WHAT LEADERS NEED TO KNOW

TALENT MANAGEMENT IN THE U.S. AIR FORCE

INSIGHTS FROM RAND RESEARCH
As the U.S. Air Force (USAF) takes actions to achieve its mission to “fly, fight, and win—airpower anytime, anywhere,” its leaders can benefit from the service’s enduring partnership with RAND Project AIR FORCE (PAF). PAF helps the Department of the Air Force (DAF) tackle difficult questions and generate actionable insights by combining the very best analytical tools and methods with a distinct interdisciplinary approach.

**WHO WE ARE**

PAF was established in 1946 by General H. H. “Hap” Arnold as a way of retaining for the USAF the benefits of having access to civilian scientific thinking that had been demonstrated during World War II. Among the DAF’s federally funded research and development centers, PAF is the only one concerned entirely with studies and analyses.

PAF’s mission is to conduct objective analysis on issues of enduring concern to DAF leaders. PAF addresses these concerns from multiple vantage points, by way of four research programs: Strategy and Doctrine; Force Modernization and Employment; Resource Management; and Workforce, Development, and Health (WDH). This document highlights WDH research, specifically.

**WHAT WE DO**

This overview of recent WDH research is organized around the four action orders issued by the Air Force’s Chief of Staff in December 2020.¹

- **ACTION ORDER A: AIRMEN.** The USAF must “recruit, access, educate, train, experience, develop, and retain Airmen . . . with the attributes required to compete, deter, and win in the high-end fight.”

- **ACTION ORDER B: BUREAUCRACY.** The USAF “must change its decision processes in order to make analytically-informed and timely decisions . . . to enable the USAF to outpace key competitors’ decision cycles.”

- **ACTION ORDER C: COMPETITION.** “The USAF must accelerate its understanding and mastery of [long-term strategic competitions with the People’s Republic of China and the Russian Federation] to accrue warfighting advantages to the United States and U.S. allies and partners; enhance collective deterrence credibility; and drive the competitions to areas of U.S. advantages and/or competitors’ weaknesses.”

- **ACTION ORDER D: DESIGN AND IMPLEMENTATION.** The USAF must “make force structure decisions in Fall 2020 and amend force planning processes to create the fiscal flexibility required to design and field the future force we need.”
Action Order A emphasizes the fundamental role that airmen play in enabling the USAF to succeed in the future high-end fight. To enhance its ability to attract, develop, and retain airmen—and to identify and remedy root causes that limit the representativeness and upward mobility of demographically diverse groups in the total force—the USAF is transforming elements of all phases of its human resource management (HRM) life cycle. PAF research is informing this transformation at every HRM phase.

**RECRUITING**

The transition to a single, total force recruiting concept allows for larger recruiting networks that vector individuals to appropriate points of entry into the force.

*Integrating Recruiting and Marketing for the Total Air Force*
*RR-4391-AF, forthcoming*

*A Snapshot of the Department of the Air Force Total Force Recruiting Integration: Survey Results and Implications*
*RR-A548-1, www.rand.org/t/RRA548-1*

*Improving the Goal-Setting Process for U.S. Department of the Air Force Recruiters*
*PE-A548-1, www.rand.org/t/PEA548-1*

**SELECTION**

Defining job-relevant attributes for Air Force Special Warfare operators and training raters on how to assess those attributes allows the USAF to adopt an evidence-based approach to assessment and selection—an approach that is applicable to other competitive career fields with demanding requirements.

*Assessment and Selection for United States Air Force Special Warfare: Vol. 1, Defining Attributes and Designing Rater Training*
*RR-A549-1, forthcoming*
PROMOTION
Assigning USAF career fields to different developmental categories and exploring the feasibility and utility of officer management flexibilities allow for developmental pathways that are tailored to the needs of career fields and individuals.

Championing the Agile Air Force Officer Career: Examining the Potential Use of New Career Management Flexibilities
RR-4439-AF, www.rand.org/t/RR4439

Department of the Air Force Officer Talent Management Reforms: Implications for Career Field Health and Demographic Diversity
RR-A556-1, www.rand.org/t/RRA556-1

RETENTION
Econometric models enable the USAF to explore incentive structures and other management tools needed to increase retention in vital career fields. Understanding the factors that limit retention in select personnel subgroups, such as female officers, can help the USAF address potential barriers and improve officer retention.

Cost-Benefit Analysis of Special and Incentive Pays for Career Enlisted Aviators
RR-A189-1, www.rand.org/t/RRA189-1

Addressing Barriers to Female Officer Retention in the Air Force
RR-2073-AF, www.rand.org/t/RR2073

CIVILIANS
Examining compensation and benefits structures and identifying barriers to the advancement of demographically diverse subgroups will help the USAF attract and retain a talented and diverse civilian workforce.

Department of the Air Force Civilian Compensation and Benefits: How Five Mission Critical and Hard-to-Fill Occupations Compare to the Private Sector and Key Federal Agencies
RR-A334-1, www.rand.org/t/RRA334-1

Advancement and Retention Barriers in the U.S. Air Force Civilian White Collar Workforce: Implications for Demographic Diversity
RR-2643, www.rand.org/t/RR2643
Action Order B addresses USAF-wide decision processes. To maintain advantage in tomorrow’s fight, the USAF must outpace key competitors’ decision cycles and make analytically informed and timely decisions.

Private and public organizations are increasingly applying tools from the field of artificial intelligence (AI) to business processes, including HRM. The USAF is well positioned to join these organizations in applying AI throughout its HRM life cycle. PAF research has provided guidance to the USAF as it takes steps to improve its data governance, modernize its information technology (IT) systems, and develop safe and ethical paradigms for applying AI to HRM.

**RECRUITING**

By tracking recruiting leads generated by marketing activities, the USAF can enhance strategic resource management of the recruiting enterprise.

*Improving Strategic Resource Management in the Air Force Recruiting Enterprise: Challenges and Next Steps for Policymakers*

PE-A304-1, www.rand.org/t/PEA304-1

**SELECTION AND PROMOTION**

By using natural language processing to extract information from performance narratives, the USAF can deliver personalized development pathways to officers in early-career stages.

*Can Artificial Intelligence Help Improve Air Force Talent Management? An Exploratory Application*

RR-A812-1, www.rand.org/t/RRA812-1

**OCCUPATIONAL CLASSIFICATION**

By applying modern machine learning (ML) techniques to data about training and early-career outcomes of enlisted personnel, the USAF can assign individuals to occupations that increase the likelihood of positive outcomes for both the airmen and the USAF.

*U.S. Air Force Enlisted Classification and Reclassification: Potential Improvements Using Machine Learning and Optimization Models*

RR-A284-1, www.rand.org/t/RRA284-1

**RETENTION**

By applying ML to historical retention data, the USAF can anticipate future shortages in personnel subcategories.

*Developing an Air Force Retention Early Warning System: Concept and Initial Prototype*

RR-A545-1, www.rand.org/t/RRA545-1
ACTION ORDER C: COMPETITION

Action Order C addresses the potential re-emergence of long-term strategic competition as China and Russia modernize their militaries. The USAF must understand these competitions to accrue warfighting advantages, enhance collective deterrence, and drive competitions into areas of U.S. advantage and competitor weakness. PAF has completed several studies to support the USAF’s efforts in aircrew management and training, multidomain operations, and readiness and deployment.

AIRCREW MANAGEMENT AND TRAINING

To maintain a combat-ready pilot force, the USAF must produce a sufficient number of new pilots to offset the shortage caused by the commercial demand for pilots; balance the competing demands of providing air power, developing pilots’ skills, and sustaining pilots’ skills; and incorporate virtual and constructive technologies in the pilot training enterprise.

Projecting Air Force Rated Officer Inventory Across the Total Force: Total Force Blue Line Model for Rated Officer Management
RR-2796-AF, www.rand.org/t/RR2796

MULTIDOMAIN OPERATIONS

The USAF can ensure freedom of maneuver in the cyber domain by defining cyber missions—and by identifying the knowledge, skills, and abilities needed to accomplish those missions and integrating advanced training technologies to lay the groundwork for Joint All-Domain Command and Control.

Attracting, Recruiting, and Retaining Successful Cyberspace Operations Officers: Cyber Workforce Interview Findings
RR-2618-AF, www.rand.org/t/RR2618

Building the Best Offensive and Defensive Cyber Workforce
Volume I, Improving U.S. Air Force Training and Development
RR-A1056-1, www.rand.org/t/RRA1056-1

Volume II, Attracting and Retaining Enlisted and Civilian Personnel
To ensure that service members are physically and mentally fit, the USAF can promote a culture of physical fitness and deliver programs and services to promote readiness and resilience among service members and their families.

**A Review of the Air Force Fitness Assessment**
RR-A762-1, www.rand.org/t/RRA762-1

**Is Today’s U.S. Air Force Fit? It Depends on How Fitness is Measured**
RR-A552-1, www.rand.org/t/RRA552-1

**Air Force Morale, Welfare, and Recreation Programs and Services: Contribution to Airman and Family Resilience and Readiness**
RR-2670-AF, www.rand.org/t/RR2670

### ACTION ORDER D: DESIGN AND IMPLEMENTATION

Action Order D reflects the need to develop a lethal yet affordable force that Congress supports. Determining workforce requirements is essential to ensuring that the USAF has the human capital to perform its full range of missions. PAF has assisted the USAF in understanding these requirements by examining manpower determinants and the reserve component mix.

**MANPOWER DETERMINANTS**
The USAF can better link force structure and requirements to mission needs by adopting best practices from other military services, government agencies, and private industry, and by increasing the use of virtual data collection.

**Air Force Manpower Determinants: Options for More-Responsive Processes**
RR-4420-AF, www.rand.org/t/RR4420

**RESERVE COMPONENT MIX**
The USAF must also undertake legal, resourcing, and policy changes to fully utilize the air reserve component.

**Options for Improving Strategic Utilization of the Air Reserve Component for Sustained Active-Duty Missions**
RR-A270-1, forthcoming
WORKING WITH US

WHAT WE DELIVER

PAF’s studies and analyses are tailored to the needs of the sponsor. Generally, PAF provides

- continuous interaction with PAF subject-matter experts throughout the project
- accessible, timely, and policy-focused reports that address senior leader concerns and recommend courses of action
- descriptive, transparent, and rigorous supporting materials that describe the project’s methodology and support the project’s conclusions
- as appropriate, additional outreach materials to help socialize the work to other interested stakeholders, such as the DAF, the U.S. Department of Defense, Congress, or the public.

SPONSOR IDENTIFICATION

All PAF research projects must be sponsored by a USAF general officer (GO) or member of the senior executive service (SES). Most sponsors assign one or more action officers (AOs) to manage the technical and administrative aspects of their PAF projects.

LINES OF FUNDING

DAF organizations can initiate a PAF research project in two ways:

1. **Centrally Funded** (also referred to as “core projects”). Air Force Studies, Analyses, and Assessments (SAF/SA; formerly HAF/A9) employs a rigorous, iterative, GO/SES voting process to select projects for inclusion in its annual research plan. This process accounts for about 70 percent of the projects that PAF will conduct during a fiscal year. Funding for these projects is part of a line item in the congressional budget and is awarded through the competitive selection process. Project topics are submitted in January and the research plan is approved by a steering group consisting of three- and four-star GOs between June and July. Maintaining a balance of projects across the DAF and the four PAF programs is key to this selection process.

2. **Sponsor Funded** (also referred to as “add-on projects” because they are add-ons to the core research agenda). This process accounts for about 30 percent of the projects that PAF will conduct during a fiscal year. Funding for these projects comes directly from the organization requesting the research and does not require a competitive selection process because the requesting organization is paying for the research (and not competing with others). DAF sponsors may initiate a PAF add-on research project at any time of the year by requesting the work, submitting required documentation, and transmitting organizational funds. Ideas and requests for PAF add-on projects may originate from a variety of circumstances (e.g., continuation of prior PAF work or new challenges). To initiate the process, a sponsor or AO typically contacts the appropriate PAF program director or subject-matter expert. The timeline of add-on projects is flexible.

PAF also supports DAF organizations in many informal ways. To request WDH research reports highlighted here or to discuss pressing DAF challenges, contact the director of PAF’s WDH program at www.rand.org/paf/about/pafmanagement.

NOTE


RAND Project AIR FORCE (PAF), a division of the RAND Corporation, is the Department of the Air Force’s (DAF’s) federally funded research and development center for studies and analyses, supporting both the United States Air Force and the United States Space Force. PAF provides the DAF with independent analyses of policy alternatives affecting the development, employment, combat readiness, and support of current and future air, space, and cyber forces. Research is conducted in four programs: Strategy and Doctrine; Force Modernization and Employment; Resource Management; and Workforce, Development, and Health.

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