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The Merge

In air combat, "the merge" occurs when opposing aircraft meet and pass each other. Then they usually "mix it up." In a similar spirit, Air and Space Power Journal*'s "Merge" articles present contending ideas. Readers are free to join the intellectual battlespace. Please send comments to aspj@maxwell.af.mil or cadreaspj@aol.com.*

Managing the Human Weapon System

A Vision for an Air Force Human-Performance Doctrine

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> *The basic planning, development, organization and training of the Air Force must be well rounded, covering every modern means of waging air war. . . . The Air Force doctrines likewise must be flexible at all times and entirely uninhibited by tradition.*
>
> —Gen Henry H. "Hap" Arnold

In a recent paper on America's Air Force, Gen T. Michael Moseley asserted that we are at a strategic crossroads as a consequence of global dynamics and shifts in the character of future warfare; he also noted that "today's confluence of global trends already foreshadows significant challenges to our organization, systems, concepts, and doctrine. We are at an historic turning point demanding an equally comprehensive revolution." Furthermore, to revolutionize the twenty-first-century Air Force, according to General Moseley, we must start with our Airmen since "any organizational renaissance begins with people. We must prepare our Airmen for a future fraught with challenges, fostering their intellectual curiosity and ability to learn, anticipate and adapt."[1]

An evolving recognition of "the human as the most important weapon system in the Global War on Terrorism" is evident in the special operations forces' declaration that "humans are more important than hardware" in asymmetric warfare.[2] Consistent with this view, in January 2004, the deputy secretary of defense directed the Joint Staff to "develop the next generation of . . . programs designed to optimize human performance and maximize fighting strength."[3] In response, US Joint Forces Command began a transformation of force health protection (FHP) by addressing human-performance standards, metrics, capabilities, and gaps via a new Joint Human Performance Enhancement Joint Capabilities Document.[4] In 2005 the director of the Office of Net Assessment sparked wider interest by publishing *Human Performance Optimization and Military Missions*, which prompted the Department of Defense (DOD) / Health Affairs to sponsor a conference on human-performance optimization in June 2006.[5] The conference report advocated such optimization at all DOD

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levels, but as yet, no overarching implementation strategy has appeared.[6]

In the Air Force, human-performance programs are generally more product oriented than human-centric, and relevant strategy and doctrine are limited to health services.[7] As General Moseley reminds us, "History is replete with examples of militaries that failed due to their inability to transform organizations and culture, adopt new operational concepts, or leverage breakthrough technologies."[8] The Air Force cannot leverage breakthroughs in human performance unless it is organizationally and culturally ready. Similarly, the 2008 Air Force Medical Service (AFMS) Capabilities Review and Risk Assessment concluded that we must make the most of human capital in terms of recruitment, selection, training, operational performance, cross training, retention, and postretirement health and well-being.[9] The assessment recommended a coordinated program to operationalize human performance for all Airmen by developing an overarching human-performance doctrine, organizationally redefining human performance as a line responsibility with health-services input, and developing ethical and legal frameworks for Air Force human performance.

In rising to Defense Secretary Robert Gates's challenge to "think out of the box" in continuous pursuit of better ways to support the joint force, we believe it is high time to address the shortfall in Air Force human-performance doctrine.[10] We propose a holistic doctrine that incorporates a capabilities-based, total life-cycle approach to managing Airmen—a performance-based force-projection model that concentrates on human performance while continuing to provide health care and casualty prevention to joint force commanders.

Transforming from Force Health Protection to Human-Performance Doctrine

Doctrine for FHP, defined as "all measures taken by commanders, leaders, individual Service members, and the Military Health System to promote, improve, or conserve the mental and physical well-being of Service members across the range of military operations," characterizes every service member as a *human weapon system* requiring total life-cycle support and maintenance.[11] It specifically describes this support in terms of three interrelated pillars: "healthy and fit force," "prevention and protection," and "medical and rehabilitative care."[12] With this framework in mind, FHP catalyzed the genesis of our model for human performance as providing capabilities of human weapon systems to the joint force commander. We departed from the health focus of FHP and embraced a large scope of application by accepting two transformational tenets. The first involves *managing Airmen consistent with other military weapon systems.* This necessitates the creation of capability-based requirements with associated performance thresholds and objectives derived directly from needs identified by the combatant commander to drive Airman acquisition and sustainment programs.[13] These programs should be managed by a program executive officer (with associated program managers using integrated process and product development) who provides a single organizational focus for the total life-cycle management of Airmen and remains accountable for life-cycle costs, schedule, and performance.[14]

The second tenet requires health-service support to *focus on human performance in addition to health care as the primary means of supporting the joint force commander.* Although this may seem at odds with the historical objectives of health-service support, it actually expands upon them, once we understand that health is a prerequisite for performance but that the presence of health does not guarantee performance.[15] Given the prerequisite need for health, addressing performance satisfies the FHP pillars of "healthy and fit force" and "prevention and protection" (which we can equate with primary and secondary preventive medicine). In fact, superior performance itself is a means of prevention and protection. For example, victorious forces historically suffer lower casualty rates than defeated forces, and improving situational awareness decreases the risk of fratricide.

Managing Airmen's capabilities through human performance erects a new doctrinal edifice with three foundational pillars: performance sustainment, performance optimization, and performance enhancement (fig. 1). Since no universally accepted human-performance definitions exist, the names chosen for the pillars serve as placeholders for major enterprise areas rather than specific definitions.[16] Figure 1 also depicts the pillars resting on an organizational foundation that embodies attributes of the university model: dissemination of knowledge, research, and teaching.[17] Doctrine, organizations, and weapon systems are interrelated—history demonstrates that advances in one area without corresponding advances in the others limit the overall effectiveness of weapon systems.[18] Thus, the university model represents the organizational change needed to support the human-performance doctrinal vision for the human weapon system.

Performance Sustainment for Airmen

Performance sustainment covers accession through separation/retirement with the goal of *maintaining target performance levels throughout a career while minimizing total life-cycle costs.* It also embraces the FHP pillars of "healthy and fit force" and "prevention and protection." Preventive medicine is a major contributor to performance sustainment because physical and mental health remains a necessary, but not sufficient, precursor for performance. Performance sustainment contains most health-service support functions with the exception of consequence management.[19] The objective calls for sustaining performance in the face of enemy actions, full-spectrum (natural and technological) environmental threats and stressors, and advancing age.

If we accept the paradigm of the human weapon system, then the breadth of performance sustainment fits comfortably within the larger framework of the DOD acquisitions life cycle (fig. 2), specifically including the use of requirements derived from the Joint Capabilities Integration Development System. Applying the Defense Acquisition Management Framework to Airman acquisitions affects the AFMS and Air Force in the following transformational ways:[20]

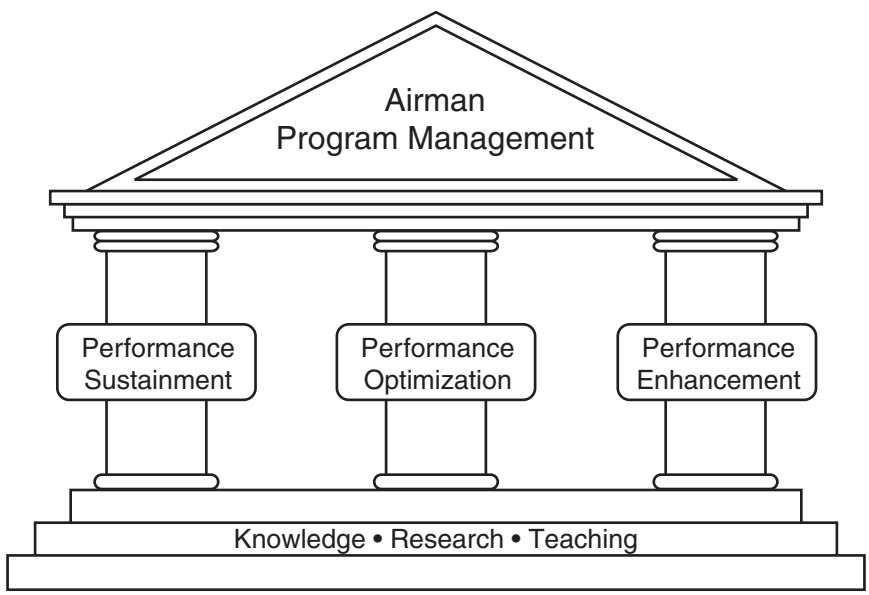

Figure 1. Three pillars of program management for Airmen

- Development of a portfolio of Airman capability documents (ACD) derived from the Joint Capabilities Integration Development System for groups of related Air Force specialty codes incorporating physical, physiological, psychological, and cognitive performance thresholds and objectives.[21]
- Formulation of a supporting test and evaluation master plan (TEMP) for each ACD, which becomes the source document for conducting preaccession screening, gauging developmental progression during training, and monitoring performance over a career.[22]
- Consideration of the time from accession to end-of-life instead of a nominal 20-year career during ACD development and preaccession screening, with the aim of minimizing total life-cycle costs.
- Alteration of the AFMS's preventive health assessments to performance and health assessments, primarily focusing on physical, physiological, psychological, and cognitive performance (based on the ACD and TEMP), with continued emphasis on health maintenance. Examples of performance monitoring include duty-specific fitness assessments, exposure-driven mental-health screening, and neurocognitive assessments.
- Deployment of tailored, multidisciplinary expeditionary-performance support teams

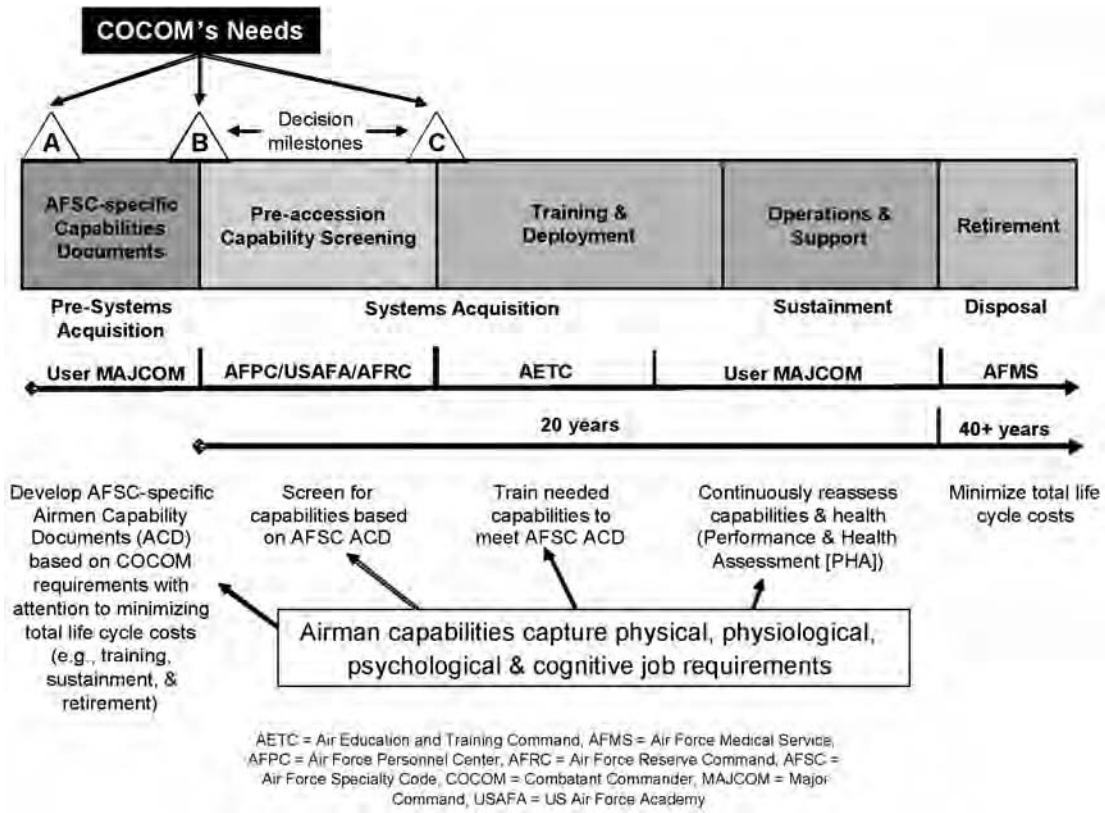

Figure 2. Application of the Defense Acquisition Management Framework to Airman acquisitions. (From Defense Acquisition University, *Introduction to Defense Acquisition Management*, 7th ed. [Fort Belvoir, VA: Defense Acquisition University Press, 2005], 49.)

containing traditional expertise in preventive medicine augmented by expertise in the physiological, psychological, and cognitive domains.

Performance sustainment will drive research and development of continuous, real-time, and periodic performance-assessment tools to support both the ACD and TEMP; mitigation strategies of the performance-degrading effects of advancing age; and physical and psychological countermeasures to maintain performance during warfare or exposure to environmental threats such as climatic extremes, g-forces, fatigue, weapons effects, prolonged mental stressors, and witnessing or participating in violent acts. However, the systems-engineering process, rather than the development of countermeasures and personal protective equipment, offers the primary means of mitigating threats and stressors.[23]

Performance Optimization for Airmen

Performance optimization seeks to *achieve the most efficient use of limited human resources* by comprehensively integrating Airmen within the Air Force's sociotechnical systems.[24] People are the critical elements within systems, so adopting a human-centric perspective of systems increases total system performance and minimizes total ownership costs.[25] Optimization occurs in defense acquisitions, starting with the specification of system requirements and flowing down through system design, development, and deployment. It goes well beyond human-machine interface design and *involves deliberate planning to efficiently leverage the Airman through the process of human systems integration (HSI),* a process model for obtaining performance. Perhaps more importantly, that model defines the domains of performance: human factors engineering (HFE); personnel; training; manpower; environment, safety, and occupational health (ESOH); habitability; and survivability.[26] We obtain better system performance with lower ownership cost by actively managing the interactions and trade-offs between domains rather than simply optimizing individual domains. As an illustration, employing intuitive automation in the design of a workstation to simplify a work process (HFE domain), thereby reducing manpower and training requirements (manpower and training domains), yields significant savings over the life cycle of a system. In addition, the HSI tool enables program managers to counter shortfalls in one domain by augmenting another to achieve targeted system performance. For example, a program forced to accept shortfalls in cockpit design (HFE domain) could respond by augmenting training (training domain) or selecting more capable or experienced aircrew members (personnel domain). Failure to adequately attend to HSI results in a degraded weapon system that can become prohibitively expensive to repair.

A new, high-level conceptual model of the HSI process (fig. 3) better explains the essential relationships between the HSI domains and human performance.[27] The input domains (manpower, personnel, training, and HFE) are typical items or services procured by the DOD, which makes their specification as process inputs more congruent with the DOD's capabilities-development process. Additionally, focusing on the four input domains greatly simplifies the challenges of forecasting the impact of HSI trade-offs through modeling and simulation, a necessary consideration given DOD initiatives for simulation-based acquisitions.[28] In contrast, the ESOH, habitability, and survivability domains represent desired system attributes or behaviors not directly procurable; rather, they emerge through various combinations of the input domains. These three domains also collectively describe the FHP pillar of "prevention and protection," directly linking performance optimization to FHP and providing an avenue to address FHP through a systems-engineering approach.

Performance optimization affects performance sustainment, during which the bulk of prevention activities occur. The HFE domain drives the human physical, physiological, and cognitive performance requirements that, in turn, must be sustained throughout the life of a system. System requirements specified for the ESOH, habitability, and survivability domains influence the likelihood of future hazardous exposures that will require prevention

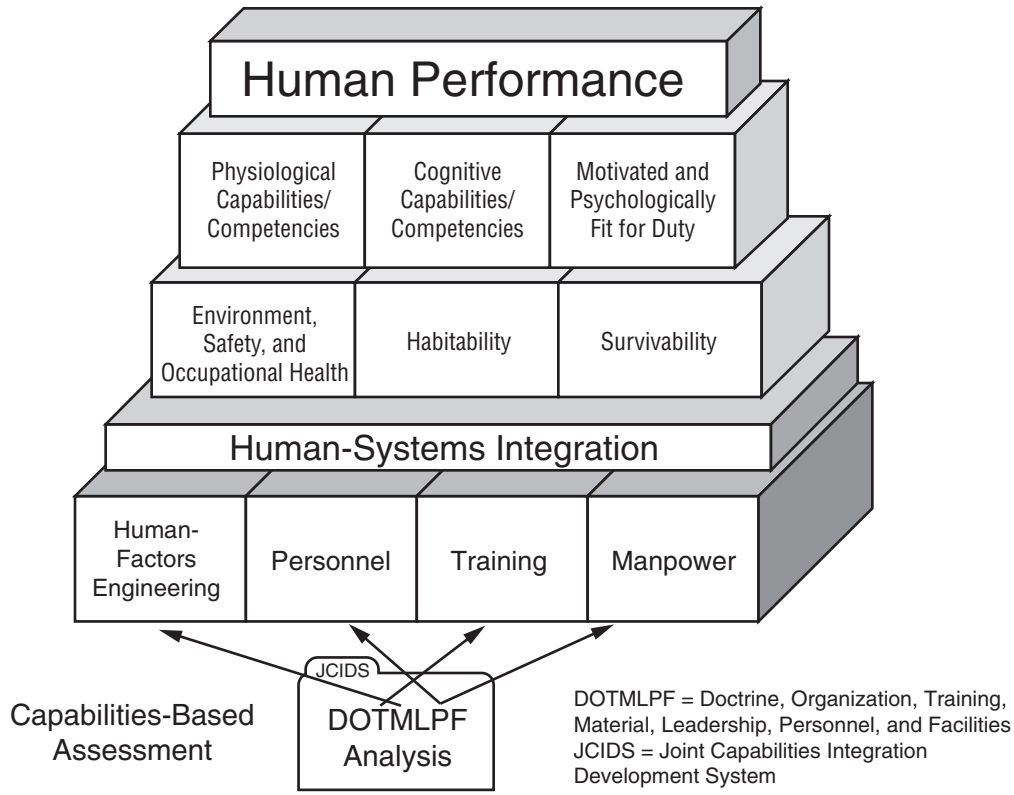

Figure 3. Linkages between the HSI process model and the Joint Capabilities Integration Development System gap analysis. (Adapted from Robert Lindberg, to the author, personal communication regarding the 711th Human Performance Wing's HSI model, 23 July 2007.)

and protection. Failure to compensate for human weaknesses or to capitalize on human strengths when specifying system requirements drives research and development of countermeasures to prevent injury or illness. Therefore, performance optimization maximizes efficiencies and cost savings through primary and secondary prevention.

Performance Enhancement for Airmen

Performance enhancement occurs chiefly through science and technology initiatives that *enable Airmen to operate beyond established and sustainable performance* thresholds, a spectrum ranging from intrahuman (biotechnology and pharmacology) to extrahuman (hardware and software). We developmentally plan a human-performance science and technology road map "by investigating future threats; recognizing capability gaps and requirements; capturing needed system-performance characteristics; and understanding technology gaps, risks, and needs."[29] Advances in performance enhancement create new capabilities for Airmen, enabling performance sustainment and optimization by expanding the existing performance envelope and providing solution sets for tradeoffs in the HSI domain. Thus, the three foundational pillars of program management for Airmen in figure 1 become a set of interrelated enterprises rather than distinct and independent efforts. *Integration* becomes the key word when we organizationally, functionally, and financially address human performance.

Summary

The world's security environment is changing dramatically in many dimensions—political, economic, social, and military. In response, "the Air Force is transforming into an effects-based, efficient provider of human combat capability, which can sustain air, space, and cyberspace superiority for the joint force and our Nation."[30] As General Moseley pointed out, "It is the *Airmen* who transform hunks of metal, buckets of bolts, microprocessors, and circuitry into the Nation's warfighting edge" (emphasis in original).[31] Providing capability for human combat, however, requires related doctrine on weapon systems. This article has proposed a vision for a broad human-performance doctrine for the Air Force—to sustain, optimize, and enhance Airmen. It addresses "how we think" about human performance and lays the foundation for future doctrine describing "what we think" about human performance. Ultimately, human-performance doctrine should provide a capabilities-based, total life-cycle approach to managing Airmen. Within the AFMS, it is time to *move from a health-based FHP model to a performance-based force-projection model.* In this new paradigm, the medical service maximizes successful force projection through its contribution to the human-performance mission while simultaneously standing ready to mitigate performance failures through consequence management. That said, the AFMS alone cannot implement the vision described here: its scope is driven by the breadth of application of human performance, which goes well beyond health services. The Air Force, therefore, must think strategically about its human weapon systems and develop both doctrine and the supporting organizational structures to operationalize human performance for all Airmen. We agree with General Moseley's observation that we are at a strategic crossroads, believing that a holistic approach to human performance is critical to the posture of the Air Force. We cannot say it any better than did our former chief of staff: "America's Air Force will succeed in the 21st century only by developing and resourcing a coherent strategy that closes the gap between ends and means. The window of opportunity is shutting fast. Time is not on our side."[32] ❑

Notes

1. Gen T. Michael Moseley, *The Nation's Guardians: America's 21st Century Air Force*, CSAF White Paper (Washington, DC: Department of the Air Force, Office of the Chief of Staff, 29 December 2007), 3, 6, http://www.af.mil/shared/media/document/AFD-080207-048.pdf.

2. Patricia A. Deuster et al., "Human Performance Optimization: An Evolving Charge to the Department of Defense," *Military Medicine* 172, no. 11 (November 2007): 11, http://www.siib.org/news/367-SIIB/version/default/part/AttachmentData/data/HPO%20Mil%20Med%202007.pdf.

3. PowerPoint briefing, 2007 Military Health Services Conference, subject: "Human Performance Optimization (HPO) within DOD," slide 6, http://www.tricare.mil/conferences/2007/Mon/M107.ppt (accessed 27 May 2008).

4. Ibid.

5. A. Russell, B. Bulkley, and C. Grafton, *Human Performance Optimization and Military Missions: Final Report*, GS-10F-0297K (Washington, DC: Office of Net Assessment, May 2005).

6. Deuster et al., "Human Performance Optimization"; and PowerPoint briefing, 2007 Military Health Services Conference.

7. Air Force Doctrine Document (AFDD) 2-4.2, *Health Services*, 11 December 2002, 47–52, https://www.doctrine.af.mil/AFDCPrivateWeb/AFDD_Page_HTML/Doctrine_Docs/afdd2-4-2.pdf.

8. Moseley, *Nation's Guardians*, 2.

9. Headquarters US Air Force, Assistant Surgeon General for Operations, *United States Air Force Medical Service 2008 Capabilities Review and Risk Assessment: Operationalize Human Performance for All Airmen* (Washington, DC: Department of the Air Force, 31 March 2008).

10. Michael W. Wynne, secretary of the Air Force, and Gen T. Michael Moseley, chief of staff of the Air Force, to all Airmen, memorandum, 24 April 2008.

11. Joint Publication 4-02, *Health Service Support*, 31 October 2006, I-3, http://www.dtic.mil/doctrine/jel/new_pubs/jp4_02.pdf; and AFDD 2-4.2, *Health Services*, 21.

12. Office of the Secretary of Defense (OSD), *Force Health Protection* (Washington, DC: Department of Defense, 6 November 2003), 10, 13; and Department of Defense Directive (DODD), 6200.04, *Force Health Protection*, 9 October 2004, 2, http://www.dtic.mil/whs/directives/corres/pdf/620004p.pdf.

13. Chairman of the Joint Chiefs of Staff Instruction (CJCSI) 3170.01F, *Joint Capabilities Integration and Development System*, 1 May 2007, A-3, A-8, http://www.dtic.mil/cjcs_directives/cdata/unlimit/3170_01.pdf.

14. Office of the Undersecretary, Acquisitions and Technology, *DOD Guide to Integrated Process and Product Development* (Washington, DC: Department of Defense, 5 February 1996), 1-1 through 2-12; and DODD 5000.01, *The Defense Acquisition System*, 12 May 2003, 2, 10, http://www.dtic.mil/whs/directives/corres/pdf/500001p.pdf.

15. Deuster et al., *Human Performance Optimization*, 3, 5.

16. Many organizations have become interested in pushing the limits of human performance, and they have developed terminology corresponding to their interests and funding (e.g., AFMS and Joint Forces Command—human-performance enhancement; Office of Net Assessment and DOD Health Affairs—human-performance optimization; Defense Threat Reduction Agency—human-performance modification). This multiple, overlapping terminology reinforces stovepipes and prevents effective unity of effort, potentially harming the larger Air Force and DOD mission. V. Martindale, to the author, personal communication regarding "Point Paper on Human Performance Terminology for AFMS," 25 July 2007.

17. Jaroslav Pelikan, *The Idea of the University: A Reexamination* (New Haven, CT: Yale University Press, 1992), 32–43, 58–62, 78–98.

18. I. B. Holley Jr., *Ideas and Weapons* (New Haven, CT: Yale University Press, 1953), 175–78.

19. Consequence management is defined as those individual and organizational activities directed at halting the progress of disease or limiting the damage caused by injury and reducing the long-term social disability produced by any residual impairment.

20. Department of Defense Instruction (DODI) 5000.2, *Operation of the Defense Acquisition System*, 12 May 2003, 2, http://www.dtic.mil/whs/directives/corres/pdf/500002p.pdf.

21. CJCSI 3170.01F, *Joint Capabilities Integration and Development System*, A-8.

22. DODI 5000.2, *Operation of the Defense Acquisition System*, 35.

23. Beverly S. Cohen, "Industrial Hygiene Measurement and Control," in *Environmental and Occupational Medicine*, ed. William N. Rom (Philadelphia: Lippincott-Raven, 1998), 1753–55.

24. The term *human-performance optimization* has been discussed as a focus area for the Joint Medical Research Command. See Deputy Assistant Secretary of Defense, Force Health Protection and Readiness, to Assistant Secretary of Defense, Health Affairs, memorandum, 26 December 2006. The use of performance optimization in the context of this proposal is not congruent with the formulation of human-performance optimization as used by that command; nor is it intended to suggest that HSI is solely a health-services function since it clearly crosscuts multiple functional capabilities described in the Agile Combat Support Concept of Operations (e.g., acquisition, civil engineer, logistics readiness, manpower, personnel, safety, science and technology, training, test and evaluation, etc.). We use the term *performance optimization* simply because it best describes the proposed enterprise area.

25. DODI 5000.2, *Operation of the Defense Acquisition System*, 43.

26. Ibid., 43–45; and MIL-HDBK-46855A, *Department of Defense Handbook: Human Engineering Program Process and Procedures*, 17 May 1999, 19–20, http://hfetag.dtic.mil/docs-hfs/mil-hdbk-46855a.pdf.

27. Nita L. Miller and Lawrence G. Shattuck, "Rethinking HSI: An Applied Approach," draft, 2007.

28. Since the key word in *human systems integration* is *integration*, any modeling and simulation effort needs to capture domain interactions in order to accurately predict the impact of domain trade-offs on total system performance and ownership costs. For example, assuming we could model performance by using a log-linear model, capturing domain-interaction effects requires a full or saturated model. When we work with all seven human-systems integration domains, the resulting model would have 127 terms—a significant computational challenge. However, by considering only the four input domains, we reduce the model to a more manageable 15 terms.

29. Gen Bruce Carlson and Maj Stephen Chambal, "Developmental Planning: The Key to Future War-Fighter Capabilities," *Air and Space Power Journal* 21, no. 1 (Spring 2008): 5, http://www.airpower.maxwell.af.mil/airchronicles/apj/apj08/spr08/spr08.pdf.

30. *Air Force Roadmap: 2006–2025* (Washington, DC: Department of the Air Force, June 2006), 19, http://www.af.mil/shared/media/document/AFD-060713-002.pdf.

31. T. Michael Moseley, "America's Air Force: The Nation's Guardian," *Joint Force Quarterly* 49 (2d quarter 2008): 11, http://www.ndu.edu/inss/Press/jfq_pages/editions/i49/8.pdf.

32. Ibid., 13.

The Air Force Commander

The Power of Interaction and Vision

Col William Mott, USAF*

HOW DO YOU measure command success? Simply by the next job you are awarded? Or by combat victory, plain and simple? If you care about these questions, this article has something for you. The target audience is US Air Force commanders, but I suspect that any leader can improve by paying careful attention to the subjects of interaction and vision.

Many individuals measure command success by a combination of mission and people. The question is, "How do you successfully fulfill the mission and maximize your people's potential?" Answer that, and you probably have the essence of command! Command is "the legal authority to direct and order subordinates to perform duties or accomplish actions to attain military objectives."[1] One way of measuring commanders' success involves considering their command climate—the environment in which they exercise their authority and guide their people to carry out the mission. This article addresses the tools, means, and feel that a commander uses to create a successful environment.

I have experience as commander of an F-22 operations group. Before you decide, "Well, I'm not one of those!" let me simply say that it puts me in a unique position of having both subordinate commanders and an immediate superior in close proximity to my command. This position as a middleman allows some insight into command because I not only give direction and observe the firsthand effects, but also react to the directions of my commander.

Command Climate

Command is about impact! Coach Tom Landry of the Dallas Cowboys once said, "Leadership is getting someone to do what they don't want to do, to achieve what they want to achieve." Combat commanders have been inspiring followers ever since Alexander the Great led the charge that routed the Persians at the river Gaugamela. It is what today's commanders need to do. The question is, "How can Air Force commanders make a difference from the moment they enter their units until they head home?" Everything that occurs affects the *command climate*, which, though perhaps more of a joint term than an Air Force one, means "a state or condition existing from shared feelings and perceptions among soldiers about their unit, about their leaders, and about their unit's programs and policies. This condition is created by the commander and his chain of command from the commander's vision and leadership style, and influenced and perpetuated by their communication and their leadership."[2]

A positive command climate blends the importance of people and mission into an organizational climate that breeds success. Commanders can be either the moat that prevents

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their units from attaining the goal or the bridge that enables them to reach it. Whether they excel or just plod along, the commander's leadership will make a difference, either for good or bad.

How do you shape a favorable command climate? How do you create a unit that Airmen fondly recall, saying, "That was a great squadron," or "That was a golden time at Base X," or "The ORI [operational readiness inspection] rated us outstanding because. . . ."? You do it through interaction with subordinates and superiors and through a well-communicated command vision. Finally, preparation for an ORI will test these command skills.

Command Interaction

Commanders shape their units. Their mere presence affects mission accomplishment and Airmen's perceptions of the unit. The means and tools that the commander uses to interact with his or her command are critical.

Unfortunately, human interactions can't be boiled down to cookbook solutions or checklists of things to do or say. The nature of command interaction is dynamic, and what applies in one situation may not apply in another. For example, one of my subordinates asked me for an appointment. I determined that the meeting would certainly be a "routine" discussion about assignments since the officer was scheduled for reassignment, so the best means to get ready called for reviewing his personnel records. When the officer sat down, I started talking about potential training and assignments. Suddenly, I learned that the real reason for the meeting was the officer's personal situation and how the assignment might affect his family—not exactly what the "checklist" said about a counseling session.

That is the point about using a checklist or an academic approach to interactions within the command. Personnel issues are not easily divisible into subject areas or readily handled with a checklist. There is no checklist for each meeting because you never know where that encounter is going. Yet, even though you can't have a checklist for every type of meeting, some key guidelines do exist for the different types that a commander might face.

Rule one: every interaction with people has an effect on the command climate. Whether it is with your superior, subordinates, or family and friends, it all makes a difference. After even a small interaction, someone walks away with an opinion of you and your command.

Consider the commander's personal staff. How the commander walks into the office and starts the day is key. Like it or not, the commander's demeanor will answer questions they all have, such as "Will it be a good day or a bad day?" and "What kind of mood is the boss in?" The way the commander starts the day with his immediate staff will shape how they deal with the rest of the command. You can't afford to have a quiet morning or bad day—you simply must start with enthusiasm, courtesy, and excitement.

How often does the average Airman interact with his or her commander? I would say that time with the commander is less available than most of us would like to admit. In fact, some of your subordinates' only contact with the commander will occur through the staff. How many phone calls do the executive officer and secretary field each day that never reach the commander's office? A great many. The staff represents you and may "impact" more of the command than the commander. How the commander interacts with his staff has a cascading effect throughout the entire command.

What about your interactions with subordinate commanders and leaders? Just as your staff deals with your Airmen, so do your subordinate commanders touch everyone under their command. Commanders interact with subordinate commanders via writing or by communicating one on one or in a group. Within these engagements a commander makes his or her influence felt within the unit.

Letters—now e-mail—offer an easy way to communicate. You state your case, hit "send," and move on to something else. There is no need to converse, explain, debate, or align your schedules. Personal digital assistants (PDA) and e-mail make access nearly instantaneous. Written communication to subordinates has a great number of advantages, and, clearly, a

modern commander must use e-mail to exercise command. Those who say that "e-mail leadership is no leadership" must come from a different generation! Nevertheless, you must be careful when using written communication, especially instant communication. How many e-mail addicts do you know—people with cell phones attached to their belts and set to vibrate for every message received? The addictive and impersonal nature of e-mail warrants special care when used by a leader.

Immediate written communication carries hidden dangers. Certainly, the risk of being misunderstood is high unless you are a careful writer. Do you have a humorous personality? Someone may simply interpret your e-mail humor as sarcasm or worse. What about that instant access to your subordinates or commanders? What message do you convey when the date and time tag on your e-mail says Saturday at 0200? Do you expect an immediate response? Does it send an implied message about your priorities at home? Maybe not, but your recipient can infer something about your leadership—perhaps a message that you do not want to convey.

Pres. Abraham Lincoln supposedly wrote letters to his generals that he never sent. He obviously put some thought into his directions yet found it better not to send them. Perhaps a similar lesson applies to e-mail communications: some thought needs to go into the crafting of messages, and perhaps more than a few should not go forward!

Commanders can also communicate with subordinate commanders one on one, a style that offers the best chance for interaction. I consider the time I get with the wing commander precious. Any small conversation with him answers questions that save me from sending e-mails, and I hear what is important to him. Face-to-face time with the boss is invaluable. And so it is with your subordinate commanders. That communication must occur frequently, outside your office. You must move around so that your Airmen can see you talking to subordinate commanders and supervisors in their work areas. Not only do they get to see you outside the ivory tower, but also you get to see the "ground truth" of the facilities and people under your command.

What should you say during one-on-one conversations with subordinate leaders? Again, there is no checklist to use. Commanders have an agenda, and subordinates have theirs. I suggest that the more the subordinate talks, the more the commander can support him or her. Think of it as *bump steering*, a term that describes how a pilot can adjust an aircraft's autopilot while keeping it engaged: small control-stick inputs that "bump" the aircraft to the correct heading and altitude. Similarly, subordinate commanders need to remain engaged and receive only small guidance from the senior. You should spend less time talking and more time listening when interfacing one on one.

The more common method of communicating with subordinate commanders occurs via meetings. Most units have a leaders' meeting at least once a week, but is it a pleasure or a pain? Is it productive or stifling? As expected, the way the commander conducts the meeting determines the environment that, in turn, will affect the unit. Does communication take place in one direction? Does the commander allow dissension? Does the conversation delve too closely into the subordinate commander's area of responsibility? The commander must ensure that the meeting is productive, enjoyable, and marked by open communication and clear decisions. Ultimately, are the commander's meetings "councils of war" in which democracy reigns or a means of gathering data, listening to opinions, and making decisions? I prefer the latter style.

Here are two insights that speak to the power of meetings. In one case, I was chairing a meeting with subordinate commanders. Jokingly, one of them said, "Sir, I've been elected to talk to you on a certain issue." It seemed humorous, but it raised the question of whether I was approachable or too autocratic. If subordinate leaders are not comfortable voicing dissent, then they are not likely to talk openly about difficult issues. And that can mean that their vision may not cover the commander's blind spot.

In a second case, while attending a meeting chaired by the wing commander, I noted that

when someone brought up bad news, members of the audience kept their eyes not on the briefer but on the commander. They wanted to read his body language—to see how he would react. In the same manner, the "eyes and ears of the wing" were looking at the subordinate commanders at the table to see how they would react—to see if they would get along, fix blame, or say nothing. The conduct of the leaders at any meeting, even their interactions, influences command climate.

As in one-on-one discussions, large meetings provide a means by which the commander influences his or her unit, for good or bad. In the Air Force, we traditionally call the room to attention out of respect for the commander. Just as that focuses everyone on the commander's presence, so should the commander focus on his or her conduct during the meeting. Commanders have the power to concentrate on the mission's and their people's success, and to build a positive command climate.

Command interaction is a powerful part of commanding the staff and subordinate commanders, but especially members of the unit. How should the commander interact with Airmen? The commander is the identity of the unit and the representative of the Air Force enterprise to those Airmen. If you can't be approachable, if you can't share some information, how are your Airmen supposed to know what is important to you? Most of us have seen pictures of Gen Dwight Eisenhower meeting with members of the 101st Airborne Division prior to D-day. Some might think it was a media stunt, but in reality it was good for the men and good for Eisenhower. According to one account,

> Corporal Kermit Latta was struck by the "terrific burden of decision and responsibility" which showed on his face and by the sincerity of his effort to communicate with his young soldiers. He paused to speak to their group, and we can detect in his exchanges something of the deft personal appeal which was to make him the United States' most popular postwar president:
>
> "What is your job, soldier?"
>
> "Ammunition bearer, sir."
>
> "Where is your home?"
>
> "Pennsylvania, sir."
>
> "Did you get those shoulders working in a coal mine?"
>
> "Yes sir."
>
> "Good luck to you tonight, soldier."
>
> This exchange demonstrates that Eisenhower not only spoke to soldiers, he saw them as well. That was and is rare for generals.[3]

On that night of 5 June 1944, General Eisenhower watched the members of the entire 101st Airborne Division board their C-47s, waited while they launched, and saluted each plane as it took off.[4] I think there was something real in the general's command interaction—an attitude that connected the commander with his men. This is an essential aspect of command interaction.

I look for that interaction all the time. When I step out to fly, the crew chiefs and flight-line supervisors know that the commander is coming out. Those five minutes before I need to climb in and go fly are critical. The same is true when I'm in the staff car driving or walking the flight line during a launch. As a commander, you see the other commanders often, whether in daily meetings or because "you're the boss." But the people that you meet for five minutes on the flight line don't see the commanders as often. Those few minutes of interaction represent their complete picture of them. You can't afford that time to be negative in any way. Like General Eisenhower, you must "see" your Airmen.

Here is an example that humbled me and emphasized the power of words from a leader. I was having breakfast with the wing's chiefs and with those of Air Education and Training Command and went through the dining-hall line first. I was polite, engaging, and pleasant to the Senior Airman who was cooking. Or so I thought. As I waited, the two chiefs ordered their food and chatted with the Senior Airman and other servers. In the time it takes to cook an omelet, the chiefs learned where the Senior Airman was from, how he joined the Air Force, that he was a football player, that he was finishing his college degree, and that he liked his job at Tyndall AFB, Florida. The two

chiefs joked with one another and complimented the young Airman on his service to the country. All I got was an omelet, but I was pleasant! The Airman got a memorable conversation with two command chiefs. Who did the better job as a leader?

In summary, a commander's interaction with subordinate leaders and Airmen will create an environment depending solely on his or her style. But without a purpose, message, and vision, it can amount to nothing more than pleasantries. It is essential that a commander communicate a vision—the purpose behind all this interaction. A commander's interaction becomes more than words, e-mails, or meetings when he or she communicates the core of the mission—the vision.

Command Vision

A commander's interaction style must be precise and purposeful. You can't have one without the other. Vision is a powerful thing, but without the tools to communicate, it is wasted. That is why I spoke of command interaction before vision.

Vision is a tough concept to master. Is it just words or a true means by which the commander communicates his or her intent? Think of "Integrity, Service, Excellence." Is it a slogan or powerful set of words? Is it a saying on the bottom of PowerPoint slides, or is it truly our core values? I think it is what we are because I can weave those words into any mission, action, or event with which I am associated. Gen Douglas MacArthur said, "'Duty,' 'Honor,' 'Country'—those three hallowed words reverently dictate what you want to be, what you can be, what you will be."[5] This is true for the US Military Academy's "Duty, Honor, Country," and it is the same with the Air Force's "Integrity First, Service before Self, Excellence in All We Do." But it is that way only because leaders make it part of their everyday actions. Vision—specifically, the Air Force's core values—frames our daily operations.

Vision is an equally tough concept to implement. It is the inspiration for future operations, while the activity of daily operations can either detract from achieving the vision or help it along. The point is that just as a commander's interactions affect Airmen's ability to accomplish the unit's mission, so can daily routine hinder attainment of the commander's vision.

How do you shape a vision, craft it, and make it valuable to the unit? Command vision can be defined as that which "empowers, inspires, and challenges. . . . Vision is the rudder that keeps a ship on course."[6] It is that concept to which all unit efforts return. When crafting a vision, you should begin by referencing mission and vision statements for echelons of command above the unit (Air Force, major command, numbered air force, wing, and even combatant command, if applicable). Next, you should write a vision statement for the unit, focusing it on the future, grounding it on current operations, and dividing it into components.

We can explain the crafting of a vision statement simply by analyzing one. Consider the vision that I espouse for my F-22 / F-15 / Air Battle Manager operations group: "Shape the CAF [Combat Air Forces] with Air Dominance War Fighters of Character." I think it works as a vision statement because I can break it into components that reflect the values of my group. The main component ideas are "shape," "war fighters," and "character." The 325th Operations Group is a training command. Our focus is air dominance. And war fighters are needed in the global war on terror. Every student will someday be in a position to influence the CAF. Before long, our graduates will become instructors at Tyndall; most instructors are in only their third or fourth year of flying in their weapon system. Finally, the students who depart Tyndall are leaving Air Education and Training Command and going to the CAF after nearly two years of flying training that started at a commissioning source focused on character development. Isn't it appropriate that their last training unit again emphasize character? I've had the privilege of flying with many pilots, and I remain convinced that the great ones were people of character.

A vision statement that can be broken into components directly relating to the mission is useful and helps move the unit ahead. However, a vision can simply become a set of words.

I was in a unit that had very impressive slides for various meetings, but I began to notice that the last slide always included a powerful quotation, something that could easily be a mission or vision statement—yet it wasn't the current wing mission. It wasn't even the major command's mission. Then it changed! Depending on the briefer, the ending slide had a different slogan. It took me a while to track down those words and discover that they were old but that they had lingered on the PowerPoint master slide! Unfortunately, they had become just words.

If a well-crafted commander's vision can be powerful, how does he or she capture that power and make it work for the unit? How does the commander take the time available each day and shape it so that the unit's efforts reach towards the vision—the goal? Two means for a commander to do that include keeping a combat focus and planning for each day in command.

I have flown in combat, and, clearly, the best way commanders can push their vision is to have a combat focus. That is all there is to it. We have one mission to execute, one activity for which everyone in the unit is responsible. When all else fails, combat employment, execution, and mission are number one! That is the emphasis. We are warriors, and a combat focus is the first step towards achieving a commander's vision. Think of professional football, whose teams concentrate on winning the Super Bowl. Nothing else matters. The same is true in the Air Force—winning in combat is all that matters.

To be focused, a commander requires a daily plan of attack. Commanders will likely be bombarded with 50 e-mails a day that can shackle them to their computers, just as the paperwork in-box can occupy them for hours. Paying excessive attention to immediate needs can detract from commanders' long-term goals.

Here are some ideas to help control the needs of today and meet the goals of tomorrow. First, have a calendar—marked not only with other people's meetings that you have to attend but also with things that you want to do. If you want time to walk the flight line, then schedule it. If you want time to work out, then schedule it. If you want time to talk with another commander, then schedule it. With my own calendar, after I subtract time for flying and meetings, I have roughly two days each week to meet my priorities. Commanders shouldn't leave time open on the calendar and wait to see what comes up. They should have a plan for their time that will support their goals, address their concerns, and support the unit's vision.

Second, control your in-box—both for paperwork and e-mail. I worked for a man who kept his in-box in a desk drawer. I supposed he did so purely for aesthetics—for keeping the commander's desk looking neat. But I noticed that he would look at the in-box only when he wanted to, checking it in the morning and evening. He would go through it when he had the time, and by limiting his constant attention to it, he always had a small stack of paperwork to plow through. He maximized his time by limiting his "nibbling" at the in-box. This wasn't an accident; it was planned.

The same is true of e-mail messages: you could spend all day answering them. Although you would never miss anything, consider the effort necessary to answer e-mail as it arrives. You've seen the guy with the belt-mounted PDA set to buzz for each new e-mail. He grabs it, enters his password, selects "messaging," selects "e-mail," and then waits for the program to open. If he doesn't reply, he takes time to close the program and return the PDA to his belt. Think of the time it takes to answer each e-mail—how it adds up over a day, a week, a year. Haven't we learned something from the industrial revolution of American history? Wouldn't it be better to set aside time for e-mail, much as you do for an in-box, and plow through it all at once? I think so, and I don't set my PDA to ring for new e-mails—or wear it on my uniform! (Although I know you can, this is my technique!)

So what is the point of controlling the literal and electronic in-box? To generate time to realize your command vision, not simply react to daily activities. The payoff is having time to focus on goals and objectives rather than jumping for every other organization's priorities. A commander must keep perspective on

the needs of daily correspondence versus its impact on the overall game plan.

For example, an e-mail from the unit training manager appeared one day, containing various details found in a status-of-training report as well as comments on additional training that the group lacked. This includes routine events such as fire-extinguisher training—mandatory items reportable to headquarters because they reflect the unit's and each individual's ability to deploy. This particular e-mail listed 238 events overdue in the operations group, consisting of five squadrons. Two hundred thirty-eight events! Good grief! This required immediate commander involvement! I made it a priority to "solve this problem" and make our "stats" improve. Unfortunately, however, these events had no effect on our daily mission; this training did not support my vision. Their completion, whether immediately or later, would neither change the number of sorties we flew nor improve the safe execution of our primary flying mission. Worse yet, it turned out that the operations group and all of its Airmen had over 20,000 ancillary training events to fulfill! This e-mail about the status of ancillary training identified less than 1.2 percent of the annual training requirements that were delinquent! What would a reasonable level of training amount to? Perhaps 90 percent complete? That translates to 2,000 events not completed—and we would still be at 90 percent!

The point is that an e-mail arrives announcing a problem, but without a comprehensive approach to determining its priority and relevance to the mission, it can quickly become a snare for a commander's time. Commanders need that time to make their vision real. How often has an e-mail arrived announcing a deadline for required information to "solve a problem"? I suggest that, often, the problem is neither a mission-threatening issue nor worthy of the given deadline. True, a commander must react to his or her superiors, but without a game plan for e-mail, the "ping" can be translated down into the unit with the wrong message about priorities and focus.

Simply stated, have a command vision, and make time to move it along. Keep a combat focus, keep moving forward, and keep managing distractions. The largest percentage of a commander's time should concentrate on carrying out the mission and making the vision a reality—not managing the daily routine. An ORI offers one way of determining the success of your vision and command-interaction skills.

Application: Preparation for an Operational Readiness Inspection

A commander's interaction with his or her command—whether individually, in meetings, or via electronic communication—is critical to success. The way that the commander applies his or her vision to the unit contributes to the command climate.

How can you know that your unit is on the right track? We are a warrior culture and a nation at war, so combat would represent the ultimate test. Short of that, consider an ORI. In the preparation for and execution of this inspection, a unit commander faces a strong challenge of his or her command climate.

Earlier, I talked about command interaction and then about vision. I chose this order because without the tools for communication, a good vision will rot within the commander. But a major event like an ORI demands that we start with vision. We always want to begin with "outstanding" and work from there. We're all winners; it's why we are in the service and desire to fight the good fight. But what if you declare "an 'outstanding' or go home" and then garner only an "excellent"? A better place to start is to simply say, "We'll do our best" and build a game plan that focuses on the ORI's major areas.

I was once involved in an ORI, working closely with the chief of Standardization and Evaluation (Stan/Eval), who told me point-blank that the best we could expect was a "satisfactory" since there were just too many issues to correct in the time remaining. It was a truthful and accurate assessment. To our credit, though, both of us agreed to attempt to earn the best possible rating. It took commitment, far more extra effort than expected, and close

interaction between us to find the key areas and determine where to place our main effort. It wasn't fun preparing, but we achieved our vision—an "outstanding" rating. To this day, I think we succeeded because we started small and worked big. We literally applied the old adage that "the journey of 1,000 miles begins with a single step." We transferred vision from wishful thinking into something that produced practical results—and that chief of Stan/Eval was a true hero!

Now I'll bet you want more detail than "work from small to large" when facing an ORI. Your ORI is probably not the unit's first. A review of past reports offers a good place to start. Beyond that, here are some focal points for inspection preparation:

1. Obvious discrepancies. Do not have an obvious, lingering issue that would cause the inspector general (IG) to say, "Our hands are tied. Sorry!" Determine what must be at 100 percent.

2. Checklists and Air Force instructions (AFI). Every inspector asks, "What do you do?" and follows with, "Show me your checklist and AFIs." We all do our jobs, but can we show why we do them that way and document training and execution?

3. Programs. Whether they are major, like Stan/Eval or Quality Assurance, or minor, such as recall rosters, if they are programs, they will be inspected. So they must be in good order! Consider trying an information-exchange program between units with similar programs.

4. Attitude. Likely, the IG team will find faults in every area it examines. If inspectors find nothing on first glance, they will continue to dig. I suspect that subjective judgment plays a role in determining the final grade. The unit with attitude (which includes dress, appearance, customs, and courtesies) can win that "gray area."

5. Staff-assistance visits and self-inspections. These are powerful tools for the commander because they are often conducted by the same people who will return to inspect during the ORI. The key is to think like the inspectors and use the same procedures they use. The IG inspectors are Airmen, just like us. They run checklists and inspect according to the AFIs, so there is no magic involved! What they can do, you can too.

If that answers vision, what of interactions? An ORI tests commanders' interaction with their commands. Clearly, they have the greatest experience with inspections and know the mission and operations. Quite literally, commanders can best endure the brunt of the inspection and handle all details. But, of course, they can't do that. They have to get their units ready, get them to do the work, be ready to meet inspectors, and solve problems. This is the test of communications within a unit.

An ORI is known as a leadership test. Although it tests vision—the ability to set a goal and reach it—the ORI really gauges a commander's ability to interact and communicate with his or her Airmen. After the inspection, we quickly forget the grade—but not the months of preparation. The methods, tone, and environment created by the commander's approach to the ORI will remain. The ORI tests the commander's skill at interacting with Airmen in the face of a challenge. When the IG tells the commander, "We have a finding you need to know about," his or her interaction skills are going to be stressed and tested.

The ORI will assess commanders' ability to overcome obstacles to fulfilling their vision. It requires honed interaction skills that are both logical and practical. Some say that we should do away with ORIs or call them something else, but that is nonsense! Tested units perform better, and tested commanders improve their leadership skills.

Conclusion

This article is one of many on command. It won't be the last, and it presents no new trick or fad. I sought to take some of the mystery out of formulating a command vision and to emphasize that command interactions are

powerful tools. I hope it made you think, "I've been there" or "I'll watch for that."

I concentrated on command climate—the subjective assessment that a unit is good or bad. Commanders play the greatest role in determining the unit's status by setting the vision, focusing the unit's eyes on the goals, and de-emphasizing the daily routine. At the same time, they build a cohesive unit via personal interactions that inspire confidence in their leaders and trust amongst their subordinates. The effort placed on command interactions makes all the difference.

What does it all add up to? Some call it moral toughness within a unit, good morale, or positive command climate. Any way you interpret it, I say it adds up to successful command! ❑

Tyndall AFB, Florida

Notes

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3. Merle Miller, *Ike the Soldier: As They Knew Him* (New York: G. P. Putman's Sons, 1987), 617.

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6. AU-2, *Guidelines for Command*, 23.