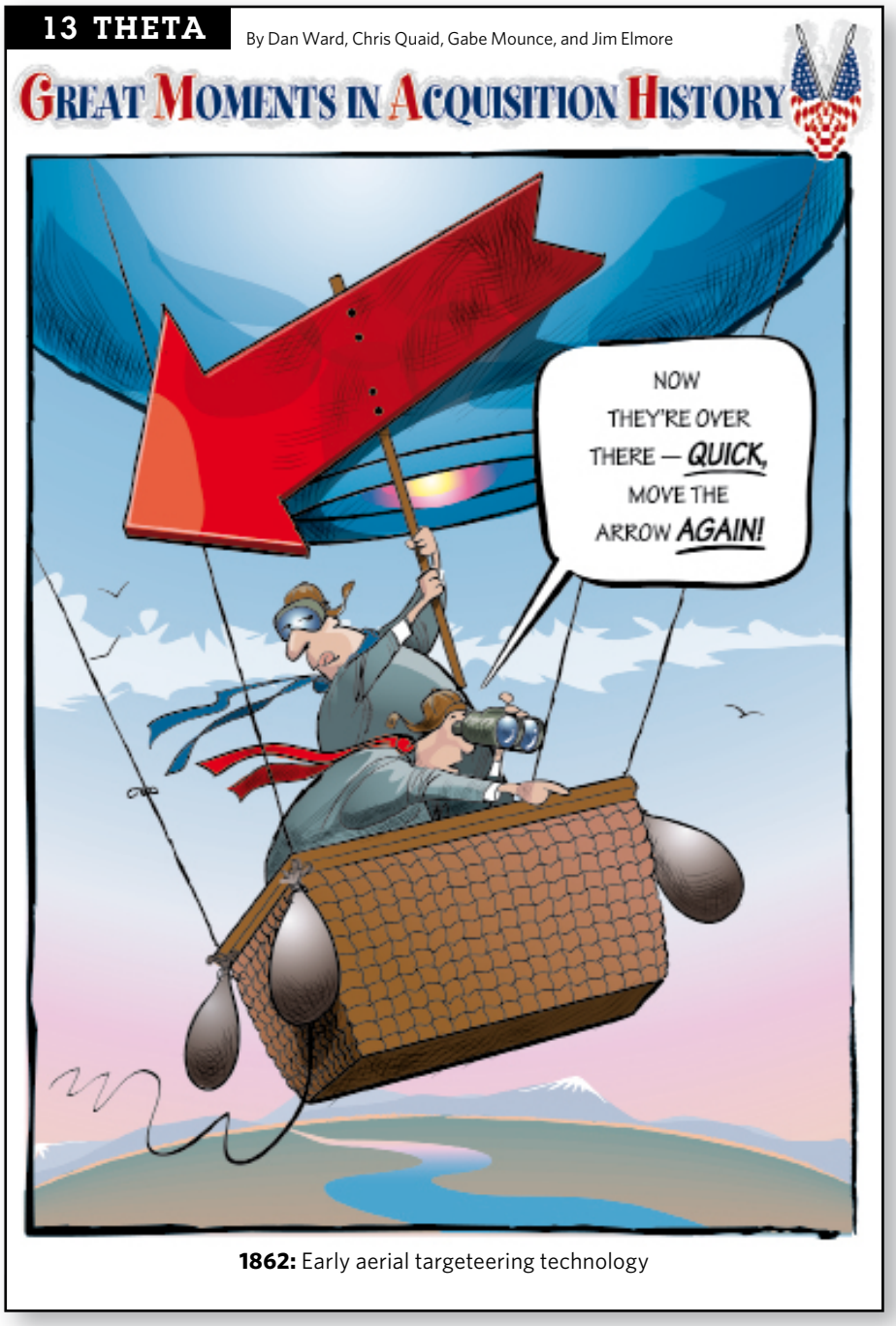
The command has had several significant successes in the logistics arena.

AFMC stood up the Air Force Global Logistics Support Center in March 2008. The center is now integrating supply-chain processes into one end-to-end enterprise, helping the Air Force reduce annual operating support costs by as much as 10 percent and increasing equipment availability. That center has been working closely with major commands, AFMC's air logistics centers, and the Defense Logistics Agency to make sure we have the most current data and standard processes to identify warfighter repair requirements.

Throughout this past year, integrated process teams of specialists from the logistics support center and DLA have tackled a whole range of improvements in processes, roles, and responsibilities for joint support of distribution planning, enterprise-level metrics, inventory reduction, a collaborative planning process for consumable items, and sourcing strategies. The whole list is longer.

A few years ago, the command started what we call Centralized Asset Management, and that has proven its value. It centralizes programming, budgeting, and execution for Air Force weapons system sustainment within AFMC instead of having it spread out among the operational commands. With CAM, we've fundamentally refocused how the Air Force manages weapons system sustainment requirements and funding at the logistics enterprise level. The CAM process saves time and money by eliminating multiple-requirements reviews. The money saved has gone right back into funding other high-priority requirements.

We've begun final planning for the Expeditionary Combat Support System, which is a critical component of the Air



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Force's eLog21 initiative [*see <http://www.af.mil/library/eLog21.asp> for more information on eLog 21*]. The ECSS is based on a commercial software technology. It will merge base-level and wholesale logistics systems into an enterprise-level approach, replacing more than 250 legacy computer systems while giving us real-time visibility of assets worldwide. What's significant is that ECSS will give decision makers a single source of authoritative information.

We've also piloted High Velocity Maintenance at all three of our air logistics centers, which allows us to shorten an asset's total down-time for maintenance. And it gives us a lot more predictability in the work we need to plan and the materials we need on hand.

To me, the most gratifying success has been the significant progress in certifying our fleets to fly synthetic fuel blends. We're on track to have all engines approved to use a 50-percent synthetic jet fuel blended with JP-8 by 2011. And now, we're even looking toward using bio-based fuels. For a guy who believes that conservation of resources and green technologies are important to national defense, that's pretty exciting news.

Q *What new technologies are on the horizon that might help on the battlefield?*

A Our Air Force Research Lab is heavily involved in aircraft design. For example, it's investigating the use of carbon fiber for aircraft use. The benefit would be a stronger, perhaps lighter, and less-costly aircraft, but with greater range and endurance. If successful, it may lead the way to put less demand on international sources for rare metals.

NASA is providing test data from the X-43A aircraft to enhance our understanding of hypersonic flight dynamics to be used in the Air Force's own hypersonic, hydrocarbon-fueled flight program, the X-51. Our collaborative research with NASA on high-altitude, long-endurance technology will result in a lighter-weight, gust-tolerant wing design. These are all technologies I want the Air Force to lean forward on.

Our researchers and scientists have made excellent progress with technology that will allow us to anticipate, find, fix, track, target, engage, and assess enemy activity anytime, anywhere. We're developing new technology for today and tomorrow's fight, modernizing and acquiring weapons systems, including everything from the combat uniforms worn by our airmen to the manned and unmanned aerial systems and subsystems they fly and maintain. When I see what our scientists and engineers are doing, I'm optimistic about the Air Force's—and really, the nation's—ability to maintain our technological edge.

Q *Gen. Hoffman, we thank you for your time.*