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Racial Disparity Root Cause Analysis for the Department of the Air Force

Refining the Way Forward



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About This Report

The Department of the Air Force (DAF) recently released three reports discussing the disparities it identified for minority groups and women.¹ Eliminating documented, persistent, and unwanted disparities requires sustained commitment at all DAF organizational levels, rigorous and regular analysis, well-coordinated comprehensive implementation of well-crafted solutions, and dedicated and consistent resourcing. The DAF is taking many actions to address the disparities; however, this project was designed to assist the Air Force's Force Management Policy Directorate in refining its way forward. This report presents the results of that evaluation. The primary audiences for this report are those involved in developing policies for human capital management (HCM), such as recruiting, development, and promotion. In addition, a wide range of senior DAF leaders not involved in HCM will likely be interested in this report. The research reported here was commissioned by the Director of Military Force Management Policy, Deputy Chief of Staff for Manpower, Personnel and Services, Headquarters U.S. Air Force, and conducted within the Workforce, Development, and Health Program of RAND Project AIR FORCE as part of a fiscal year 2022 project, "Racial Disparity Root Cause Analysis."

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This report documents work originally shared with the DAF on October 21, 2022. The draft report, dated September 2023, was reviewed by formal peer reviewers and DAF subject-matter experts.

¹ Inspector General, Department of the Air Force, *Report of Inquiry (S8918P): Independent Racial Disparity Review*, December 2020; Inspector General, Department of the Air Force, *Assessment Report (S8918P): Independent Racial Disparity Review—Six-Month Assessment*, September 2021a; Inspector General, Department of the Air Force, *Report of Inquiry (S8918P): Disparity Review*, September 2021b.

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Our primary contacts were Kenneth Schwartz and Matthew Fisher. We appreciate their willingness to provide the policy background and contact information that was important for the data-gathering effort related to this research.

We also thank our DAF workshop participants, who generously gave their time in support of this research effort. Their thoughtful input on these important issues greatly benefited our work.

We also appreciate the feedback and responsiveness provided by our dedicated reviewer, Maria Lytell. Additionally, we want to thank Bart Bennett and Peter Nguyen for their thorough reviews. Collectively, these reviews helped strengthen the report and aided in communicating our key points. We want to acknowledge the contributions of our summer intern, Amy Cross. She assisted with interviews and proposed theoretical frameworks for understanding the root causes.

Summary

Issue

In December 2020 and September 2021, the Department of the Air Force (DAF) released reports discussing the disparities it identified for minority groups and women.² Eliminating documented, persistent, and unwanted disparities requires sustained commitment at all DAF organizational levels, rigorous and regular analysis, well-coordinated comprehensive implementation of well-crafted solutions, and dedicated and consistent resourcing. The DAF is taking many actions to address the disparities; however, this project was designed to assist the Air Force's Force Management Policy Directorate in refining its way forward.

Approach

The RAND team developed a framework to assess how DAF policies drive leaders' actions at strategic, operational, and tactical levels and to help identify policy gaps at each level. The team explored exemplar practices in other organizations to identify those that could help address the DAF Inspector General's findings regarding human capital management (HCM). The team conducted seven workshops with representatives from various communities that have roles in the DAF's human capital cycle and conducted additional analyses to address gaps identified during the earlier tasks. Next, the team developed dashboards that the DAF could use to routinely execute barrier analysis to analyze and improve patterns of representation and promotion within the different career fields. This project culminated with recommendations targeted at three distinct groups: HCM policymakers, wing/squadron leaders, and senior DAF leadership.

Key Findings

The project team derived these key findings:

- The DAF is implementing innovative diversity initiatives in multiple HCM pipeline segments; however, it is critical to monitor the initiatives for effectiveness and return on investment.
- The RAND assessment of disparity countermeasures and initiatives revealed gaps across root causes, governance, resourcing, and implementation accountability.

² Inspector General, Department of the Air Force, *Report of Inquiry (S8918P): Independent Racial Disparity Review*, December 2020; Inspector General, Department of the Air Force, *Assessment Report (S8918P): Independent Racial Disparity Review—Six-Month Assessment*, September 2021a; Inspector General, Department of the Air Force, *Report of Inquiry (S8918P): Disparity Review*, September 2021b.

- The DAF barrier analysis methodology could be improved if it is grounded in deductive reasoning to determine the extent to which observed disparities in a career field can be attributed to the root causes for disparities identified in the 2020 and 2021 reports.
- A dashboard would help organize the data inputs and enable development teams (DTs) and career field managers to make side-by-side comparisons of talent development and promotion analysis to determine reasons for disparities.

Recommendations

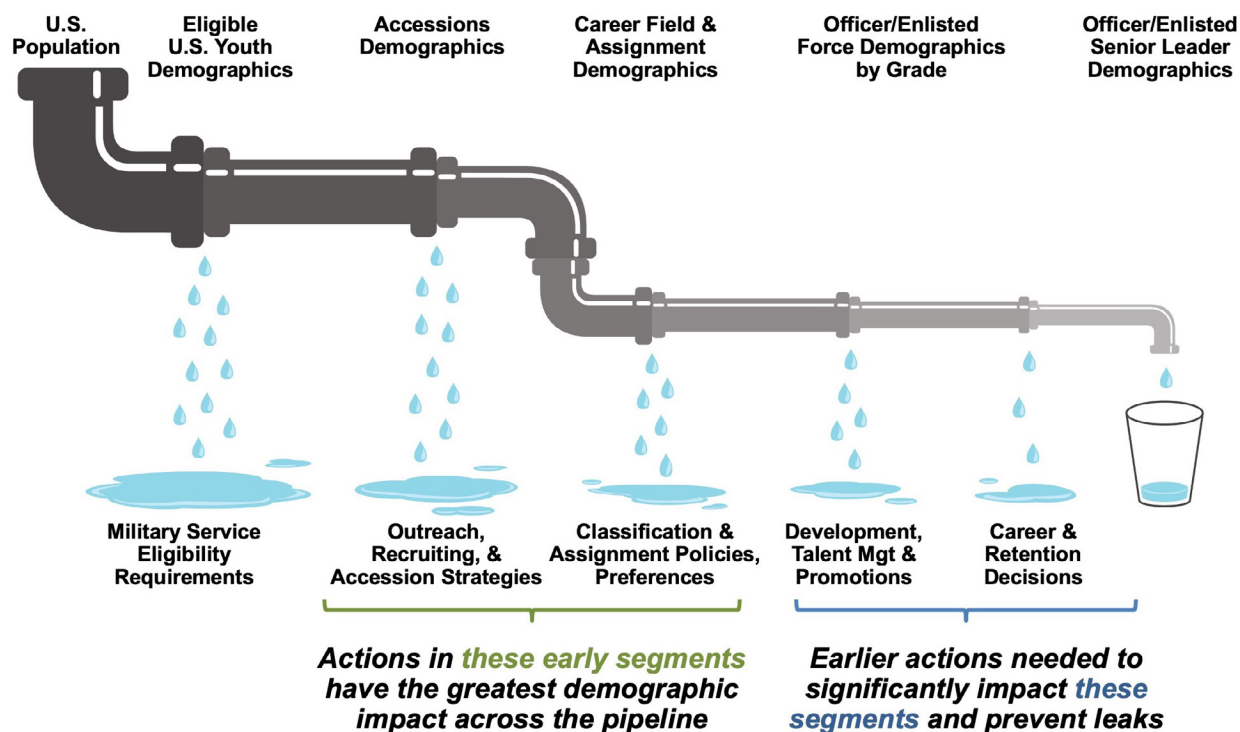
The project team offers these recommendations (Figure S.1).

Figure S.1. Recommendations for Reducing Racial Disparities in the Department of the Air Force

Force Inflow	Officer and Enlisted Recruiting	
	Recommendation 1. Expand use of published racial, ethnicity, and gender stretch goals for officer and enlisted recruitment, accessions, and career field classification	Recommendation 2. Bolster the Air Force recruiting enterprise to enable wider reach and earlier engagement
	Officer Accessions	
	Recommendation 3. Increase Air Force Reserve Officer Training Corps (AFROTC) minority-serving institution (MSI) commissioning rates by addressing fiscal, educational, and other barriers to entry	Recommendation 4. Provide competitive tools to recruit high-performing racial and ethnic minority officer candidates at selective, upper-tier science, technology, engineering, and mathematics colleges and universities
	Officer Classification (Operations Career Field Assignment)	
	Recommendation 5. Ensure that multiple rated diversity improvement countermeasures are coordinated, resourced, and measured for their effectiveness Recommendation 6. Increase awareness among internal and external audiences/influencers of programs that serve as introductions to operations career opportunities	Recommendation 7. Place successful minority officers with ops backgrounds as AFROTC MSI detachment cadre to engage with prospective recruits to ops career fields, and boost participation in You Can Fly programs
Force Management	Institutional Implementation	
	Recommendation 8. Expand use of published racial and ethnic minority promotion and retention outcomes	Recommendation 9. Build predictive success models to enable active management decisions by year group based on current, standardized data sets to enable pre-board analysis
	Base/Wing Implementation	
	Recommendation 10. Implement wing-level processes to actively manage development opportunities by year group Recommendation 11. Inculcate deliberate, active mentoring by local wing leadership Recommendation 12. Add wing-level checks and balances to increase trust and confidence	Recommendation 13. Support base-level acculturation and socialization for racial, ethnic, and gender minorities Recommendation 14. Develop and proliferate comprehensive, recurring unconscious bias training Recommendation 15. Hold commanders accountable for the diversity, equity, and inclusion (DEI) climate in their units
	Institutional Barrier Analysis	
End to End	Recommendation 16. Standardize data feeds/data sets, focus analytical approach and methodology Recommendation 17. Publish barrier analyses outcomes and resulting diversity initiatives to an “All–Air Force” Common Access Card accessible portal	Recommendation 18. Resource dedicated core staff to routinize DT barrier analysis Recommendation 19. Institute an annual DT Barrier Analyses Summit co-chaired by the Secretary of the Air Force and the Chief of Staff of the Air Force
	Strategic Narrative/Transparency/Trust, Resource Investments, and Enterprise Responsibilities	
	Recommendation 20. Communicate an action-oriented strategic narrative, and increase data transparency Recommendation 21. Commit to dedicated, consistent DEI resource investments	Recommendation 22. Assign clear lines of authority, responsibility, and accountability to conduct racial, ethnic, or gender disparity/barrier analyses, implement diversity improvement initiatives/barrier countermeasures, and assess effectiveness

RAND's project team employed a *leaky pipeline metaphor*³ to conduct our data analyses, assess current strategies and policies, and develop recommendations. Figure S.2 illustrates this framework.

Figure S.2. Key Observations: The Human Capital Pipeline



SOURCE: Adapted from the Military Leadership Diversity Commission's (MLDC's) personnel life cycle framework affecting military demographic composition. (See MLDC, *From Representation to Inclusion: Diversity Leadership for the 21st Century Military*, Final Report, March 15, 2011, p. 45.)

³ See Jason M. Sheltzera and Joan C. Smith, "Elite Male Faculty in the Life Sciences Employ Fewer Women," *Proceedings of the National Academy of Sciences (PNAS)*, Vol. 111, No. 28, July 15, 2014.

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Introduction

In December 2020, the Department of the Air Force (DAF) Inspector General (IG) released *Report of Inquiry (S8919P): Independent Racial Disparity Review* (which we will also refer to as the RDR), which examined racial disparities that exist for Black service members in several areas, including certain promotion rates and selection/classification into operational versus support career fields.⁴ In September 2021, the DAF IG released *Report of Inquiry (S8918P): Disparity Review* (which we will also refer to as the DR), which expanded on the RDR by examining disparities in discipline and opportunities for other racial/ethnic minorities—Asian, Native American, Pacific Islander, and Hispanic/Latino—and for women.⁵ These reports found that minority military members are underrepresented in promotions to E-5–E-7 and O-4–O-6 and in the operational Air Force specialties, with the largest disparity being among pilots. The Director of Military Force Management Policy, Deputy Chief of Staff for Manpower, Personnel and Services, Headquarters U.S. Air Force (AF/A1P), was charged with responding to the DAF IG reports by identifying root causes that explain the racial disparities and developing countermeasures to address them.⁶

Drawing on RAND’s expertise in racial equity research, the AF/A1P asked RAND Project AIR FORCE (PAF) to assist in refining the DAF’s way forward (i.e., a long-term response strategy). The goal was to address identified root causes by identifying measures of effectiveness and conducting case studies of experiences and development among both diverse and more homogeneous communities within the DAF.

A critical component for a long-term response strategy is to develop a synchronized human capital management (HCM) analysis capability for diversity and inclusion. This deficiency in DAF HCM was emphasized in the 2021 Air Force–sponsored National Academies of Science report *Strengthening U.S. Air Force Human Capital Management: A Flight Path for 2020–2030*.⁷ The report highlighted three priorities to strengthen the DAF HCM system:

1. *Data*. It is important to manage airmen and guardians with an interconnected HCM system that facilitates decisions driven by data that are systematically collected and analyzed.

⁴ Inspector General, Department of the Air Force, *Report of Inquiry (S8918P): Independent Racial Disparity Review*, December 2020.

⁵ Inspector General, Department of the Air Force, *Report of Inquiry (S8918P): Disparity Review*, September 2021b.

⁶ As stated in the DR (Inspector General, Department of the Air Force, 2021b, p. 1), “a disparity exists when the proportion of a racial-ethnic or gender group within a subset of a population is different from the proportion of the majority group subset or the general or existing DAF population. . . . While the presence of a disparity alone is not evidence of racism, sexism, discrimination, or disparate treatment, it may present a concern that requires more in-depth analysis.”

⁷ National Academies of Sciences, Engineering, and Medicine, *Strengthening U.S. Air Force Human Capital Management: A Flight Plan for 2020–2030*, National Academies Press, 2021.

2. *Airman/guardian*. Prioritize airmen and guardians by giving them a larger role in job assignments to maximize their contribution to the mission and to help ensure that the DAF remains a competitive employer.
3. *Research*. The world is changing too fast to expect the DAF HCM system to keep pace without data-driven collaboration and research, including leveraging advantages of artificial intelligence.⁸

These HCM priorities are also essential if the DAF is going to reduce the racial/ethnic and gender disparities identified in the DAF IG reports. This more-systematic approach should help produce an alignment of strategic outcomes for diversity management with the DAF's HCM policies, organizational functions, program, and practices.

Study Objective and Approach

The DAF IG's independent RDR in December 2020 found that Black service members in the DAF face disparities in career opportunities and disciplinary action compared with their White peers. The DAF immediately initiated several root cause analyses (RCAs) conducted by different teams. These teams were trying to identify the root causes for the disparities (e.g., promotions, retention, military justice). In September 2021, the DAF released a six-month progress update on the RDR findings and the DR.⁹ The DR extended the focus on ethnicity and gender to include members of the following groups: Hispanic, Latino, Asian, American Indian, Alaska Native, Native Hawaiian, and Other Pacific Islander. This review addressed personnel opportunities and disciplinary actions for these groups. Also, in accordance with Air Force Instruction (AFI) 36-7001, the Air Force Directorate for Force Development (AF/A1D) provided data to the development teams (DTs) and led the teams through a barrier analysis process.¹⁰ Each DT performed a version of barrier analysis primarily focused on promotion disparities. The results were compiled by AF/A1D and provided to the Secretary of the Air Force Office of Diversity and Inclusion (SAF/DI). SAF/DI will review those results to identify broader DAF trends and patterns.

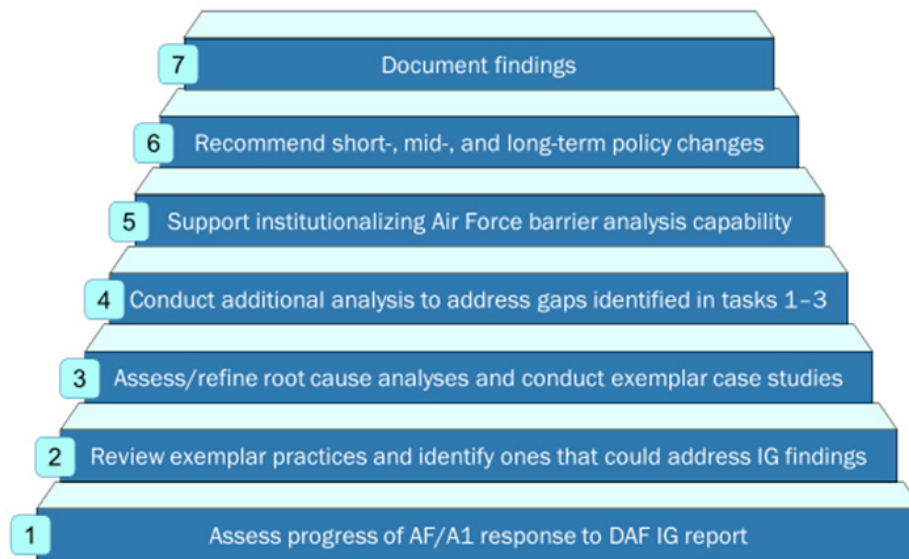
The RAND research team sought to build upon that prior work. As shown in Figure 1.1, RAND researchers performed several tasks that will help the DAF to address racial disparities in its workforce. Working with the sponsor, the authors structured the tasks so that they would build on each other.

⁸ National Academies of Sciences, Engineering, and Medicine, *Strengthening U.S. Air Force Human Capital Management: A Flight Path for 2020–2030, Consensus Study Report Highlights*, National Academies Press, 2020, pp. 2–3.

⁹ Six-month progress update (also referred to as the *six-month assessment*): Inspector General, Department of the Air Force, *Assessment Report (S8918P): Independent Racial Disparity Review—Six-Month Assessment*, September 2021a. DR: Inspector General, Department of the Air Force, *Report of Inquiry (S8918P): Disparity Review*, September 2021b.

¹⁰ AFI 36-7001, Diversity & Inclusion, February 19, 2019.

Figure 1.1. RAND PAF Major Tasks



The project’s purpose was to assess the progress of the Deputy Chief of Staff for Manpower, Personnel, and Services, Headquarters U.S. Air Force (AF/A1), in response to the DAF IG report; therefore, task 1 permeates the effort. As discussed in Chapter 2, for task 2, the RAND team developed a framework to assess each proposed HCM countermeasure using a standard set of questions. This framework focused on how DAF policies drive leaders’ actions at strategic, operational, and tactical levels, and it helped identify policy gaps at each level. Leveraging research from prior projects, the team explored exemplar practices in other organizations to identify those that could help address the DAF IG’s findings regarding HCM. As discussed in Chapter 3, for task 3, the team conducted seven workshops with representatives from various communities that have roles in the human capital cycle (i.e., officer career field managers [CFMs], enlisted CFMs, squadron commanders, senior enlisted leaders, Air Force Reserve Officer Training Corps (AFROTC) detachment commanders serving at minority-serving institutions [MSIs], barrier analysis team leaders, and DT chairs). Based on these workshops, the team developed several themes to address the disparities.

Using this information and logistic regression models, the RAND team performed additional analyses for task 4. These analyses highlight the importance of sustainment: Implementing and sustaining change is challenging and complex, requiring both planning and well-established procedures to be effective. As discussed in Chapter 4, for task 5, the team developed notional dashboards that the DAF could use to routinely execute barrier analysis. These dashboards help users analyze and improve patterns of representation and promotion within the different career fields. The dashboards leverage information garnered via a more synchronized HCM analysis capability for diversity, equity, and inclusion (DEI).¹¹ Finally, as discussed in Chapter 5, for task 6, this project culminated with

¹¹ See National Academies of Sciences, Engineering, and Medicine, 2021, pp. 41–53, for a discussion of the attributes that make an effective human capital system. That chapter also discusses the challenges that the DAF faces as it seeks equilibrium between implementing best practices and best fit.

recommendations targeted at three distinct groups: HCM policymakers, wing/squadron leaders, and senior DAF leadership.

Structure of This Report

The remaining chapters in this report provide the results of our analyses and document our findings and recommendations. Chapter 2 discusses the framework used to identify policy gaps at strategic, operational, and tactical levels. Chapter 3 discusses themes from various workshops and how those themes relate to the findings identified in Chapter 2. Chapter 4 discusses the proposed dashboards that DAF may use to execute barrier analyses. It also discusses the synchronized analytic capability needed to support these analyses. Chapter 5 provides our conclusions and summarizes the recommendations. An appendix lists the countermeasures from the RDR.

Assessment of DAF Countermeasures

The RDR and the subsequent RCA of the issues that the IG identified provided the foundation for our analysis. Per agreement with the sponsor, this project was structured to build on rather than replicate the DAF RCA. We should also note that the DAF was working to address some of the identified issues at the time of this research, and, as a result, some of the deficiencies may have been addressed by the time this report is published.

In this chapter, we discuss both DAF documents to provide the context for our assessment of the countermeasures and longer-term sustainment challenges. The assessment was derived from three sets of RAND-developed criteria: (1) the countermeasures design and support for long-term sustainability, (2) the number of root causes for disparities addressed by the countermeasures, and (3) the extent of organizational coordination established to manage the countermeasures. The assessment concludes with a notional summary assessment of risk to countermeasure success.

DAF Root Cause Analysis

In response to the RDR, AF/A1 assembled several cross-functional working groups to address the RDR findings.¹² These working groups were led by Air Force staff members, and three groups—enlisted promotion disparities, officer promotion disparities, and career field classification disparities—included RAND representatives. The specific disparity problems (as articulated in the RDR) addressed by these groups were the following:

- a. Black service members are underrepresented in operational career fields and overrepresented in support career fields.
- b. Black officers are being nominated for intermediate developmental education (IDE) and senior developmental education (SDE) at a rate that exceeds the overall nomination rate but are being designated to attend (DA) at a rate that is lower than the overall DA rate.
- c. Black enlisted members are consistently underrepresented in all promotion categories and ranks except E-8 and E-9, with the largest disparities in the ranks of E-5 and E-6.
- d. Black officers and officers from other underrepresented groups are consistently promoted below the overall average rate and below White officers' rate in almost every in-the-promotion-zone (IPZ) board to O-4, O-5, and O-6.
- e. Military and civilian DTs' barrier analysis reports are not standardized and lack specificity, resulting in incomplete and/or insufficient reporting details and actionable plans.

¹² While working groups had also been established for sexual harassment, disciplinary disparities, wing commander selection disparities, and civilian promotion disparities, RAND's participation was focused on the classification disparity and promotion disparity working groups for the RCA and the assessment of the subsequent countermeasures.

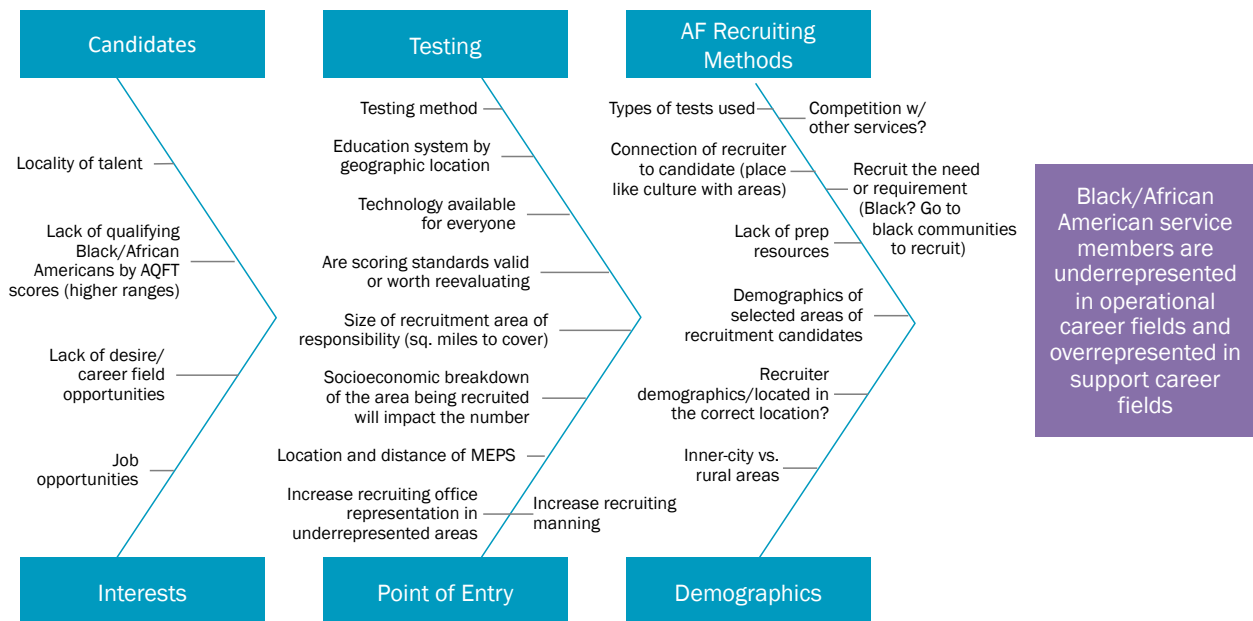
The groups employed the U.S. Air Force (USAF) practical problem-solving model¹³ to develop countermeasures and subsequent action plans to address these disparities. The model delineates an eight-step process: (1) clarify and validate the problem, (2) break down the problem and identify performance gaps, (3) set improvement targets, (4) conduct cause analysis, (5) develop countermeasures and an implementation plan, (6) see countermeasures through, (7) confirm results and process change, and (8) standardize successful processes. The working groups' efforts focused on steps 1 through 5 and used available Air Force data on racial and ethnic group differences in accessions testing; career field classification; professional development; career development; and promotions for enlisted, officer, and civilian personnel.

The working groups participated in weekly meetings over a three-month period to conduct the RCA (step 4) and develop countermeasures and an implementation plan (step 5). The RCA was facilitated by an Air Force Manpower Analysis Agency team. It involved structured group problem-solving discussions to explore the structural and process factors that could be contributing to the reported disparities at different stages of an airman or guardian's career life cycle.

The first stage of the RCA resulted in fishbone diagrams, created by the working groups, that listed the candidate factors contributing to specific disparities. Figure 2.1 is an example of a fishbone diagram, created by the classification working group to analyze representation disparities in operational career fields. The candidate factors are categorized as they are related to candidates, interests, testing, point of entry, Air Force recruiting methods, and demographics.

¹³ Air Force Smart Ops for the 21st Century, "Problem-Solving," brochure, undated.

Figure 2.1. Career Field Disparities Fishbone Diagram



SOURCE: Adapted from DAF, “RDR Classification Disparities Root Cause Analysis,” HAF/A1PT, briefing, April 2, 2021a, Slide 29.

NOTE: AF = Air Force; AQFT = Armed Forces Qualification Test.

The second stage of the RCA prioritized each candidate factor’s relative impact by consensus ratings of 9 (high), 4 (medium), or 1 (low) for the following three criteria: (1) the availability of data to validate the factor’s influence, (2) the factor’s direct relationship to the reported disparity, and (3) the factor’s impact on creating the disparity. An example of this prioritization process created by the promotion disparity working group is shown in Table 2.1. Candidate factors responsible for promotion disparities are listed in the second column. Column 1 identifies the category assigned to the candidate factor. The remaining columns record the consensus scores and the total weighted score. This process helped the working groups identify the most potent root causes and create specific countermeasures to mitigate each disparity.

Table 2.1. Example of Officer Promotion Disparities Prioritization

Category	Officer Promotions Disparities: Prioritization Matrix	Validation (Data)	Relationship to Problem	Impact to Problem	Total Weighted
People (service members)	Adverse information and clean record rate	9	9	9	9.00
People (leadership)	Disparity of DP recommendations w/in AFSC categories (RDR, p. 70)	9	9	9	9.00
People (leadership)	Lower representation in DP recommendations (RDR, p. 69)	9	9	9	9.00
People (leadership)	Selection and performance in SQ/CC	9	9	9	9.00
People (leadership)	IDE/SDE in-residence pushes	9	9	9	9.00
People (leadership)	Higher rates of adverse actions (minorities)	9	9	9	9.00
Policy	SOS/IDE DG guidance	9	9	9	9.00
Procedures	Low selection rates for career broadening opportunities	9	9	9	9.00
Procedures	Lower selection rates for key developmental opportunities (e.g., in-residence IDE/SDE)	9	9	9	9.00
Procedures	Recruitment of diverse population	9	9	9	9.00
People (leadership)	Promotion Recommendation Form and Officer Performance Report stratification statements	4	9	9	7.33
Procedures	Mentorship, coaching, and feedback (formal and informal)	4	9	9	7.33
Procedures	Lack of transparency and understanding unofficial and informal selection processes (i.e., how a WG/CC picks an executive officer)	4	9	9	7.33
People (leadership)	Structural bias	4	9	9	7.33
Policy	Promotion memory (halo effect)	4	9	9	7.33
People (service members)	Bias (conscious and unconscious with respect to who is mentored/coached, given opportunities, etc.)	4	9	9	7.33
Policy	Quality of supervisor	1	9	9	6.33
Procedures	Stratification policy (includes lack of policy)	1	9	9	6.33

NOTE: AFSC = Air Force Specialty Code; DG = Distinguished Graduate; DP = Definitely Promote; SOS = Squadron Officer School; SQ/CC = Squadron Commander; WG/CC = Wing Commander.

Disparity Review

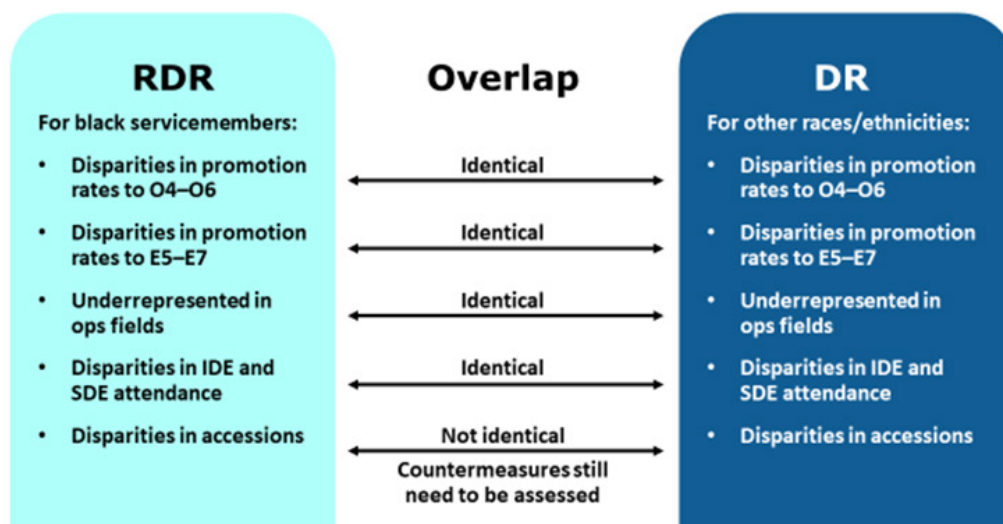
The DR expanded the RDR's focus on African Americans by addressing disparities in discipline and opportunities for women and racial and ethnic minorities, including Asian American, Native American, Pacific Islander, and Hispanic/Latino personnel. Figure 2.2 provides a high-level comparison of the RDR and DR findings.

Comparing the findings from the two reports suggests the following:

1. The scale of the representation, development, and promotion disparities is significant. The commonality of issues shared by underrepresented groups of service members indicates that large numbers of airmen and guardians at some point in their careers could be directly or indirectly affected by DAF policies, processes, or practices that result in disparities.
2. The differences noted in accessions disparities among African Americans (reported in the RDR) and other underrepresented groups (reported in the DR) highlight that the scope of the countermeasures for these disparities may need to be broad and possibly tailored to each underrepresented subgroup.¹⁴
3. The findings from the two reports combined strongly indicate that the potential impact of the reported disparities is consequential. Underrepresented racial and ethnic groups compose roughly 40 percent of the enlisted force and 25 percent of the officer corps. The reported disparity issues can have an immediate impact on retention and full utilization of DAF talent, as well as on future recruitment from underrepresented communities.

Working with the project sponsor, the project team determined that the countermeasures created to address the RDR disparities are also applicable to nearly every DR disparity. This conclusion allowed the team to focus the assessment on the RDR countermeasures that had already been developed. It also gave the team the highest confidence that the results of the assessment would have a similar practical impact on disparities affecting the underrepresented groups reported in the DR.

Figure 2.2. RDR and DR Countermeasure Comparisons



The next section shows the results of step 5 in the Air Force problem-solving model (develop countermeasures and an implementation plan) for each classification and promotion disparity problem. The section also presents the team’s policy-driven assessment framework that was used to assess the long-term sustainability of the countermeasures.

¹⁴ The team assessment occurred during fall 2021. At that time, the DAF had not developed specific countermeasures for the reported accessions disparities.

Assessment of DAF Countermeasures

The RDR validated 16 disparities, nine of which fall within AF/A1 policy oversight. The same AF/A1 cross-functional working groups that completed the RCA for the disparities developed countermeasures appropriate to eliminating or mitigating the problem and specified the offices primarily responsible for implementing the countermeasure (the Office[s] of Primary Responsibility column in Table 2.2). The scope of the RAND team's assessment included the countermeasures for each problem statement listed in Table 2.2.¹⁵ The assessments were conducted with representatives of the organizations listed as having primary responsibility for the countermeasures.

Table 2.2. Countermeasures Assessed

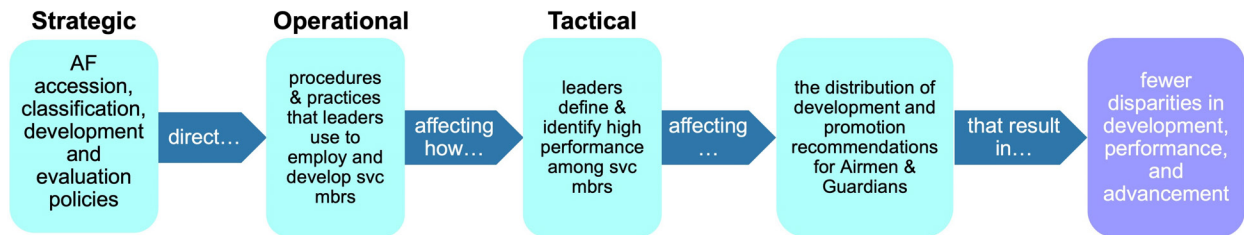
Disparity Problem (AF 6-Month Assessment Reference)	# Countermeasures	OPR(s)
2.2. Black service members are underrepresented in operational career fields and overrepresented in support career fields	8	AFRS, AFPC
2.3. Black officers are being nominated for IDE/SDE at higher than the overall nomination rate but designated to attend at a lower rate	3	A1D
2.5.1. Black enlisted members were consistently underrepresented in all promotion categories and ranks except E8 and E9 with the largest disparities in the ranks of E5 to E6	4	A1PE, A1PT
2.5.2. Black officers and officers from other underrepresented groups consistently promoted below the overall average rate and below White officers' rate in almost every IPZ board to O4, O5, and O6	7	A1D, A1PP
2.7 - Military and Civilian Developmental Teams' (DTs) barrier analysis reports were not standardized and lacked specificity, resulting in incomplete and/or insufficient reporting details and actionable plans.	10	A1D, ODI
Disparity problems not included: sexual harassment, disciplinary, wing commander selection, civilian disparities		

NOTE: A1D = Air Force Directorate for Force Development; A1PE = Air Force Enlisted Evaluations & Promotion Policy; A1PP = Air Force Office of Military Force Policy; A1PT = Air Force Accessions & Training Management Division; AFPC = Air Force Personnel Center; AFRS = Air Force Recruiting Service; ODI = Office of Diversity and Inclusion.

The RAND team developed a policy-driven framework to assess the long-term sustainability of each countermeasure and then established additional criteria to determine the likelihood of each set of countermeasures successfully mitigating or solving respective diversity problems. The DAF's HCM is designed as a system that functions at strategic, operational, and tactical levels, as shown in Figure 2.3.

¹⁵ The problem number identifiers in Table 2.2 are taken from Inspector General, Department of the Air Force, September 2021a. The appendix lists all 32 countermeasures for these five problems.

Figure 2.3. Policy-Driven Categorization Assessment Framework



At the strategic level, DAF accession, classification, development, and evaluation policies direct operational procedures and practices that leaders use to employ and develop service members. Numerous reports by RAND and a 2021 report by the National Academy of Sciences, Engineering, and Medicine have described the relationship between HCM policies and operational action.¹⁶ The translation of DAF HCM policy intent and specific policy instructions into organizational roles, responsibilities, and actions results in the manpower, personnel, training, development, and promotion processes that service members experience. In turn, these operational processes affect how leaders at the tactical level develop airmen and guardians and how they define and identify high performance among service members.¹⁷ The racial, ethnic, and gender disparities reported by the DAF IG are an unintended consequence of the culmination of these policies, procedures, practices, and leaders' actions that govern how competitive development opportunities are distributed, how individual performance is assessed in the form of performance reports, and ultimately what promotion recommendations personnel receive.

Within this framework, the team interpreted the DAF's countermeasures as initiatives to correct strategic, operational, and tactical elements of this system that will result in fewer racial, ethnic, and gender disparities throughout the personnel life cycle. Reflecting this framework, the RAND team developed specific criteria for the strategic, operational, and tactical levels of this systems framework to assess the long-term sustainability of each of the 32 countermeasures. In its simplest form, *long-term sustainability* is defined as the ability to be maintained at a certain rate or level. Within the DAF HCM context, this definition extends to maintaining the structural, management, resource, and evaluation components of each countermeasure to ensure that its intended long-term effects will be realized.

¹⁶ See Susan M. Gates, Edward G. Keating, Adria D. Jewell, Lindsay Daugherty, Bryan Tysinger, Albert A. Robbert, and Ralph Masi, *The Defense Acquisition Workforce: An Analysis of Personnel Trends Relevant to Policy, 1993–2006*, RAND Corporation, TR-572-OSD, 2008; Georges Vernez, Albert A. Robbert, H. G. Massey, and Kevin Driscoll, *Workforce Management Requires an Analysis-Based Approach*, RAND Corporation, RB-215-AF, 2007; Robert M. Emmerichs, Cheryl Y. Marcum, and Albert A. Robbert, *An Executive Perspective on Workforce Planning*, RAND Corporation, MR-1684/2-OSD, 2004a.; Robert M. Emmerichs, Cheryl Y. Marcum, and Albert A. Robbert, *An Operational Process for Workforce Planning*, RAND Corporation, MR-1684/1-OSD, 2004b.; Lionel A. Galway, Richard Buddin, Michael R. Thirtle, Peter Ellis, and Judith D. Mele, *Understrength Air Force Officer Career Fields: A Force Management Approach*, RAND Corporation, MG-131-AF, 2005; Kevin O'Neill, *Sustaining the U.S. Air Force's Force Support Career Field Through Officer Workforce Planning*, RAND Corporation, RGSD-302, 2012; National Academies of Sciences, Engineering, and Medicine, 2021.

¹⁷ Service cultural factors likely affect these relationships, but it was beyond the scope of this project to address the cultural dimensions.

Assessment Criteria

There are four *strategic* assessment criteria, which are aligned with the dimensions of organizational governance specified in RAND's strategic governance review for multi-organizational systems of education, training, and professional development.¹⁸

1. a strategic requirements definition
2. long-term resource requirements
3. assigned organizational responsibilities, coordination processes, and accountability processes to achieve long-term diversity objectives
4. evaluation processes to assess progress toward achieving long-term diversity objectives.

The four *operational* assessment criteria are RAND-generated and represent the HCM domains that were examined in the RCA working groups. These criteria focus on the degree to which the countermeasures establish processes and practices to implement diversity management policies and achieve diversity requirements in the following areas:

1. recruitment, accession, and classification
2. training processes
3. individual mentoring and deliberate development
4. talent management and development.

Three *tactical-level* criteria are RAND-generated and focus on the degree to which the countermeasures impact a leader's ability to equitably develop airmen and guardians and conduct accurate assessment of performance and promotion potential:

1. the leader's ability to apply comparable definitions of performance and potential across specialties in advancement decisions
2. the specification of accountability processes for equitable stratification assessments for development and advancement recommendations
3. the specification of accountability processes for the equitable development of subordinate airmen.

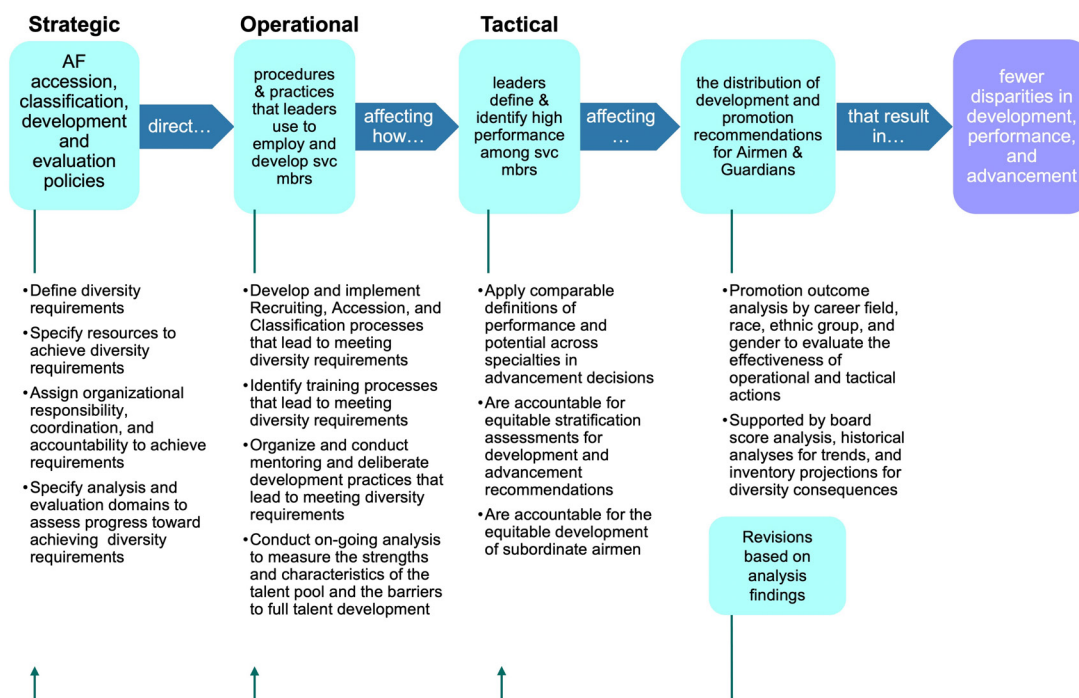
An additional set of criteria was created by RAND to establish the degree to which the countermeasures addressed two features of promotion board outcomes:

1. the degree to which the countermeasure incorporates a promotion outcome analysis by career field, race, ethnic group, and gender to evaluate the effectiveness of the operational and tactical actions
2. the degree to which the countermeasure's effectiveness is supported by promotion board score analysis, historical trend analysis, and inventory projections for diversity consequences.

¹⁸ Glenn A. Daley, Dina G. Levy, Tessa Kaganoff, Catherine H. Augustine, Roger W. Benjamin, Tora K. Bikson, Susan M. Gates, and Joy S. Moini, *A Strategic Governance Review for Multi-organizational Systems of Education, Training, and Professional Development*, RAND Corporation, MR-1560-OSD, 2003.

To mirror the DAF HCM system, the assessments for this project were designed to also be used as an ongoing assessment for the DAF to manage current and future diversity disparity countermeasures for achieving DAF diversity objectives. The system's relationship to the assessment criteria is shown in Figure 2.4. Each level of assessment criteria for countermeasures provides cascading levels of rigor that result in a countermeasure's long-term effectiveness and can be used to identify needed corrections to the countermeasures portfolio. Viewing the DAF HCM system through the strategic, operational, and tactical assessment criteria can more clearly identify deficiencies that threaten the DAF's efforts to achieve its diversity management objectives.

Figure 2.4. Policy-Driven Assessment Criteria



Countermeasure Assessment Methodology

The countermeasures assessment was conducted with the DAF points of contact from organizations responsible for implementing the countermeasures. The individual assessment sessions ranged from one to two hours and were designed to allow the point of contact to identify the degree to which the countermeasure met each assessment criterion. Participants' judgments were expressed using a stoplight indicator, where green indicated that the countermeasure fully met the criteria, yellow indicated partial fulfillment, and red indicated that the criterion was relevant to the countermeasure but was not met. The assessment included identifying criteria that were not applicable to the purpose or intent of the countermeasure. Explanations were recorded for yellow and red assessments to identify the additional elements that the countermeasures would need to meet the criteria.

A partial display of an assessment matrix nomenclature is shown in Table 2.3. The left column lists the criterion assessment question. The question shown in this excerpt addresses the strategic governance criterion of whether there exists a policy or policies that support the countermeasure initiative. The entries across the top row of the table begin with the specification of the RDR disparity. Next, each countermeasure (and its formal reference) to the disparity is listed as a column header from left to right. The entries populating the table contain the results of the assessment as a stoplight color code indicating the extent to which the criterion had been satisfied and as a narrative supporting the color code.

Table 2.3. Example of the Assessment Nomenclature

Question	RDR/DR Initiatives to Address: Disparity in AFSCs (Ops vs. Support Career Fields) (RDR cross-reference pp. 34–45) Problem Statement: Per DAF IG’s Independent RDR, December 2020, and results of data analysis and surveys of 123,000 Airmen, Black/African American service members are underrepresented in operational career fields and overrepresented in support career fields.	Provide more resources and information on operational career paths to potential recruits via Air Force Work Interest Navigator (AF-WIN) and new enhanced job counseling platform (Six-Month Assessment Sub-Paragraph 2.2.3.1) (Point of contact [POC] Air Force Recruiting Service [AFRS]): Done (Note: Assessment based on a hypothetical target for minority recruiting. Recruiting goals are the basis for all AFRS planning and operations.)	Leverage AFRS quarterly job matching scheme to provide up to 5 months to encourage and place recruits in the right job (Six-Month Assessment Sub-Paragraph 2.2.3.2) (POC AFRS): Done (Note: Assessment based on a hypothetical target for minority recruiting. Recruiting goals are the basis for all AFRS planning and operations.)	Improve marketing efforts toward underrepresented populations and untapped geographical regions, academic sources, Minority Serving Institutions, affinity-based professional organizations/ events/outreach, and networks with science, technology, engineering, and mathematics (STEM) groups (Six-Month Assessment Sub-Paragraph 2.2.3.3) (POC AFRS)	Create deliberate minority recruiting strategy to ensure minority recruiters from operational career fields are best used to inspire, engage and recruit other minority candidates into operational career fields (Six-Month Assessment Sub-Paragraph 2.2.3.4) (POC AFRS)	Initiate communication campaign targeting recruiters to highlight their crucial role in promoting enterprise diversity and inclusion priorities (Six-Month Assessment Sub-Paragraph 2.2.3.5) (POC AFRS)	Perform operational pipeline analysis to determine where Black/African Americans are departing training and/or cross training and creating plan to address findings (Six-Month Assessment Sub-Paragraph 2.2.3.6) (POC Air Force Personnel Center [AFPC], AF/A1P)	Review and update screening measures, as appropriate, with emphasis placed on predictive success models targeting operational career fields (Six-Month Assessment Sub-Paragraph 2.2.3.7) (POC AFPC, AF/A1P)	Review and update Armed Forces Qualification Test (AFQT) and Pilot Candidate Selection Method (PCSM) as recommended by the AFQT and PCSM working group (Six-Month Assessment Sub-Paragraph 2.2.3.8) (POC AFPC, AF/A1P)
Is the initiative supported by policy that states DAF diversity objectives? (Strategic Criteria [S])		Yes AF Policy, Air Force Policy Directive (AFPD) 36-20, <i>Recruiting Programs and Accession of Military Personnel</i> , March 3, 2023, and Air Force Manual (AFMAN) 36-2032, <i>Military Recruiting and Accessions</i> , October 24, 2023, do not specify diversity objectives. AFPD 36-20 has the following sentence: "It is Air Force policy to: 1.1. Attract, engage, and access the brightest, physically fit individuals to create a diverse, technically-savvy, military force that can successfully execute the Air Force’s mission." However, AFRS staff assert that the current policy documents will support the countermeasure.	Yes The countermeasure is supported by current guidance.	Partially AFMAN 36-2032 broadly supports this initiative, but the document does not currently delineate required measures of diversity recruiting with regard to tracking, marketing, advertising efforts, and producing matrix reports outlining return on investment for efforts. Conversely, Air Force Recruiting Service Instruction (AFRSI) 36-2001, <i>Recruiting Procedures for the Air Force</i> , April 1, 2005, incorporating through Change 2, September 8, 2008, specifically states that recruitment and selection be made without regard to race, color, religion, sex, or national origin. AFRS staff cannot fully answer this question because the marketing efforts would be driven by the requirements. AFRS conducts broad campaigns that have the flexibility to focus on specific minority groups under current policy.	No (1) AFMAN 36-2032 does not delineate a policy or set of policies that would support a deliberate minority recruiting strategy using minority recruiters from operational career fields to recruit other minority candidates into operational career fields. (2) AFRSI 36-2001 specifically states that recruitment and selection be made without regard to race, color, religion, sex, or national origin.	Partially AFMAN 36-2032, Section 2.2.4., Training Responsibilities (pp. 14–15), supports the initiative generally but does not specifically identify training requirements on topics of enterprise diversity and inclusion priorities.	No AF policy does not specifically address pipeline analysis for minorities in general or African Americans as a group. AFPC staff state that there needs to be clear specification of the 80 percent rule for adverse impact in the appropriate policy documents. There may be an AFRS policy, but this should be checked. Not sure if there is a U.S. Department of Defense (DoD) policy.	Partially AFMAN 36-2664, <i>Personnel Assessment Program</i> , January 30, 2024, provides general support for this initiative. However, the document does not specifically identify diversity objectives, diversity metrics, or diversity impacts of screening measures.	Partially AFMAN 36-2664 provides general support for this initiative. However, the document does not specifically identify diversity objectives, diversity metrics, or diversity impacts of screening measures. AFPC staff say that such wording in a policy document would be helpful.

NOTE: Cell color key: Red = Does not answer assessment question. Yellow = Partially answers assessment question. Green = Completely answers assessment question.

To summarize, the assessment for long-term sustainability across all 32 countermeasures identified major, common deficiencies at the strategic, operational, and tactical levels.

1. At the strategic level, many relevant policy documents that could support countermeasures
 - do not explicitly address diversity requirements and objectives
 - do not explicitly address lines of organizational responsibility, coordination, and accountability among stakeholders to achieve diversity objectives
 - do not explicitly address strategic-level evaluation processes to evaluate the effectiveness of diversity management.
2. At the operational level, the countermeasures
 - lack precise explanations of how countermeasures address a root cause (directly or indirectly)
 - lack precise explanations of how countermeasures will achieve diversity requirements and objectives
 - lack shared understanding among stakeholders about how countermeasures operate systemically to achieve diversity requirements and objectives.
3. At the tactical level, the countermeasures
 - do not address leader accountability processes to ensure that stratification assessments leading to promotion are equitable
 - do not address leader accountability processes to ensure that development across racial, ethnic, and gender subgroups is equitable
 - do not incorporate the design of promotion board analysis that can contribute to assessing diversity outcomes and inform corrections to strategic and operational diversity countermeasures.

To augment the long-term sustainability assessment, the team added two more criteria to estimate the risk that a set of countermeasures will fail to address a disparity problem.¹⁹ In total, this comprehensive assessment includes


- strategic, operational, and tactical deficiencies that threaten the long-term sustainability of the countermeasure
- the number of root causes for the disparities that are addressed by the countermeasures
- the completeness of the enterprise-level processes to support the governance and management of the complete set of countermeasures.

The logic supporting the comprehensive assessment is as follows: (1) The less sustainable the countermeasures are, (2) the fewer root causes that are addressed by the countermeasures, and (3) the fewer enterprise-level governance and management processes are established for the countermeasures, then (4) the higher the notional risk to success for diversity and inclusion improvements. Figure 2.5 displays the template used to summarize the assessment of countermeasures assigned to each of the

¹⁹ During the assessment process, DAF points of contact for a countermeasure were asked whether it was able to address the reported root causes and whether there were supporting processes or enterprise-level processes to manage the countermeasure.

five disparity problems. The entries in the quadrants identify at a high level what needs to be addressed to move out of the red risk zone.

Figure 2.5. Criteria Questions for Each RDR Problem

<p>1</p> <p>Are the countermeasures designed for long-term sustainability and success?</p>	<p>2</p> <p>Do the countermeasures map to the root causes?</p> <p>✓ Yes, they map ✗ No, they do not map</p>
<p>3</p> <p>Are there clear lines of responsibility, coordination, and accountability across organizations contributing to the countermeasure?</p>	<p>4</p> <p>What is the risk to AF success for diversity and inclusion improvements?</p> 

The next section discusses the specific sustainability deficiencies for the countermeasures assigned to each diversity problem and introduces additional criteria that, when combined with specific sustainability threats, indicate the extent to which each set of countermeasures can be expected to correct specific disparity problems.

Risk Assessment

The purpose of the risk assessment was to identify consequential impediments to the countermeasures successfully solving specific disparity problems. With that objective in mind, the assessment results will be presented for each disparity problem listed in Table 2.2. The risk assessment template shown in Figure 2.5 accompanies the narrative description of the results.

Disparity Problem 2.2. Black Service Members Are Underrepresented in Operational Career Fields and Overrepresented in Support Career Fields

The DAF goal is to have equal/proportional representation in all accessions.²⁰ The fact that Black service members are underrepresented in operational career fields and overrepresented in support career fields indicates that this goal has not been achieved. Eight countermeasures were developed to achieve two goals specified in the RCA of this problem:²¹

²⁰ As stated in DAF, "A1PT RDR-Classification Disparities Root Cause Analysis Briefing," April 6, 2021c, Version 16.

²¹ As stated in DAF, "A1PT RDR-Classification Disparities Root Cause Analysis Briefing," April 6, 2021b, Version 15, Slide 10.

1. a recruiting strategy that would achieve an officer and enlisted talent pipeline reflecting the diversity of the current and future eligible pipeline
2. revisions to policies and processes for AFSC selection, training, and preparatory courses for classification in enlisted operational and officer rated career fields.

The comprehensive assessment for these countermeasures resulted in the following findings.

Deficiencies That Threaten the Long-Term Sustainability of the Countermeasures

- Generally, while the RDR and other analyses identify racial disparities with the DAF, there are no policy documents that state desired DAF diversity objectives.
- Generally, resource requirements to support countermeasures are not identified.
- Generally, organizational responsibilities, coordination, and accountability processes to implement and sustain the countermeasures are not fully specified.
- Generally, there is no evaluation process to determine countermeasure effectiveness.
- Specifically, the minority marketing effort countermeasure is not fully defined or developed.
- Specifically, there is no plan for ongoing analysis to measure the strengths and characteristics of the potential applicant talent pool.

Deficiencies Regarding Countermeasures Addressing Identified Root Causes

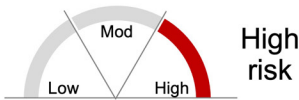
- Collectively, the eight countermeasures only address two of six root causes:
 - lack of propensed Black candidates for operational career fields
 - decentralized AFSC reservation/classification process.
- The unaddressed causes are the following:
 - lack of deliberate placement strategy for Black recruiters
 - lower Armed Services Vocational Aptitude Battery (ASVAB) and AFQT qualification rates
 - failure to incorporate job-related competencies within training and accession testing validation
 - lower recruiting manning versus other services.

Deficiencies in Intraorganizational and Interorganizational Staff Processes

- Coordination and accountability processes to implement and sustain the countermeasures among AFRS, Air Education and Training Command (AETC), AF/A1, the Secretary of the Air Force for Manpower and Reserve Affairs (SAF/MR), and SAF/DI have not been established.
- Data and analysis needs have not been defined to support coordination and accountability processes for the operational- and strategic-level countermeasures.

Figure 2.6 summarizes these findings. Based on (1) the number of threats to sustainability, (2) the number of root causes that the countermeasures fail to address, and (3) the ambiguity of how intra- and interorganizational processes would sustain the countermeasures, the risk that the countermeasure for Disparity Problem 2.2 will not successfully address the problem is high.

Figure 2.6. Risk Assessment Summary for Disparity Problem 2.2 Countermeasures

Disparity Problem 2.2: Black service members are underrepresented in operational career fields and overrepresented in support career fields	
Countermeasure deficiencies	Mapped to root causes?
<ul style="list-style-type: none"> • Absence of policy that states DAF diversity objectives • Resource requirements aren't specified • Org responsibilities and coordination and accountability processes not fully specified • Absence of evaluation processes • Minority marketing effort not fully defined or developed • Absence of plan for ongoing analysis to measure strengths and characteristics of the talent pool 	<ul style="list-style-type: none"> ✗ Lack of deliberate placement strategy for Black recruiters ✓ Lack of propensed Black candidates for operational career fields ✓ Decentralized AFSC reservation/classification process ✗ Lower ASVAB and AFQT qualification rates ✗ Failure to incorporate job-related competencies within training and accession testing validation ✗ Lower recruiting manning vs other services
Intra- and inter-organizational staff processes	Estimation of risk to enterprise success
<ul style="list-style-type: none"> • Coordination and accountability processes between AFRS, AETC, A1, SAF/MR, and ODI are not established • Data and analysis needs have not been defined to support coordination and accountability processes and the operational and strategic levels 	

Disparity Problem 2.3. Black Service Members Are Being Nominated for IDE/SDE at Higher Than the Overall Nomination Rate But Designated to Attend at a Lower Rate

The DAF goal for IDE/SDE attendance is to have selection rates for Black officers and other minorities that are consistently equivalent ($\pm 5\%$) to overall selection rates.²² The fact that Black service members are being nominated for IDE/SDE at higher than the overall nomination rate but DA at a lower rate indicates that this goal has not been achieved. Three countermeasures were developed to address the root causes of this problem. The comprehensive assessment for these countermeasures resulted in the following findings.

Deficiencies That Threaten the Long-Term Sustainability of the Countermeasures

- The countermeasures are not designed to directly achieve DAF diversity objectives. Instead, they are development requirements as defined by institutional categories with representation as a secondary outcome.

²² Inspector General, Department of the Air Force, 2021a, p. 14.

- The diversity objective of the countermeasures is not defined.
- Resource requirements to support the implementation and sustainability of the objective are not specified.
- The countermeasures do not include an assessment of the strengths and characteristics of the pool eligible for IDE and SDE selection.
- The countermeasures do not include a plan for data that could inform promotion board outcome analysis.

Deficiencies Regarding Countermeasures Addressing Identified Root Causes

- Collectively, the three countermeasures only address one of two root causes.
- The root cause that is not addressed is the lack of clear nomination/selection guidance, transparency, and criteria, which has led to subjectivity in the professional military education (PME) process.

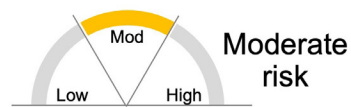
Deficiencies in Intraorganizational and Interorganizational Staff Processes

- There are no deficiencies, but there is a strength. AFI 36-2670 assigns organizational responsibilities, coordination, and accountability requirements to support the countermeasures.²³

Figure 2.7 summarizes these findings. Based on (1) the number of threats to long-term sustainability, (2) the fact that one of two root causes are not addressed by the countermeasure, and (3) the fact that there are defined intraorganizational and interorganizational processes to support the countermeasure, there is a moderate risk that the countermeasures for Disparity Problem 2.3 will not succeed in addressing the problem.

²³ Air Force Instruction 36-2670, *Total Force Development*, June 25, 2020, p. 80.

Figure 2.7. Risk Assessment Summary for Disparity Problem 2.3 Countermeasures

RDR Problem 2.3: Black officers are being nominated for IDE/SDE at higher than the overall nomination rate but designated to attend at a lower rate	
Countermeasure deficiencies	Mapped to root causes?
<ul style="list-style-type: none"> Countermeasure is not designed to directly achieve DAF diversity objectives. It is a "development to requirement" as defined by institutional categories. Diversity is a secondary outcome Diversity objective is not defined Resource requirements are not specified Initiative does not include assessment of strengths and characteristics of pool eligible for IDE and SDE selection Does not provide data that could support promotion board analysis 	<ul style="list-style-type: none"> ✓ Unbalanced distribution of IDE/SDE seats. Distribution not based on DAF requirements which caused a disproportionate allocation favoring operational over support career fields ✗ Lack of clear nomination/selection guidance, transparency and criteria has led to inordinate subjectivity in the PME process
Intra- and inter-organizational staff processes	Estimation of risk to enterprise success
<ul style="list-style-type: none"> DAFI 36-2670 (p. 80) assigns organizational responsibilities, coordination, and accountability requirements to support this countermeasure 	

NOTE: DAFI = Air Force Instruction.

Disparity Problem 2.5.1. Black Enlisted Service Members Were Consistently Underrepresented in All Promotion Categories and Ranks Except E-8 and E-9, with the Largest Disparities in E-5 to E-6

The DAF goal for enlisted promotion outcomes is to develop leaders with the appropriate tools to create and sustain an environment in which all airmen can reach their full potential, valuing the many aspects of diversity within the Air Force.²⁴ The fact that Black enlisted service members were consistently underrepresented in all promotion categories and ranks except E-8 and E-9, with the largest disparities in E-5 to E-6, indicates that this goal has not been achieved. Four countermeasures were developed to address the root causes of this problem. The comprehensive assessment for these countermeasures resulted in the following findings.

Deficiencies That Threaten the Long-Term Sustainability of the Countermeasures

- At the time of the assessment, the accountability processes for measuring promotion rates over time were not written in the countermeasures.
- The countermeasures do not include a process to hold commanders accountable to following the policy.
- There is no evaluation process incorporated in the countermeasures.

²⁴ Inspector General, Department of the Air Force, 2021a, p. 15.

- The countermeasures do not include a process for verifying data that could be used in an evaluation process.
- The countermeasures do not include ongoing analyses to measure Enlisted Evaluation System (EES) point allocations or Enlisted Forced Distribution Panel (EFDP) outcomes to evaluate the strengths and characteristics of the talent pool eligible for promotion.
- Data are not organized or do not exist to support promotion board analyses to comprehensively explain demographic disparities in promotion outcomes.

Deficiencies Regarding Countermeasures Addressing Identified Root Causes

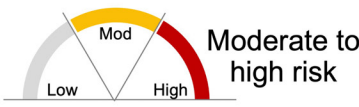
- Collectively, the three countermeasures address four of six root causes.
- The root causes that are not addressed are the following:
 - lower representation of “Promote Now” and “Must Promote” recommendations for Black members to promotion to E-5 and E-6
 - larger perception gap for Black officers and enlisted members regarding opportunities for mentorship, feedback, and role models.

Deficiencies in Intraorganizational and Interorganizational Staff Processes

- There are no accountability processes for countermeasures targeting Enlisted Force Development Councils and subsequent feedback and mentoring across staffs, from the tactical through strategic levels of oversight.
- The coordination of the EFDP outcomes with CFMs’ development activities is not specified in the countermeasures.

Figure 2.8 summarizes these findings. Based on (1) the number of threats to the sustainability of the countermeasures, (2) the fact that two of six root causes are not addressed, and (3) the fact that there are no accountability and coordination processes to support the countermeasures, there is moderate to high risk that the countermeasure for Disparity Problem 2.5.1 will not successfully address the problem.

Figure 2.8. Risk Assessment Summary for Disparity Problem 2.5.1 Countermeasures

Disparity Problem 2.5.1: Black enlisted members were consistently underrepresented in all promotion categories and ranks except E8 and E9 with the largest disparities in E5 to E6	
Countermeasure deficiencies	Mapped to root causes?
<ul style="list-style-type: none"> • Accountability processes for measuring promotion rates over time not written in countermeasure (revision in progress) • No process to hold commanders accountable to follow policy • No eval process incorporated into the countermeasures • No way to verify the truthfulness of data for eval purposes • Countermeasures do not include ongoing analyses to measure EES point allocations or EFDP outcomes to measure the strengths and characteristics of the talent pool • Data are not organized or do not exist to support promotion board analysis 	<ul style="list-style-type: none"> ✗ Lower representation of “Promote Now” and “Must Promote” recommendations for Black members for promotion to E5 & E6 ✓ Current Enlisted Evaluation System (EES) point distribution does not fully account for years of experience ✓ Lower WAPS scores for Black members for promotion to E5 & E6 ✓ Lack of standardization for large unit Enlisted Forced Distribution Panels ✓ Lack of formal/informal feedback and mentoring with regards to WAPS and Enlisted Forced Distribution process ✗ Large perspective gap for Black officers and enlisted members regarding opportunities for mentorship, feedback and role models
Intra- and inter-organizational staff processes	Estimation of risk to enterprise success
<ul style="list-style-type: none"> • Absence of accountability processes for Enlisted Force Development Councils (EFDC) and subsequent feedback and mentoring across staffs, from the tactical through strategic levels of oversight, will hinder successful implementation • The coordination of EFDP outcomes with Career Field Managers’ development activities is not specified 	

NOTE: WAPS = Weighted Airman Promotion System.

Disparity Problem 2.5.2. Black Officers and Officers from Other Underrepresented Groups Are Consistently Promoted Below the Overall Average Rate and Below White Officers’ Rate in Almost Every IPZ Board to O-4, O-5, and O-6

The DAF goal for officer promotion outcomes is also to develop leaders with the appropriate tools to create and sustain an environment in which all airmen can reach their full potential, which values the many aspects of diversity within the Air Force.²⁵ The finding that Black officers and officers from other underrepresented groups are consistently promoted below the overall average rate and below White officers’ rate in almost every IPZ board to O-4, O-5, and O-6 indicates that this goal has not been achieved. Seven countermeasures were developed to address the root causes of this problem. The comprehensive assessment for these countermeasures resulted in the following findings.

²⁵ Inspector General, Department of the Air Force, 2021a, p. 15.

Deficiencies That Threaten the Long-Term Sustainability of the Countermeasures

- Policy documents do not address surveying airmen about their mentoring experiences, as specified in a countermeasure.
- Resources are not fully specified for four countermeasures.²⁶
- Policy documents do not specify countermeasure diversity objectives.
- Organizational responsibilities, coordination, and accountability processes are not fully specified for three countermeasures.²⁷
- The plan to conduct surveys to assess the quality of mentoring does not explain how the data will lead to achieving diversity objectives.
- The strengths and characteristics of the talent pool of eligible promotion candidates are not measured by any of the countermeasures.
- During the time of the evaluation, staff decisions led to downgrading three countermeasures to either subtasks of a single countermeasure or to no longer being a countermeasure.

Deficiencies Regarding Countermeasures Addressing Identified Root Causes

- Collectively, only one of five root causes were addressed by the countermeasures. This countermeasure is “Lack of clear guidance and standardization to aid in accomplishing thorough barrier analysis among some DTs.” The root causes for the problem that were not addressed were the following:
 - lower “Definitely Promote” award rates for Black officers
 - lower selection rates for Black officers for IDE/SDE in-residence
 - lower selection rates for Black officers for career broadening/key developmental opportunities
 - large perception gap among Black officers and enlisted members regarding opportunities for mentorship, feedback, and role models.

Deficiencies in Intraorganizational and Interorganizational Staff Processes

- There are not clear specifications for how information is shared between AF/A1D (responsible for development categories) and the Air Force Office of Military Force Policy

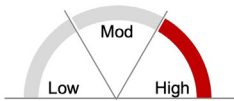
²⁶ The four countermeasures are (1) Develop and deploy DAF Unconscious Bias Mitigation Architecture Plan and training materials; (2) Enhance survey capability in MyVector Mentoring to collect and analyze data about the quality of voluntary mentoring; (3) Strengthen mentorship match capability by providing CFMs the ability to assign mentors to mentees in MyVector Mentoring; and (4) Provide resources and tools to commanders and supervisors to support mentoring toward Airmen and Guardians’ development and career objectives.

²⁷ The three countermeasures are (1) Implement developmental categories to allow greater development agility and evaluation among closer cohorts; (2) Establish policy requiring diverse pools of candidates for consideration for key military developmental nominative positions such as Executive Officer (Wing & above), Aide-de-Camp, Military Assistant, Command Chief, Senior Enlisted Advisor, CFM (Officer & Enlisted), Commander’s Action Group Chief and STARNOM/CAPNOM positions to enable slates that better reflect the broad demographic diversity of the DAF; and (3) Develop and deploy DAF Unconscious Bias Mitigation Architecture Plan and training materials.

(AF/A1PP) (responsible for competitive categories) with regard to achieving DAF diversity objectives for development and promotion.

Figure 2.9 summarizes these findings. Based on (1) the number of threats to the sustainability of the countermeasures, (2) the fact that only one of five root causes are addressed, and (3) the fact that there is not clarity about how intraorganizational information-sharing between the AF/A1 staffs responsible for development and the staffs responsible for promotion would support the achievement of DAF diversity objectives, there is a high risk that the countermeasures for Disparity Problem 2.5.2 will not succeed in addressing the problem.

Figure 2.9. Risk Assessment Summary for Disparity Problem 2.5.2 Countermeasures

RDR Problem 2.5.2: Black officers and officers from other underrepresented groups consistently promoted below the overall average rate and below white officers' rate in almost every IPZ board to O4, O5, and O6.	
Countermeasure deficiencies	Mapped to root causes?
<ul style="list-style-type: none"> • Policy documents do not specify countermeasure diversity objectives • Resources are not fully specified for 4 countermeasures • Org responsibilities, coordination, and accountability not fully specified for 3 countermeasures • Evaluation processes not specified for 4 countermeasures • Policy documents do not address surveying airmen about their mentoring experiences • Surveying the quality of voluntary mentoring doesn't lead to meeting diversity requirements • The strengths and characteristics of the talent pool are not measured in any of the countermeasures • Staff downgraded 3 countermeasures to subtasks of countermeasures or not actual countermeasures 	<ul style="list-style-type: none"> ✗ Lower "Definitely Promote" award rates for Black officers ✗ Lower selection rates for Black officers for IDE/SDE in-residence attendance ✗ Lower selection rates for Black officers for career broadening/key developmental opportunities ✓ Lack of clear guidance and standardization to aid in accomplishing thorough barrier analysis among some Developmental Teams ✗ Large perspective gap for Black officers and enlisted members regarding opportunities for mentorship, feedback, and role models
Intra- and inter-organizational staff processes	Estimation of risk to enterprise success
<ul style="list-style-type: none"> • There needs to be clear specification of how information is shared between A1D (responsible for developmental categories) and A1PP (responsible for competitive categories) with regard to achieving DAF diversity objectives for development and promotion 	 <p>High risk</p>

Disparity Problem 2.7. Military and Civilian DTs' Barrier Analysis Reports Were Not Standardized and Lacked Specificity, Resulting in Incomplete and/or Insufficient Reporting Details and Action Plans

The DAF goal for barrier analysis processes and outcomes is to ensure that functional authorities and DT chairs are equipped to complete an effective barrier analysis. They need to be able to use standardized templates that identify triggers, investigate and validate potential barriers, develop decisive action plans, and assess measurable results to facilitate quarterly progress updates in a variety of senior leadership forums, to include the Force Development Council and Chief of Staff of the Air Force Diversity and Inclusion Council.²⁸ The fact that the military and civilian DTs' barrier analysis

²⁸ Inspector General, Department of the Air Force, 2021a, p. 23.

reports were not standardized and lacked specificity, resulting in incomplete and/or insufficient reporting details and action plans, indicates that this goal has not been achieved. Ten countermeasures were developed to address the root causes of this problem. The comprehensive assessment for these countermeasures resulted in the following findings.

Deficiencies That Threaten the Long-Term Sustainability of the Countermeasures

- At the time of the assessment, five countermeasures were downgraded to tasks that are components of countermeasure directed at training materials.
- At the time of the assessment, it is unclear which countermeasures are the primary responsibility of SAF/DI.
- No policy exists that specifies the diversity objectives for countermeasures directed at training.
- Countermeasure imply that additional staff will be required for training CFMs, but the higher staffing levels have not been specified.
- There is no assignment of organizational responsibilities, coordination processes, or accountability processes for the countermeasures directed at training programs.
- Training countermeasures do not assess the strengths or characteristics of the talent pool to guide the content and delivery of the training.
- At the time of the assessment, the enterprise-level unconscious bias mitigation architecture did not yet exist.
- Policy does not exist to specify DAF diversity objectives or to standardize resource requirements at the operational level to achieve diversity objectives.
- An enterprise-level evaluation process has not been specified for the countermeasures.
- Enterprise-level barrier analysis reporting processes and action planning processes have not been specified.

Deficiencies Regarding Countermeasures Addressing Identified Root Causes

- Collectively, four of five root causes were addressed by the countermeasures. The root cause that was not addressed was that barrier analysis guidance is unclear and does not set expectations with regard to reporting requirements and subsequent action plans.

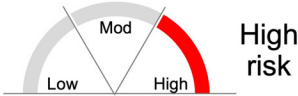
Deficiencies in Intraorganizational and Interorganizational Staff Processes

- The roles and responsibilities of SAF/DI are not clearly defined in the countermeasures.
- SAF/DI staff coordination processes with the AF/A1 staff are not clearly defined.
- SAF/DI and AF/A1D staff coordination processes with major commands, functional managers (FMs), and CFMs are not clearly defined.

Figure 2.10 summarizes these findings. The risk is high that the countermeasures for Disparity Problem 2.7 will not address the problem. This judgment is based on (1) the number of threats to the sustainability of the countermeasures, (2) the fact that only four of five root causes are addressed, and

(3) the lack of clarity about SAF/DI roles and responsibilities and about interorganizational coordination processes to support the countermeasures' implementation and sustainment.

Figure 2.10. Risk Assessment Summary for Disparity Problem 2.7 Countermeasures

Disparity Problem 2.7: Military and Civilian Developmental Teams' (DTs) barrier analysis reports were not standardized and lacked specificity, resulting in incomplete and/or insufficient reporting details and actionable plans.	
Countermeasure deficiencies	Mapped to root causes?
<ul style="list-style-type: none"> • A1D identified 5 Countermeasure that are actually tasks, 4 of which are components of the Training Materials countermeasure • ODI does not accept that it has been assigned 4 countermeasures • No policy specifying diversity objectives for training program • Additional manpower will be required for training CFM, but the levels have not been specified • No assignment of org responsibilities, coordination processes, or accountability for training program • Training countermeasure does not include an assessment of the strengths and characteristics of the talent pool • Enterprise-level Unconscious Bias Mitigation Architecture does not yet exist • Policy does not exist to specify DAF diversity objectives, standardize resource requirements definition at the operational level • Enterprise level evaluation processes have not been specified • Enterprise-level barrier analysis reporting and action planning have not been specified 	<ul style="list-style-type: none"> ✓ Lack of clarity of Barrier Analysis roles and responsibilities outlined in AFI 36-7001 and in the annually published Functional Manager (FM)/DT Guidance Memorandum ✓ Barrier Analysis training and tools are inadequate and do not meet the customers' needs ✗ Barrier Analysis guidance is unclear and does not set expectations in regards to reporting requirements and subsequent action plans. ✓ Report completions and submission were not being tracked in any formal or meaningful way ✓ Barrier Analysis reports were not actionable, incomplete and/or not provided.
Intra- and inter-organizational staff processes	Estimation of risk to enterprise success
<ul style="list-style-type: none"> • The roles and responsibilities of ODI aren't clearly defined • ODI staff relationship with A1D staff not clearly defined • ODI and A1D staffs relationship with MAJCOMS and operational organizations not clearly defined 	

Summary of Countermeasures Assessment Findings

The DAF has implemented wide-ranging responses to the root causes of the racial, ethnic, and gender disparities reported by the IG. The countermeasures that have been crafted have the potential to improve the representation, development, and promotion disparities that are affecting thousands of airmen and guardians. However, this assessment reveals that the expectations of the countermeasures effectiveness will be thwarted by (1) relevant policy documents not specifying governance processes to achieve DAF enterprise objectives for diversity outcomes, (2) the absence of clear specification of organizational roles and responsibilities to implement and sustain the countermeasures, (3) not specifying the resource requirements to implement and sustain the countermeasures, and (4) not developing the accountability and evaluation processes to ensure the countermeasures' success. In

addition, the assessment found that there are disparity root causes for which no countermeasures have been developed. Allowing these gaps to continue would further hamper achieving the DAF's diversity management goals. Finally, the successful implementation and sustainment of countermeasures call for interstaff and intrastaff coordination processes, particularly in the Pentagon, AETC, AFRS, and AFPC. The assessment found that the countermeasures do not specify how these processes would support the implementation and sustainment of the countermeasures.

How can these risks be mitigated? We believe that the first courses of action must be taken by the offices of primary responsibility for each of the disparity problems. Our risk assessment findings identified discrepancies that, if the offices of primary responsibility take appropriate action, will mitigate the risks of countermeasures failing and root causes not being addressed.

In the next chapter, we present the insights and ideas for improving DAF diversity management that come from a broad spectrum of DAF stakeholders. It is our intent that their insights and ideas, combined with this countermeasures assessment, will enhance the DAF's capability to achieve its diversity management objectives.

Promising Practices for Addressing Department of the Air Force Racial/Ethnic Disparities

During this study, the research team held a series of workshops with a variety of stakeholders to help the DAF refine its strategy to address disparities identified within the RDR and DR.²⁹ These workshops covered three racial/ethnic disparities identified by the DAF IG:

- Racial/ethnic minorities are underrepresented in operational officer career fields.
- Racial/ethnic minority officers are consistently promoted below the overall average rate and below White officers' rate in almost every IPZ board to O-4, O-5, and O-6.
- Certain racial/ethnic minority groups are promoted at lower-than-average rates for E-5 to E-9 promotions.

The goal of the workshops was to gather ideas from different DAF stakeholder groups on promising practices for addressing disparities and to identify potential barriers to implementation. Many of these stakeholder groups were not part of the RCA effort, and these workshops allowed additional stakeholder engagement to address the disparities identified in the RDR and DR.³⁰ The focus on identification of barriers to implementation of promising practices complements the outcomes of the RCA discussed in Chapter 2.

In this chapter, we summarize the workshop outcomes. For each topic area, we also provide highlights from the research literature³¹ related to some of the promising practices identified in the workshops and discuss how those promising practices fit in with countermeasures already identified in other DAF efforts to address the racial/ethnic disparities identified in the IG reports.³²

²⁹ See Inspector General, Department of the Air Force, 2020, and Inspector General, Department of the Air Force, 2021b.

³⁰ While we did review the identified disparity areas from the RDR and DR with workshop participants, we did not share specific countermeasures from the RCA, because we were seeking perspectives and ideas from the participants that were not influenced by the ideas in the countermeasures.

³¹ We note that this review is not meant to be a comprehensive review of all research literature that may be related to the promising practices identified by the workshop participants.

³² We did observe a small amount of overlap in the promising practices identified in the workshops and the countermeasures, but not a great deal. The workshops involved different DAF stakeholder groups than those that participated in the RCA and represented fresh perspectives. We understand that addressing DEI issues can be complex and often requires a multipronged approach developed by DAF stakeholders with multiple perspectives. We do not believe that the limited overlap between the countermeasures and workshop outcomes means that one process is invalid, but, instead, both contribute to a broader, more comprehensive response.

Workshop Approach

Participants

We engaged key stakeholder groups across officer and enlisted communities and across career fields that we felt would provide important and potentially unique perspectives on promising practices that could address the three disparities found in the 2020 and 2021 DAF IG reports. As shown in Table 3.1, we held a total of seven virtual workshops, each targeting different stakeholder groups.³³ Participants in each workshop represented a range of Air Force career fields, including both operational and support communities.³⁴

Table 3.1. Workshop Stakeholder Groups

Workshop	Number of Participants
1. Officer CFMs	9
2. MSI AFROTC detachment commanders	11
3. Squadron commanders	11
4. Enlisted CFMs	10
5. Senior enlisted leaders	8
6. Barrier Analysis Working Group (BAWG) leads	15
7. DT chairs	7

³³ The research team first identified key stakeholder groups that would have on-the-ground insights about the three disparity areas. The team then worked with the sponsor to identify individuals belonging to these stakeholder groups. For squadron commanders and senior enlisted leaders, the research team asked each DT chair to nominate several individuals as potential participants. For most stakeholder groups, the team then contacted all individuals by email and invited them to participate in the workshop. Those individuals who were interested and available participated in the workshop. Because of the large numbers of enlisted CFMs, the research team invited only a sample, representing a range of career field communities, to participate. Before the workshop, all participants received an informed consent document that outlined the voluntary nature of participation and assured them that, while the research team would be taking notes during the workshop discussions, comments made during the workshop were confidential and any comments or outcomes from the discussion would not be attributed to any individual. Participants were also asked to keep other participants' identities confidential and to not provide any answers that they did not feel comfortable sharing in front of other participants. The workshop facilitator reminded the participants of this information at the start of the workshop.

³⁴ Workshop participants were selected strictly based on their DAF role and not by demographics. We recognize that demographically homogenous discussions can elicit more candid responses about race/ethnicity and gender; however, the purpose of these workshops was to gain perspectives based on participants' knowledge in their professional roles, not their own personal career experiences. Additionally, the DAF IG reports included a "Voice of the Airmen and Space Professionals" component that elicited information in a confidential manner about the personal experiences of racial/ethnic minorities and women in the DAF.

Workshop Format

Each workshop was tailored to the specific stakeholder group that participated and covered only those topic areas best suited for that stakeholder group. Because the BAWG leads and DT chairs had previously been involved with conducting barrier analyses in response to the DAF IG reports, those workshops focused on reviewing and providing feedback on the promising practices generated in the other workshops. Table 3.2 provides an overview of the disparities covered in each workshop.

Table 3.2. Racial and Ethnic Disparities Covered Across Stakeholder Workshops

Workshop	Disparities Covered
1. Officer CFMs	<ul style="list-style-type: none">• Underrepresentation in operational officer career fields• Officer promotions
2. MSI AFROTC detachment commanders	<ul style="list-style-type: none">• Underrepresentation in operational officer career fields
3. Squadron commanders	<ul style="list-style-type: none">• Underrepresentation in operational officer career fields• Officer promotions
4. Enlisted CFMs	<ul style="list-style-type: none">• Enlisted promotions
5. Senior enlisted leaders	<ul style="list-style-type: none">• Enlisted promotions
6. BAWG leads	<ul style="list-style-type: none">• Review of insights from workshops 1–5
7. DT chairs	<ul style="list-style-type: none">• Review of insights from workshops 1–6

The first five workshop sessions were structured as follows. At the beginning of each workshop, a member of the research team welcomed participants, introduced the study and project team, and outlined the agenda for the session. The workshops included a series of breakout sessions facilitated by members of the RAND team and discussions by all workshop participants together, which were also facilitated by a member of the RAND team. Discussion on each topic included the components below. (For workshops that addressed more than one topic area, this procedure was repeated.)

- Identify promising practices:
 - Hold a breakout session for small group discussion on potential promising practices.
 - Breakout groups share their top three promising practices with the larger workshop.
- Prioritize promising practices for further discussion:
 - Workshop participants vote on the top three promising practices (chosen from the promising practices shared by all breakout groups) that they think have the most potential for impact.

- The three promising practices with the most votes are identified for further discussion of implementation considerations.
- Discuss implementation considerations:
 - Hold a breakout session for small group discussion of implementation considerations for the top three promising practices prioritized by workshop participants.
 - Breakout groups share their thoughts on implementation considerations with the larger workshop.

The research team took a different approach for workshops 6 and 7. These stakeholder groups have different perspectives than the others because they have been closely involved with conducting barrier analyses in response to the DAF IG reports. The BAWG workshop began with each BAWG lead providing an overview of their respective BAWG and then moved into a discussion about the promising practices and implementation challenges identified in workshops 1–5. The final workshop with the DT chairs aimed to identify potential gaps from the outputs of the previous workshops from a DAF senior leader perspective.³⁵

Promising Practices Identified by Workshop Participants

In this section, we describe the promising practices and implementation challenges identified by workshop participants across the three areas of interest:

- underrepresentation in operational officer career fields
- racial and ethnic disparities in officer promotions
- racial and ethnic disparities in enlisted promotions.

For each area, we also provide examples of evidence from relevant research previously conducted,³⁶ as well as identification of gaps from the Task 1 countermeasures.

Underrepresentation in Operational Officer Career Fields

Workshops 1–3 were composed of officer CFMs, MSI AFROTC detachment commanders, and squadron commanders, all of whom provided inputs relevant to underrepresentation in operational officer career fields. Based on inputs from the breakout groups, each workshop identified three specific promising practices for further discussion. Across all three workshops, these promising practices generally fell under the following three broad categories:

- Recalibrate recruitment and accessions strategies to ensure diverse talent pools.
- Target diverse populations earlier in the pipeline, including STEM recruitment.

³⁵ For each workshop, members of the RAND research team took notes to capture key observations from the discussions.

³⁶ Evidence from previous research presented is not intended as a comprehensive literature review on these topics. Rather, we provide relevant examples from previous RAND research and the Military Leadership Diversity Commission (MLDC).

- Address fiscal and educational challenges prior to entry.

In the next sections, we describe the specific promising practices and associated implementation challenges identified by workshop participants under each of the categories shown in Table 3.3.

Table 3.3. Summary of Promising Practices to Address Underrepresentation in Officer Career Fields

Overarching Theme	Promising Practices
Recalibrate recruitment and accessions strategies to ensure diverse talent pools	<ul style="list-style-type: none"> • Set diversity stretch goals to measure progress • Develop more flexible and competitive recruiting tools (e.g., signing bonus, college loan payoff) • Ensure consistent funding of AFROTC scholarship initiatives • Review and update the Air Force Officer Qualifying Test (AFOQT) to address any racial/ethnic disparities
Target diverse populations earlier in the pipeline, including STEM recruitment	<ul style="list-style-type: none"> • Counsel prospective recruits earlier regarding valued courses of study and extracurricular activities for U.S. Air Force Academy (USAFA) and AFROTC high school scholarship applicants • Deliberately place minority operational officers at AFROTC to engage earlier with prospective recruits
Address fiscal and educational challenges prior to entry	<ul style="list-style-type: none"> • Explore programs that expose minority candidates to operations • Create scholarships for tuition at upper-tier science and engineering universities • Develop an academic support program for entering AFROTC cadets with low SAT or American College Testing (ACT) scores and/or English as a second language (ESL) cadets

Recalibrate Recruitment and Accessions Strategies to Ensure Diverse Talent Pools

Workshop participants identified four promising practices focused on recruitment and accession strategies:

- Set diversity stretch goals to measure progress.
- Develop more flexible and competitive recruiting tools (e.g., signing bonus).
- Ensure consistent funding of AFROTC scholarship initiatives.
- Review and update the AFOQT to address any racial/ethnic disparities.

Participants conveyed that defined strategic goals are necessary to focus recruitment and accessions efforts and to be able to measure progress. They also said that a lack of clarity surrounding the DAF's DEI goals makes it difficult to know where to focus efforts and resources. Finally, participants believed that ensuring that DAF stakeholders have a common understanding of targeted recruitment and accessions tools and strategies—such as AFROTC scholarship initiatives and revision of the AFOQT—may increase the service's ability to acquire and develop diverse talent.

Participants also suggested that initiatives such as AFROTC scholarships may increase the DAF's competitive advantage in the talent marketplace by providing targeted scholarships. Promising new practices included providing recruiters with additional tools, such as signing bonuses and college loan payoffs, so that competitive alternatives to private industry that is recruiting the same talent could be offered to the most qualified underrepresented minorities at the best colleges and universities.

Consistent funding and resources that AFROTC detachment commanders can leverage were identified as a necessary condition of a successful diverse, equitable, and inclusive recruitment strategy. Specifically, participants stated that the historical ebb and flow of AFROTC scholarship funding has hindered their ability to retain highly qualified underrepresented cadets and that, in some cases, recruits are lost not only to private industry but also to sister service Reserve Officer Training Corps programs.

Target Diverse Populations Earlier in the Pipeline, Including STEM Recruitment

Workshop participants identified two promising practices that focused on targeting underrepresented populations earlier in the pipeline.

- Counsel prospective recruits earlier about valued courses of study and extracurriculars for USAFA and AFROTC high school scholarship applicants.
- Deliberately place minority officers from operational specialties as AFROTC cadre so that they can engage earlier with prospective recruits.

First, participants suggested that counseling prospective recruits would allow recruiters to better engage diverse talent as early as middle school and up to freshman year of high school. An important component of this promising practice is counseling middle and high school students on the types of courses, higher education programs, and extracurricular activities that the DAF values, given that many AFROTC high school scholarships require students to pursue STEM degrees.

Second, participants suggested that underrepresentation of racial/ethnic minorities in AFROTC detachment leadership and other recruitment assignments inhibits the ability for minority students to see themselves as an Air Force officer. Specifically, ensuring diversity among recruiters was identified as a potential means of removing this barrier to entry. This strategy could include deliberately placing minority operational officers at strategic AFROTC detachments to engage with prospective recruits. By providing opportunities earlier in the pipeline for diverse prospective cadets to engage with diverse members of operational career fields and STEM, the DAF may reach students who otherwise may not believe that they too could pursue a career as an Air Force officer.

Address Fiscal and Educational Challenges Prior to Entry

Workshop participants identified three promising practices focused on fiscal and educational challenges to entry as additional contributing factors to underrepresentation in operational career fields.

- Explore programs to expose potential minority candidates to operations.
- Create scholarships for tuition at upper-tier science and engineering universities.

- Develop an academic support program for entering AFROTC cadets with low SAT or ACT scores and/or ESL cadets.

Propensity for service matters insofar as potential recruits have the monetary resources necessary to continue their education, and degree choice can significantly impact the ability to provide a recruit with scholarships. The DAF may open its aperture to support not only underrepresented populations but also other educational backgrounds into operational career fields by alleviating such barriers to entry. Additionally, racial/ethnic minority youth tend to have less exposure to flying than their majority peers—often due to financial barriers—and programs aimed to expose minority youth to aviation may increase both interest and aptitude for Air Force operational careers. Financial barriers can also prevent racial/ethnic minority youth from disadvantaged backgrounds from attending upper-tier science and engineering universities that produce talented DAF officers. Scholarships tied to attendance at these types of institutions could create a diverse talent pool for the DAF.

Workshop participants also identified providing academic support to incoming AFROTC cadets with low standardized test scores and students for whom English is a second language as a promising practice. For example, when outlining barriers that cadets who are racial/ethnic minorities and for whom English is a second language face upon entering AFROTC, one participant suggested that developing an academic support program could benefit minority students by providing educational resources and ESL courses to ensure that they are able to succeed in the Air Force.

Implementation Challenges

During workshops 1–3, participants identified various challenges to implementing the promising practices to address underrepresentation in operational career fields that are described above. Many of these challenges centered around what the DAF can legally support and how many resources the Air Force has available to spend on such initiatives. These implementation challenges, in no particular order, include

- manpower
- time
- money
- competition with private sector and the other services
- leadership support
- perceptions of accessions being of lesser quality
- lack of diversity among recruiters.

The DT chair workshop participants echoed many of these challenges and gave some additional context. For example, one participant said it is important to understand the rate at which racial/ethnic minority recruits from MSIs are graduating with STEM degrees compared with those at larger state colleges and universities. Participants also connected the challenges related to identifying high-quality minority candidates earlier in the pipeline to perceptions of accessions being of lesser quality through increasing and diversifying the candidate pools. Leadership support of recruiters and lack of clearly defined recruitment goals were also discussed. Participants also expressed concern that strategically placing minority officers in AFROTC and other recruiting assignments could inadvertently hinder

those officers' promotion potential if not carefully managed. For example, some participants mentioned that airmen may avoid AFROTC and other recruiting assignments due to a perception that it will inhibit their promotion eligibility. And so, by increasing diversity among AFROTC officers, there is concern that it will inadvertently hinder the career trajectory of an already underrepresented group at senior levels.

Evidence from Previous Research

In this section, we highlight examples of past research that has addressed some of the promising practices identified in the workshops.

First, past RAND research has found that the DAF has successfully increased the number of racial/ethnic and gender minority service members over the past decade, though the growth is slower in officer accession cohorts.³⁷ However, other RAND research posits that Black general officer representation will continue to decline in the near future.³⁸ RAND researchers found that Black general officer representation was marginally lower among both pilots and nonpilots. Given that there are fewer Black general officers than other demographic groups, minor differences—such as two additional Black pilot generals and one additional Black nonpilot general—would create a substantial disparity.³⁹ Because of a sharp decline in Black pilot production, “Black representation among general officers will likely get worse for a long time before it gets better.”⁴⁰

Second, past research on racial/ethnic and gender representation has identified challenges earlier in the talent pipeline, similar to the workshops on promising practices. For example, eligibility requirements are a potential barrier to entry, which can be driven by candidates' fiscal and educational challenges. Increased engagement earlier in the pipeline has also been identified as a critical step in recalibrating the DAF's recruitment and accessions strategies.⁴¹ Although the research is tied to fiscal and educational challenges, it also highlights how racial/ethnic and gender minorities are underrepresented in STEM throughout the educational life cycle. Moreover, Black students are more than twice as likely to drop out of school, and Black and Hispanic male students are more likely than any other demographic group to be suspended or expelled from school. These disparities can exacerbate existing challenges related to meeting educational requirements.⁴²

Other RAND research has focused on the importance of programs targeting youths. For example, early intervention in the educational pipeline to aviation may also help increase the number of

³⁷ Tiffany Berglund, “Impact of Eligibility Requirements and Propensity to Serve on Demographic Representation in the U.S. Air Force,” in Douglas Yeung and Nelson Lim, eds., *Perspectives on Diversity, Equity, and Inclusion in the Department of the Air Force*, RAND Corporation, PE-A909-1, November 2020.

³⁸ Albert A. Robbert and John S. Crown, “Why Might Black General Officer Representation Continue to Decline in the Near Future?” in Douglas Yeung and Nelson Lim, eds., *Perspectives on Diversity, Equity, and Inclusion in the Department of the Air Force*, RAND Corporation, PE-A909-1, November 2020.

³⁹ Robbert and Crown, 2020, p. 70.

⁴⁰ Robbert and Crown, 2020, p. 72.

⁴¹ Sarah W. Denton and Dwayne Butler, “Conducting Community Outreach and Marketing at Earlier Points in the Minority Candidate Pipeline,” in Douglas Yeung and Nelson Lim, eds., *Perspectives on Diversity, Equity, and Inclusion in the Department of the Air Force*, RAND Corporation, PE-A909-1, November 2020.

⁴² Denton and Butler, 2020, citing Council of the Great City Schools, *A Call for Change: Providing Solutions for Black Male Achievement*, Houghton Mifflin Harcourt, December 2012.

minority officers and mitigate the effects of cultural barriers to service.⁴³ The Federal Aviation Administration's Aviation Career Education Academy, which targets elementary, middle, and high school students, has a program in more than 200 schools across the United States and provides many offerings below \$200.⁴⁴ Research shows that youth programs generally can increase interest in the Air Force and allow students from disadvantaged backgrounds with the means to develop the necessary skillsets to pursue an operational career within the DAF.⁴⁵ The report recommended that, if the DAF is seeking to specifically address historical underrepresentation of racial/ethnic minorities in such career fields, then targeting minority youth earlier in the pipeline is key. Past research also suggests public-private partnerships as a potential mechanism to increase engagement with minority students. Researchers identified examples such as the Teen and Police Service (TAPS) Academy, which was designed to engage students who are least likely to participate in such programs: historically underserved minority youth.⁴⁶ Furthermore, this research highlighted the need for rigorous continuous evaluation programs to measure the quality of public-private youth programs and to ensure that the DAF achieves a return on its investment.

Some prior RAND research looked specifically at how the DAF can maximize the return on investment for AFROTC initiatives at MSIs.⁴⁷ This research found that existing AFROTC marketing and outreach strategies targeting minority students are almost exclusively directed toward MSIs. Yet, there is a vast swath of other institutions with AFROTC detachments with highly qualified minority students.⁴⁸

Finally, other research focused on the possible impact of the AFOQT on the DAF's diversity efforts. For example, a 2010 RAND report examined and affirmed the validity of the AFOQT as a mechanism for predicting officer performance and training outcomes.⁴⁹ However, this report noted clear group differences in outcomes, including that the use of the AFOQT leads to a higher proportion of female, Black, and Hispanic candidates being rejected for officer selection than White and male candidates.⁵⁰ More recent RAND work has looked at the role of the AFOQT as part of the

⁴³ Denton and Butler, 2020; DAF, "Statement of Lieutenant General Brian T. Kelly, United States Air Force, Deputy Chief of Manpower, Personnel and Services. Subject: Diversity in Recruiting and Retention," presentation to the Subcommittee on Military Personnel, Committee on Armed Services, U.S. House of Representatives, December 10, 2019.

⁴⁴ Federal Aviation Administration, "Aviation Career Education (ACE) Academy Schools," webpage, June 23, 2022.

⁴⁵ Other programs of note that target students beyond middle and high school include the Aim High Flight Academy (AHFA), which is an aviation scholarship for a three-week course at various colleges and universities. Other DAF efforts, such as AFRS Det-1, are discussed in more detail in the final chapter of this report. For more information on AHFA, see U.S. Air Force Recruiting Service, "Aim High Flight Academy," webpage, undated.

⁴⁶ Denton and Butler, 2020.

⁴⁷ Dwayne M. Butler, Leslie Adrienne Payne, and Sarah W. Denton, "Maximizing the Return on Investment on DAF ROTC Initiatives at HBCUs and MSIs," in Douglas Yeung and Nelson Lim, eds., *Perspectives on Diversity, Equity, and Inclusion in the Department of the Air Force*, RAND Corporation, PE-A909-1, November 2020.

⁴⁸ See Figure 5.1 in Butler, Payne, and Denton, 2020, p. 28.

⁴⁹ Chaitra M. Hardison, Carra S. Sims, and Eunice C. Wong, *The Air Force Officer Qualifying Test: Validity, Fairness, and Bias*, RAND Corporation, TR-744-AF, 2010.

⁵⁰ Hardison, Sims, and Wong, 2010.

broader officer selection system and discussed potential options for the Air Force to consider to help increase diversity while maintaining a valid officer selection system.⁵¹

Gaps from Task 1 Countermeasures

RDR Problem 2.2 in the six-month assessment included the examination of disparities for both officers and enlisted service member in operational careers fields; however, the DAF's efforts to develop countermeasures to address disparities in operational career fields have focused only on enlisted members. To augment the DAF's effort to develop countermeasures in this disparity area, the workshops focused on underrepresentation of racial/ethnic minority officers in operational career fields. Because of these different focus areas, there was no overlap between the promising practices identified in the workshops and the DAF's countermeasures assessed in Task 1 (i.e., assess progress of AF/A1 response to the DAF IG report). Because the officer-focused promising practices do not have RDR/DR countermeasures focused on officers for comparison, the DAF should assess the extent to which these promising practices address the root causes of RDR Problem 2.2. As discussed previously, these promising practices have the greatest value and potential for impact when they address the root causes of the disparities. If promising practices do not address the root causes, then they are unlikely to successfully address specific disparities. For consistency, the DAF should assess the promising practices using the same criteria employed to assess the countermeasures in Task 1.

Racial/Ethnic Disparities in Officer Promotions

Workshops 1 (officer CFMs) and 3 (squadron commanders) also provided promising practices and potential implementation challenges to efforts aimed at addressing racial/ethnic disparities in officer promotions. Based on inputs from the breakout groups, each workshop identified three specific promising practices for further discussion. These promising practices generally fell under three broad categories:

- Ensure that minority officers have the same developmental opportunities for key development as White officers.
- Ensure that there are paths for career progression.
- Better understand the root causes of promotion disparities.

In the next sections, we describe the specific promising practices identified by workshop participants in each category (see Table 3.4), as well as the associated implementation challenges participants identified.

⁵¹ Brandon Crosby, Carra S. Sims, and Kirsten Keller, "Reevaluating Officer Selection to Improve Diversity," in Douglas Yeung and Nelson Lim, eds., *Perspectives on Diversity, Equity, and Inclusion in the Department of the Air Force*, RAND Corporation, PE-A909-1, November 2020.

Table 3.4. Summary of Promising Practices to Address Disparities in Officer Promotions

Overarching Theme	Promising Practices
Ensure that minorities have the same opportunities for key development	<ul style="list-style-type: none"> • Assess whether minorities are given opportunities valued in promotion process at the same rate as majority counterparts • Gather information on why minority officers may not be opting into certain opportunities (e.g., materiel leader and squadron command) <ul style="list-style-type: none"> – Ensure timely survey processes
Ensure that there are paths for career progression	<ul style="list-style-type: none"> • Ensure that minorities are progressing appropriately in their career fields at the squadron and wing levels • Deliberately mentor minority officers to encourage them to apply for opportunities that are valued in the promotion process
Better understand the root causes of promotion disparities	<ul style="list-style-type: none"> • Evaluate the records of minorities that were not selected to understand why • Better understand the relationship between retention and promotions

Ensure That Minorities Have the Same Opportunities for Key Development

Workshop participants identified two promising practices focused on ensuring that minorities have the same opportunities for key development.

- Assess whether minorities are given opportunities valued in promotion process at the same rate as their majority counterparts.
- Gather information on why minority officers may not be opting into certain opportunities (e.g., materiel leader and squadron command).
 - Ensure timely survey processes.

Workshop participants cited concerns that racial/ethnic minority officers with promising futures are opting out of developmental opportunities such as materiel leadership and squadron commander positions as well as developmental education. During the DT chair workshop, participants reiterated this concern but mentioned that a lack of systematic data collection related to these anecdotal dynamics limits current understanding of the scale and scope of this issue.

Assessing whether racial/ethnic minorities are provided the same rates of developmental opportunities that are valued in the promotion process as their majority counterparts was identified as a first step forward. Only then will the DAF be able to gather information on *why* minority officers may be opting out of certain opportunities. Participants across workshops 1–3 and 7 suggested using dynamic surveys and face-to-face engagement with these officers to understand their decisionmaking and to provide counsel and guidance to enhance their performance and promotion competitiveness. Specifically, participants across all officer workshops identified timely dissemination of survey results as a promising practice to ensure that stakeholders across the DAF have a common operating picture.

Ensure That There Are Paths for Career Progression

Workshop participants identified two specific promising practices focused on ensuring that minority officers have defined pathways for career progression.

- Ensure that minorities are progressing appropriately in their career fields at the squadron and wing levels.
- Deliberately mentor minority officers to encourage them to apply for opportunities that are valued in the promotion process.

First, the DAF must assess whether minority officers are progressing in their career fields appropriately, particularly early in their careers at the squadron and wing levels. Based on this assessment, racial/ethnic minority officers who opt out of developmental opportunities should be provided deliberate mentoring to encourage them to apply for positions that are valued downstream in the promotion process. Participants discussed how pathways to promotion have evolved and can be confusing for officers to navigate without adequate mentoring. As such, it was suggested that promotion outcomes can be negatively impacted if there are disparities in internal social networks that share advice and guidance on promotion pathways.

Multiple participants, including the DT chairs, mentioned that in-person, face-to-face mentoring with minority officers is preferred over virtual touchpoints. They suggested that such deliberate engagement would allow the DAF to establish a feedback loop that ensures minority officers are not left behind in their career development. DT chair participants also stated that it is critical to determine whether this issue is a result of lack of access to developmental opportunities and/or a matter of a missed inflection point in their promotion timeline.

Better Understand the Root Causes of Promotion Disparities

To support the DAF's ability to assess and ensure that racial/ethnic minority officers are progressing appropriately in their career fields, CFMs, MSI AFROTC detachment commanders, and squadron commanders discussed the importance of better understanding the root causes of promotion disparities and identified two specific promising practices in this area.

- Evaluate the records of minorities who were not selected to understand why.
- Better understand the relationship between retention and promotions.

First, participants proposed that evaluating the records of minority candidates to determine why they were not selected for a promotion would provide valuable insight that could be leveraged during one-on-one mentoring sessions. During the DT chair workshop, participants echoed this promising practice and identified a potential example: It may be the case that racial/ethnic minorities did not receive mentoring and guidance on assignment management to ensure that sequencing and timing do not negatively impact their potential promotion outcomes.

Participants also discussed the need to better understand the relationship between retention and promotions. Participants in workshops 1 and 3 discussed the importance of understanding this relationship and proposed the use of dynamic exit surveys as a promising practice. Participants noted that some servicemembers may decide to separate instead of pursuing assignments that would increase their promotion potential. Moreover, participants discussed the need for the DAF to understand how

this may impact or influence demographic disparities across career fields. For example, CFM participants proposed one-on-one mentoring with minority officers considering separation in lieu of competing for promotion and providing individual-level encouragement and support. However, it was noted that scaling up individual-level practices such as this will present a variety of implementation challenges.

Implementation Challenges

Across the two workshops, participants identified the following challenges to implementing the promising practices described above, listed in no particular order:

- limited CFM visibility into promotion decisionmaking
- lack of diversity in career field pools
- money constraints
- manpower constraints
- time constraints
- balance between quality and demographics
- stratification accountability.

Participants highlighted having honest conversations with minority officers as a key barrier to implementing promising practices to address disparities in officer promotions. They recognized that these conversations can be difficult and that commanders may not feel comfortable broaching such personal and potentially emotionally charged topics or may not have time for one-on-one guidance. CFMs, AFROTC detachment commanders, and squadron commanders also pointed to manpower and money as key implementation challenges. For example, the manpower and funding required to implement DAF-wide surveys exceed current resourcing levels, and “[data] transparency is not currently possible.”

Participants in the squadron commanders workshop in particular highlighted the need to balance quality with demographic equity during the promotion board process to maintain and ensure procedural legitimacy and credibility. Specifically, it was mentioned that while performance standards should not be lowered (i.e., maintain quality expectations), it is also necessary to ensure that racial/ethnic minority officers are not held to a higher standard than their peers.

This sentiment is also evident through the discussion on another implementation challenge: lack of diversity in career field pools. Discussions surrounding the promising practices in workshops 1 and 3 connected underrepresentation in operational career fields to racial/ethnic disparities in officer promotions. CFMs noted that they are not “in the room” during the various stages of the promotion board process and are not privy to the decisionmaking; therefore, it is difficult to determine root causes behind trends and provide accurate counsel to their officers. However, it was suggested that CFMs can provide more specific information to the board on unique considerations for their AFSCs (e.g., providing current data on racial/ethnic representation and examples of successful career and assignment pathways).

During the DT chairs workshop, participants agreed with the implementation challenges identified for these promising practices and added stratification accountability to the list.⁵² They noted a perceived lack of trust in how the chain of command makes stratification decisions, and similar commentary was also evident in the DAF IG reports.

Evidence from Previous Research

RAND, among other organizations, has been involved in a multitude of studies that have looked at disparities in officer promotion processes and recommended strategies to address them. In this section, we will highlight some relevant research.

In 2010–2011, the MLDC produced myriad decision and issue papers on DEI in the armed forces. Decision Paper #4, Issue Paper #30, and Issue Paper #45 specifically address disparities in racial/ethnic and gender promotion rates.⁵³ Many of the recommendations proposed in MLDC Decision Paper #4 align with the promising practices identified during the workshops and summarized in Table 3.2. For example:⁵⁴

- MLDC recommended that DoD “continue to require that its Services use a common survey instrument to monitor and periodically report on servicemembers’ perceptions about promotion opportunities.” This aligns with the promising practices of gathering information on why minority officers are opting out of certain opportunities and ensuring a timely survey process.
- MLDC recommended that “the Services shall ensure promotion board precepts provide guidance regarding Service-directed special assignments outside of normal career paths and/or fields . . . and as appropriate, senior raters’ evaluations should acknowledge when a servicemember has deviated from the due-course at the specific request of his/her leadership.” This aligns with promising practices such as ensuring that minority members are progressing appropriately in their career fields and evaluating the records of minorities who were not selected for promotion to understand why.
- MLDC recommended that “DoD and the Service must ensure that there is transparency throughout the entire promotion system so that servicemembers may better understand performance expectations and promotion criteria and processes.” This aligns with the promising practices of deliberately mentoring and encouraging minority officers to apply for valuable opportunities and better understanding the relationship between retention and promotions.

In 2012, RAND researchers reassessed gender and minority differences in officer career progression. That research team found that it was difficult for Black officers to access the necessary mentorship to progress further in their careers and that they were more likely to receive such

⁵² Stratification involves the “racking and stacking” of officers in a peer group by their senior rater.

⁵³ For more detailed discussion, see MLDC, *Promotion*, Decision Paper #4, February 2011; MLDC, *Differences in Promotion and Retention Rates by Race/Ethnicity and Gender: Considerations When Interpreting Overall Continuation Rates*, Issue Paper #30, April 2010a; and MLDC, *Recent Officer Promotion Rates by Race, Ethnicity, and Gender*, Issue Paper #45, June 2010b.

⁵⁴ MLDC, 2011, p. 3.

assignments as recruiting, even if such assignments were not typical for their occupation and even though these assignments are generally not regarded highly in promotions decisions.⁵⁵ Additionally, Lim et al. explored officer promotions by demographic group in a 2014 report and suggested evaluating minority records not selected for promotion to gain a better understanding of contributors.⁵⁶

Gaps from Task 1 Countermeasures

A few of the promising practices identified in the workshops to address disparities in officer promotion processes were also included in the DAF countermeasures effort. Below, we highlight the promising practices from the workshops that were *not* part of the countermeasures effort:

- Gather information on why minority officers may not be opting into certain opportunities (e.g., materiel leader and squadron command).
- Ensure that minorities are progressing appropriately in their career fields at the squadron and wing levels.
- Evaluate the records of minorities who were not selected to understand why.
- Better understand the relationship between retention and promotions.

The DAF should assess the extent to which these promising practices address the root causes of RDR problems 2.5.1 and 2.5.2 (underrepresentation of Black enlisted members in promotion categories and ranks and Black officers' lower promotion rates) in order to evaluate their potential efficacy.

Racial/Ethnic Disparities in Enlisted Promotions

Workshops 4 and 5, consisting of enlisted CFMs and senior enlisted leaders, discussed promising practices and potential implementation challenges relevant to racial/ethnic disparities in enlisted promotions. Based on inputs from the breakout groups, each workshop identified three promising practices for further discussion that fell into three broad categories:

- Revise board and panel processes to reduce the impact of potential bias.
- Standardize and revise inputs to the promotion process.
- Address the potential impacts of disparities in enlisted promotions on other parts of the talent management pipeline.

In the next sections, we describe the specific promising practices and implementation challenges identified by workshop participants under each of these categories (see Table 3.5).

⁵⁵ Beth J. Asch, Trey Miller, and Alessandro Malchiodi, *A New Look at Gender and Minority Difference in Officer Career Progression in the Military*, RAND Corporation, TR-1159-OSD, 2012.

⁵⁶ Nelson Lim, Louis T. Mariano, Amy G. Cox, David Schulker, and Lawrence M. Hanser, *Improving Demographic Diversity in the U.S. Air Force Officer Corps*, RAND Corporation, RR-495-AF, 2014.

Table 3.5. Summary of Promising Practices to Address Disparities in Enlisted Promotions

Overarching Theme	Promising Practices
Revise board/panel processes to reduce the impact of potential bias	<ul style="list-style-type: none"> • Blind the process for promotion boards (mask demographic-related information) • Ensure that EFDPs reflect the demographic makeup of the squadron
Revise and standardize inputs to the promotion process	<ul style="list-style-type: none"> • Better standardize Enlisted Performance Reports (EPRs) to reduce subjectivity (e.g., remove sliding scale and focus on bullets) • Remove promotion testing and just use promotion boards for E-5 and above (Note: Participants expressed views on both sides concerning the value of promotion testing)
Address potential impact from other parts of the pipeline	<ul style="list-style-type: none"> • Insist on a more robust panel review of administrative actions (e.g., control rosters, letters of counseling) to avoid potential bias from commanding officer (CO) or chain of command • Thoroughly analyze and review accessions to ensure that the DAF is getting the right demographic makeup across career fields • Invest in bona fide education on unconscious bias training (a three-minute video is insufficient)

Revise Board/Panel Processes to Reduce the Impact of Potential Bias

Workshop participants identified two promising practices focused on reducing the impact of potential bias in enlisted promotions:

- Blind the process for promotion boards (mask demographic-related information).
- Ensure that EFDPs reflect the demographic makeup of the squadron.

Breakout groups in both workshops 4 and 5 presented the notion of blinding records that go to the promotion board as a promising practice. For example, one participant suggested that not only should promotion boards mask the demographics of an individual, but community involvement should also be removed because it could identify the individual. As we will discuss later in this chapter, multiple studies have been conducted on the use of policies that remove all identifying demographic information, such as names, pronouns, and race and ethnicity.

Participants also identified ensuring that the EFDPs reflect the demographics of the squadron as a promising practice. Participants were adamant that demographic representation not only needs to be addressed for those seeking promotion, but also needs to be a defining feature of the panel itself. Specifically, participants suggested that having a diverse panel is an important step toward addressing racial/ethnic disparities in the enlisted promotion process because the panel is composed of promotion decisionmakers. Participants felt that a diverse panel would ensure that the unique career experiences and potential challenges faced by diverse members would be acknowledged and would be less likely to negatively affect their promotion potential. Senior enlisted leaders also proposed tracking promotion

data by demographics to provide a means of continuously evaluating policies and programs aimed at increasing demographic representation across the enlisted force.

Revise and Standardize Inputs to the Promotion Process

Workshop participants identified two promising practices for standardizing inputs to the promotion process:

1. Better standardize EPRs to reduce subjectivity (e.g., remove sliding scale and focus on bullets).
2. Remove promotion testing and just use promotion boards for E-5 and above (Note: Participants expressed views on both sides concerning the value of promotion testing).

EPRs were identified by participants in both workshops 4 and 5 as a potential entry point for bias into the enlisted promotions process. Senior enlisted leaders in workshop 5 proposed that changing the format of EPRs may make the rating process less subjective. Participants gravitated toward eliminating sliding scales that rate an individual's performance on a scale from "exceeds some standards" to "exceeds most standards." The sliding scale opens the door to different interpretations of what "some" and "most" mean and how an individual might determine where someone falls.

Workshops 4 and 5 also presented eliminating promotion testing and adding promotion boards for E-5 and above as another promising practice to revise and standardize promotion inputs. However, enlisted CFMs and senior enlisted leaders expressed mixed views: Some supported promotion testing, some were against it, and some even suggested more testing be applied. As one enlisted CFM said, racial/ethnic disparities in education may negatively impact performance on standardized tests, and testing individuals on their reading comprehension and test-taking skills is not predictive of the core competencies required at the next rank. On the other hand, one group of senior enlisted leaders resisted eliminating promotion testing and extending promotion boards to E-5. This group suggested that testing can "level the playing field" and be an equalizer across racial/ethnic groups.

Address Potential Impact from Other Parts of the Pipeline

Workshop participants identified three promising practices focused on addressing potential impact from other parts of the pipeline:

- Insist on more robust panel review of administrative actions (e.g., control rosters, letters of counseling [LOCs]) to avoid potential bias from the CO or chain of command.
- Thoroughly analyze and review accessions to ensure that the DAF is getting the right demographic makeup across career fields.
- Invest in bona fide education on unconscious bias training (a three-minute video is insufficient).

The senior enlisted leaders participating in workshop 5 suggested that a panel review both control rosters⁵⁷ and LOCs to assess whether there are disparities in administrative actions that may impact an individual's promotion and to identify whether bias is a contributing factor.

Enlisted CFM participants in workshop 4 highlighted the need for a thorough analysis of accessions to ensure that the DAF is achieving demographic makeups within operational career fields that are commensurate with demographic representation within the general population that has a propensity to serve. Specifically, participants said such an assessment of accessions would require a review of standards and subsequent promotion outcomes. For example, one CFM group suggested that mechanical scores from tests in operational career fields be reevaluated and all antiquated requirements that present barriers to women and minorities be removed.

While unconscious bias was mentioned throughout workshops 4 and 5, increasing unconscious bias training was identified as a promising practice in and of itself or as a prominent feature of other promising practices. Although enlisted CFMs identified four top promising practices across their breakout groups that all involved identifying potential for bias to impact decisionmaking, the senior enlisted leader workshop specifically identified a need to invest in bona fide DAF-wide education on bias. For example, senior enlisted leader participants suggested implementing conscious and unconscious bias training throughout the personnel management life cycle, starting at basic training. These participants believed that acknowledging the potential existence of the "good ole boy" networks could promote a cultural shift toward perceiving diversity as a benefit and not a detriment to good order and discipline.

Implementation Challenges

Enlisted CFMs and senior enlisted leaders in the workshops highlighted multiple challenges to implementing the promising practices described above, listed in no particular order:

- manpower constraints
- time constraints
- money constraints
- leadership support (e.g., resistance from squadron commanders)
- lack of stratification accountability
- administrative and logistical hurdles.

Notably, implementation challenges for addressing disparities in enlisted promotions mirror many, if not all, barriers to addressing officer promotions identified in workshops 1, 3, and 7.

Enlisted CFM participants focused on challenges related to the chain of command, diversity in the pipeline, and lagging data indicators. For example, ensuring that the EFDP mirrors the demographic makeup of the squadron could be perceived as a shift of authority away from the commander. As an example of data as a lagging or nonexistent indicator, enlisted CFMs noted that removing demographic information and community involvement from promotion board records could result in important leadership experiences not being considered during decisionmaking.

⁵⁷ A control roster is a commander's rehabilitative tool for individuals whose performance is substandard or who fail to meet Air Force standards of conduct.

Senior enlisted leader participants identified implementation challenges that largely revolved around strategic communication (e.g., leadership buy-in and support); lack of stratification accountability; and the manpower, money, and time required to adequately invest in bona fide bias education. For example, they noted that if promotion testing was replaced with promotion boards, then “the only thing left would be stratification,” which does not have an accountability mechanism. Senior enlisted leader participants also pointed out that, just as mentoring is time- and manpower-intensive, overhauling the DAF’s existing bias training would require significant monetary investment.

Evidence from Previous Research

Some of the promising practices to address disparities in enlisted promotions identified during the workshops have been assessed by prior research conducted within and outside RAND.

First, enlisted participants suggested masking all potentially identifying information—names, pronouns, photos, community involvement, etc.—when records are sent to the promotion board. However, the evidence shows that masking demographic information may result in a short-term increase in representation but fails to address the root causes of disparities in promotion processes, as RAND researchers found in a 2020 review of the vast literature on the topic.⁵⁸ Furthermore, “strategic color blindness [is] a way [for White people] to minimize differences, seem friendly and unbiased, avoid engaging with people of color or racial topics, and even to pretend not to see a person’s race.”⁵⁹ Without such context at promotion boards, racial, ethnic, and gender minorities may not have the opportunity obtain a truly fair and unbiased selection.⁶⁰

Participants also suggested instituting “bona fide bias training.” While past research shows that dialogue can provide crucial information that can affect attitudes and behaviors, how unconscious bias training is structured and conducted is critical to its success in reducing bias. For example, DEI training can improve multicultural awareness and diversity-related skills (e.g., identifying cultural factors within interactions) but may not change attitudes.⁶¹ Reviews of diversity training suggest that to improve outcomes, training must

- be conducted over multiple sessions and for lengthy periods
- provide opportunities for social interaction (e.g., active, participatory activities)
- set goals for bias training outcomes
- have leadership support and engagement
- be voluntary, not mandatory.⁶²

Although prior RAND research did not examine the current Air Force enlisted promotion system (the report was published in 2014), it has examined the potential value of different selection methods

⁵⁸ Dwayne M. Butler and Sarah W. Denton, *How Effective Are Blinding Concepts and Practices to Promote Equity in the Department of the Air Force?* RAND Corporation, PE-A909-2, 2021.

⁵⁹ Douglas Yeung, “Talking About Race and Diversity,” in Douglas Yeung and Nelson Lim, eds., *Perspectives on Diversity, Equity, and Inclusion in the Department of the Air Force*, RAND Corporation, PE-A909-1, November 2020a, p. 38.

⁶⁰ Butler and Denton, 2021.

⁶¹ Douglas Yeung, “What Is Diversity Training?” in Douglas Yeung and Nelson Lim, eds., *Perspectives on Diversity, Equity, and Inclusion in the Department of the Air Force*, RAND Corporation, PE-A909-1, November 2020b.

⁶² Yeung, 2020b, p. 44.

as part of the Air Force enlisted promotion system and the degree to which various methods may have an adverse impact on minority promotion.⁶³ The research found that including a board process for promotion to E-7 could add value but that a study should first be done to assess its validity and utility, including the extent to which it may have an adverse impact.⁶⁴

Gaps from Task 1 Countermeasures

We found very little overlap between the promising practices identified in the workshops to improve enlisted promotions and the countermeasures effort assessed in Task 1. The promising practices representing ideas distinct from the countermeasures include the following:

- Blind the process for promotion boards (mask demographic-related information).
- Ensure that EFDPs reflect the demographic makeup of the squadron.
- Better standardize EPRs to reduce subjectivity (e.g., remove sliding scale and focus on bullets).
- Remove promotion testing and just use promotion boards for E-5 and above.
- Insist on more robust panel review of administrative actions (e.g., control rosters, LOCs) to avoid potential bias from the CO or chain of command.
- Thoroughly analyze and review accessions to ensure that the DAF is getting the right demographic makeup across career fields.

As in previous sections, the DAF would need to assess the extent to which these promising practices address the root causes of the disparity.

Summary

The workshops identified a host of promising practices across three areas of interest: underrepresentation in operational officer career fields, racial and ethnic disparities in officer promotions, and racial and ethnic disparities in enlisted promotions. Workshop participants also called out implementation challenges to those practices and identified whether the practices overlapped with Task 1 countermeasures.

For career fields, the promising practices fell into three broad categories:

- Recalibrate recruitment and accessions strategies to ensure diverse talent pools.
- Target diverse populations earlier in the pipeline, including STEM recruitment.
- Address fiscal and educational challenges prior to entry.

For disparities in officer promotions, the broad categories were the following:

⁶³ Kirsten M. Keller, Sean Robson, Kevin O'Neill, Paul Emslie, Lane F. Burgette, Lisa M. Harrington, and Dennis Curran, *Promoting Airmen with the Potential to Lead: A Study of the Air Force Master Sergeant Promotion System*, RAND Corporation, RR-581-AF, 2014.

⁶⁴ Notably, the Army conducts senior enlisted promotion boards and could be a source for lessons learned for the DAF to consider.

- Ensure that minority officers have the same developmental opportunities for key development as White officers.
- Ensure that there are paths for career progression.
- Better understand the root causes of promotion disparities.

For enlisted promotions, promising practices were as follows:

- Revise board and panel processes to reduce the impact of potential bias.
- Standardize and revise inputs to the promotion process.
- Address the potential impacts of disparities in enlisted promotions on other parts of the talent management pipeline.

Despite the differences in the audiences for these practices, the top implementation challenges were similar: manpower, time, and money. Lack of stratification accountability was a common challenge for officer and enlisted promotions. Other implementation challenges related to a lack of diversity—among recruiters and in the career fields.

The research team found that the promising practices identified largely did not overlap with the DAF countermeasures. The DAF would still need to assess the extent to which the promising practices from the workshop address the root causes and should perform a risk assessment, as described in Chapter 2.

In Chapter 4, we will discuss the process by which DAF conducted its barrier analyses, identify shortfalls of the approach, and provide potential ways to improve it for the future.

DAF Barrier Analysis Critique

The RAND team next focused on helping the DAF strengthen its capability to routinely execute barrier analysis. AFI 36-2670, *Total Force Development*, specifies that career field DTs “will review the demographic makeup of the functional community and identify potential barriers to all Airmen reaching their highest potential.”⁶⁵ One of the disparity problems identified in the RDR was that barrier analysis reports were not standardized and lacked specificity, resulting in incomplete and/or insufficient reporting details and action plans.

The purpose of Task 5 was to critique the barrier analyses conducted in 2021 by officer and enlisted DYs. The review identified data collection gaps, examined ways to improve the tools used to support DT barrier analysis, and identified metrics to improve the fidelity of barrier identification and the effectiveness of DT action plan implementation. The team also sought to strengthen barrier analysis at the enterprise level by helping the DAF develop a synchronized HCM analysis capability for diversity and inclusion.

In this chapter, we describe the DAF barrier analysis process; review and critique the 2021 DAF barrier analysis process and summary results; and recommend changes to data and analysis, to the DAF barrier analysis methodology, and to the action plans produced to address barriers and disparities.

DAF Barrier Analysis Process

The goal of barrier analysis is to identify the reasons for observed disparities. AFI 36-205 defines *barrier analysis* as “an investigation of anomalies found in workplace policies, procedures, and practices that limit or tend to limit employment opportunities for members of any race or national origin, either sex, or based on an individual’s disability status. Barrier analysis identifies the root causes of those anomalies, and if necessary, eliminates them.”⁶⁶ A barrier analysis includes identifying triggers (i.e., trends, disparities, or anomalies), exploring root causes of triggers, developing and implementing an action plan, and assessing the plan’s result.⁶⁷

The DAF IG’s specific findings for Air Force barrier analysis processes were directly attributed to the DTs. As reported in the RDR:

⁶⁵ AFI 36-2670, 2020, p. 22.

⁶⁶ AFI 36-205, *Affirmative Employment Program (AEP), Special Emphasis Programs (SEPS) and Reasonable Accommodation Policy*, December 1, 2016, p. 65.

⁶⁷ A detailed explanation of the barrier analysis process may be found in AFI 36-205, 2016, and U.S. Equal Employment Opportunity Commission, “Instructions to Federal Agencies for EEO MD-715,” webpage, undated.

DTs are a key component to ensuring officers and civilians are vectored to the appropriate developmental opportunities during their careers. Although AFI 36-2670, Total Force Management, does not direct diverse DTs, AF/A1 provides additional guidance placing responsibility on the DT chair to ensure diversity of its members. Since there is less diversity among the O-6 and GS-15 population, it is likely harder for DT chairs to ensure their DT's diversity. Because DTs have significant input on career development opportunities, there is a greater potential to introduce racial bias in the process. For example, the type of vectors DT members provide, which officers are identified as HPOs [high-potential officers],⁶⁸ and how closely they manage those HPOs, could all be influenced by bias. Both AFI and AF/A1 guidance call on DTs to identify barriers, conduct analyses, and provide action plans or discussion topics to address the barriers. However, this Review found the 2019 Barrier Analysis report provided to AF/A1DV was lacking in specifics. AF/A1 acknowledged not all DTs provide the required effort and analysis to identify and track diversity and potential barriers.⁶⁹

The 2021 Force Development Guidance Memo from the Vice Chief of Staff of the Air Force (VCSAF) guided the DAF response to this finding:

2021 Barrier Analysis—Each DT must fully investigate potential barriers that impede career development opportunities for our Airmen considering the entire career field populace, even those not vectored. DT Chairs shall be required to submit and out-brief a barrier analysis and related action plan. Functional Authorities must ensure DT Chairs conduct a barrier analysis.⁷⁰

Based on the RDR finding, the VCSAF's directive, and inputs from CFMs, the 2021 barrier analysis methodology and process were overhauled to improve accountability and rigor. Consequently, the 2021 DT barrier analysis efforts marked the first simultaneous investigation of classification, development, and promotion barriers for DAF enlisted members and officers. All DTs received step-by-step instructions from the AF/A1D staff, both virtually and in supporting documents, to become proficient in the methodology.

Completing the barrier analysis required the DTs to review prepared data sets and to identify any noticeable triggers. If triggers were discovered, the DTs were asked to identify potential root causes or barriers and then (if possible) categorize the potential barrier as institutional (policies/processes), attitudinal (unconscious/conscious bias or individual perceptions), or physical (conditions that act as a roadblock and prevent access). This categorization was intended to facilitate later investigations into the barriers by the CFMs and DAF enterprise leaders. For institutional barriers, the DAF required DTs to specify whether the policy or process was Air Force-wide or specific to a career field. For attitudinal barriers, the DTs were asked whether they believed the barrier was systemic unconscious/conscious bias or individual perceptions that could affect individual career advancement.

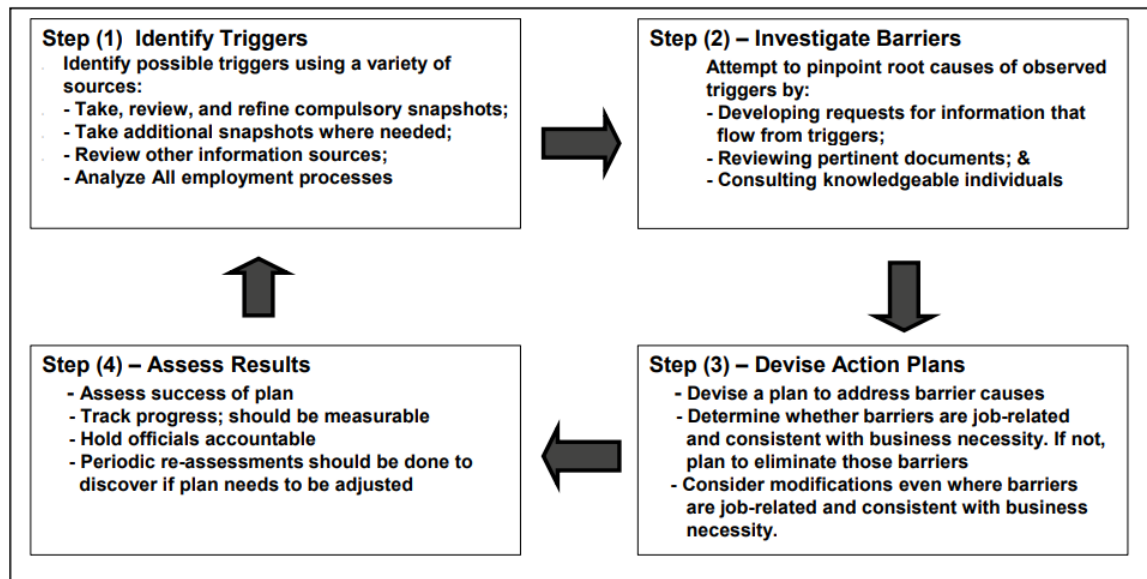
⁶⁸ HPOs are those Air Force officers who demonstrate, through their job performance, the potential to assume and succeed in positions that are instrumental to achieving senior rank.

⁶⁹ Inspector General, Department of the Air Force, 2020, p. 79.

⁷⁰ VCSAF, Force Development Guidance Memo, 2021.

The DTs were required to construct action plans that would eliminate the barrier within a specified period of time and to make necessary adjustments to those plans after periodic progress reviews. Figure 4.1 illustrates this four-step process, as reported by SAF/DI.

Figure 4.1. Barrier Analysis Process, as Reported by SAF/DI



SOURCE: Reproduced from SAF/DI, *Air Force Active Component 2021 Development Team Barrier Analysis Report Draft*, current as of August 22, 2022b, p. 7.

Critique of the 2021 Barrier Analysis

The team reviewed the 2021 DT barrier analysis process and summary results, focusing on the barrier analysis instructions given to the DTs, the data available to the DTs, and the DTs' summarized responses (recorded in a Barrier Analysis Response Database) that AF/A1D compiles and sends to SAF/DI. The purpose of the review was to

- determine whether the methodology contained impediments to producing the intended outcomes of barrier analysis
- review the data that the DTs had available to reach conclusions about barriers within career fields
- identify potential data and analysis gaps that could impede either the barrier analysis conclusions or high-quality action plans.

The results of each review are presented below.

Methodology Description

Step 1. Identifying Triggers

The first step of the DT barrier analysis methodology is the review of data to identify triggers that, with supporting evidence, can help identify highly likely racial, ethnic, or gender (REG) barriers. DTs' source data resided in a collection of spreadsheets and database summaries residing in a SharePoint file. These data reported the quantitative index of diversity for the career field,⁷¹ demographic outcomes for test results, attainment of development milestones, promotion recommendations, and promotion outcomes. For example, Table 4.1 shows which data are available for officer career field DTs.

Table 4.1. Data Available for Officer Career Field DTs

Career Field	Data Available
Officer demographics	<ul style="list-style-type: none">• Comparison of a particular career field's overall diversity to the Air Force with trend over time data (2010–2020)• Total Active Component Officer Demographics fiscal year (FY) 2011–FY 2020
Officer promotions	<ul style="list-style-type: none">• Ten-year (2011–2020) history for O-4/O-5/O-6 promotions• AFSC roll-up summarizing ten-year IPZ averages, highlighting specific problem areas to generate discussion during the barrier analysis process• Additional data included 36 other tabs: 12 IPZ tabs, 12 above-the-promotion-zone tabs, and 12 below-the-promotion-zone tabs of additional data in each file to further analyze promotion recommendations
PME	<ul style="list-style-type: none">• Five-year roll-up comparing DT selection rates by REG groups based on eligible officers compared to those who graduated from IDE/SDE programs from 2016 to 2020• Data on officers who chose to opt out of IDE/SDE consideration during 2021 (including why)
Squadron Command/Materiel Leader	<ul style="list-style-type: none">• Data (as of July 2021) showing status of officers who have/have not commanded, or held a Materiel Leader position

SOURCE: Reproduced from SAF/DI, *Air Force Active Component 2021 Development Team Barrier Analysis Report Draft*, current as of August 17, 2022a, p. 6.

Step 2. Investigating Barriers

DTs were instructed to ask probing “why questions” to identify barriers and were given the following guidance:⁷²

⁷¹ AF/A1D provided measures of career field diversity using Simpson's Diversity Index (SDI). SDI measures community diversity. The SDI metric offers organizations a more robust way to “quantify” diversity. SDI distills the measurement of diversity into a single, trackable metric. The SDI score range is from 0 to 1, with scores closer to 1 indicating higher diversity and scores closer to 0 indicating lower diversity. Additional information on SDI was provided to CFMs and DTs in the barrier analysis officer and enlisted demographic files.

⁷² To ensure accuracy, the bullet points for Steps 2–4 are verbatim from U.S. Air Force, *Barrier Analysis Process Guide*, 2021.

- The main goals should be to investigate potential barriers by asking “what” could be causing the data anomaly and “why?”
- Identify statistically savvy team members to conduct your Barrier Analysis.
- Start by asking the question “why?” and keep asking “why?” throughout your data review.
- Conduct research to uncover information that will help identify both TRIGGERS/BARRIERS.
- Continue to ask the question “why” to go beyond the symptom (TRIGGER).
- Validate the BARRIERS you identify in your analysis. Are there additional data sources and questions to answer to ensure that the identified BARRIERS are supported by data?
- BARRIERS can be related to policy, process, culture, leadership, or any other dimension.
- DTs are encouraged to go beyond the minimum requirements.
- Data required for the 2021 Barrier Analysis will be provided, but some data on your Career Field is only maintained by your DT year-to-year.
- Potential tools: Request data assistance through
 - SAF/DI, AFPC, etc.
 - Direct contact
 - Focus groups within AFSC
 - Exit and retention survey results
 - AF BAWGs.

Step 3. Devise Action Plans

The barrier analysis concludes with action plans for eliminating the identified barrier, an outbrief for the functional authority, and a barrier analysis summary to be sent to SAF/DI. DTs were provided the following guidance to developing their action plans:⁷³

- Create an action plan with the objective of eliminating/mitigating barrier(s):
 - Plan should be specific and measurable
 - Assess results of action plan
 - Continual assessment of the plan and results to make sure the plan is viable and progressing in the right direction to meet objective(s)
 - Continual consideration of plan modification as needed.

Step 4. Assess Results of Action Plan

- Continual assessment of the plan and results to make sure the plan is viable and progressing in the right direction to meet objective(s).

⁷³ U.S. Air Force, 2021, p. 7.

How Well Does the Methodology Produce Intended Outcomes?

Our review found that the methodology could be strengthened in three areas: mitigating threats to the methodology's validity, mitigating threats to the methodology's reliability, and improving the precision of the action plans derived from the barrier analysis. Here are the definitions of these criteria within this context:

- *Validity* refers to how accurately a method measures what it is intended to measure.⁷⁴ Within this context, validity pertains to the methodology leading to (1) an identification of actual barriers causing the observed differences that are (2) tied to the root causes already identified by the DAF and (3) that are also distinct from empirically supported differences between racial, ethnic, and gender subgroups (e.g., validated test score cutoffs).
- *Reliability* refers to how consistently a method measures something. It is an index of repeatability. If the same result can be consistently achieved using the same methods under the same circumstances, the measurement is considered highly reliable. In this context, reliability is high if a different set of DT members could use the same methodology and the same data and reach the same conclusions about barriers.
- *Precision* characterizes the degree to which the focus of the barrier analysis and the content of the action plans are aligned with root causes of disparities specified by the DAF in the six-month assessment report.⁷⁵ The content and reasoning within the action plan should be strongly supported by the barrier analysis findings and also linked to the root causes of the disparities already identified in the RDR and DR.

Strengthening the barrier analysis process and outcomes to meet these criteria can be achieved through better tailoring the data and analyses that support the barrier analysis process and the development and implementation of the action plans. We identified four issues.

1. *The quantity of data available for barrier analysis can threaten validity.* The large volume of data resources provided to the DT comprehensively covers the depth and breadth of the barrier analysis domains, but their presentation as raw data and semiprocessed data can challenge a group's ability to compile and distill the data to reach conclusions. This amount of data and analyses made available to DTs to conduct barrier analysis can lead to information overload and confound the identification of valid barriers. The consequences

⁷⁴ For additional information about validity, see American Psychological Association, *Principles for the Validation and Use of Personnel Selection Procedures*, 5th ed., August 2018, and Earl R. Babbie, *The Practice of Social Research*, 15th ed., Cengage, 2021.

⁷⁵ Inspector General, Department of the Air Force, 2021a. The Secretary of the Air Force (SECAF) directed the DAF IG to conduct independent assessments of DAF-wide initiatives targeted at addressing specific findings in the DAF IG RDR released in December 2020 (Inspector General, Department of the Air Force, 2020). The first assessment was scoped to specifically address progress over a six-month period since the release of the RDR and has commonly been referred to as the *six-month assessment* (i.e., Inspector General, Department of the Air Force, 2021a). A second assessment was initiated 18 months after the RDR's release to better assess the results of fully implemented initiatives designed to, as appropriate, address identified disparities. The SECAF directed these independent reviews to ensure thoughtful follow-through, accountability, and transparency and to assess effectiveness.

- of information overload is a widely researched topic.⁷⁶ Its impact on problem-solving and decisionmaking activities can include (1) decreased decision quality, (2) decreased decision speed, and (3) competing interpretations of the problem and specifications of solutions. These risks can be corrected by narrowing the amount and types of data that DTs use to a focused set of data that are central to the root causes of the disparities reported in the DAF at large.
2. *The prescribed approach to identifying barriers can threaten validity.* The instructions given to DTs (listed above) represent an inductive reasoning approach to problem-solving. The iterative “why” queries are steps in an approach to develop plausible explanations or root causes of the observed disparities or triggers. This approach is an acceptable form of inquiry, but its weakness is that it can lead to explanations of disparities that are not centrally related to the root causes the DAF has already identified. While the DTs may have found reasonable explanations for disparities in their career fields, the approach can also lead DTs to miss the reasons for career-field disparities that also contribute to DAF-wide disparities. This weakness can be mitigated by a deductive reasoning approach that seeks to determine the extent to which the observed career field disparities are contributing to the DAF disparities at large.
 3. *The prescribed approach to identifying barriers can threaten the reliability of barrier analysis process.* The 2021 barrier analysis required DTs to identify observed triggers, explore the database, and discuss possible explanations for the triggers. Based on their own observable hypotheses and anecdotal evidence from reliable sources, the DTs ultimately built a case that a specific barrier exists. This set of activities, while leading to a conclusion, poses threats to reliability (or repeatability) of those conclusions. This form of reasoning will lead to unique conclusions. If the barrier analysis reasoning is unique to each DT, then it cannot be replicated later by another DT from the same or different career fields. Repeatability is critical because it ensures that there can be a unity of effort to identify and eliminate barriers within and across career fields. This threat to the reliability of the process can be addressed by revising DTs’ barrier analysis activities to reduce the extent to which the triggers they observe are indicators of the barriers that have already been identified DAF-wide.
 4. *The volume of data available for barrier analysis and the prescribed approach to develop action plans can threaten the precision of the barrier analysis findings and resultant action plans.* The central feature of the precision criterion is the tight link between the barrier analysis findings and action plans to the root causes identified in the DAF six-month assessment. The shortcomings identified in the above critiques can result in the DT barrier analyses and action plans failing to target these root causes. Additionally, the reporting of barrier analysis findings and action plans is restricted to the functional authority for the career

⁷⁶ See Martin J. Eppler and Jeanne Mengis, “The Concept of Information Overload—A Review of Literature from Organization Science, Accounting, Marketing, MIS, and Related Disciplines,” in Miriam Meckel and Beat F. Schmid, eds., *Kommunikationsmanagement im Wandel*, Gabler, 2008, and Peter Gordon Roetz, “Information Overload in the Information Age: A Review of the Literature from Business Administration, Business Psychology, and Related Disciplines with a Bibliometric Approach and Framework Development,” *Business Research*, Vol. 12, 2019.

field and SAF/DI. However, barriers identified by the DT and the corrective actions those teams have specified involve multiple organizational stakeholders. These stakeholders should be engaged in two ways to enhance action plan precision: First, they should serve as a source of data and analysis to confirm the barrier analysis findings. Organizations such as AETC, AFRS, AFPC, and AF/A1 staff possess the expertise and analytical capabilities to verify and enhance the barrier analysis findings. Second, the organizational stakeholders are essential partners for implementing and evaluating the action plans. In addition to functional expertise, these organizations can improve the viability of action plans and provide the vital additional analysis support needed to implement and evaluate action plans.

Conducting rigorous barrier analysis within the DAF is a complex set of activities. The effectiveness of the undertaking will first rely on the use of data and analysis approaches that will ensure validity, reliability, and precision within and across DAF career fields. This increased rigor can be achieved through the creation and use of analysis support tools, standardized reasoning to interpret data and analysis, and empirically supported action plans that are coordinated throughout the DAF enterprise. Recommendations for achieving these capabilities are described in the following sections.

Recommended Changes to Data and Analysis

The RDR/DR findings were reported for the DAF enterprise. Because the enterprise is comprised of specific career fields, the barrier analyses steps should determine whether specific career field disparities are contributing to the RDR/DR disparities and root causes at large. The threats to the validity, reliability, and precision of the barrier analysis methodology can be reduced if (1) DTs have more tailored data and analysis to support their deliberations and action plans; and (2) a focused methodology is tightly linked to established root causes.

The DAF can improve the volume and presentation of data supporting barrier analysis by organizing five specific sets of data into a decision support dashboard, as shown in Table 4.2.

Table 4.2. Five Data Sets for Decision Support Dashboard⁷⁷

Type of Decision Support	Data Sets	
	Enlisted DTs	Officer DTs
Accessions skill and representation disparities, providing specific reports tightly aligned with the root causes identified for accessions and classification disparities	<ul style="list-style-type: none"> • REG breakout for past year's enlisted accessions into the career field (raw numbers and test performance) • REG breakout of total career field (incorporating disparity flags used in the 2021 database tools) 	<ul style="list-style-type: none"> • REG breakout of past year's officer accessions into the career field (raw numbers and test performance) • REG breakout of total career field (incorporating disparity flags used in the 2021 database tools)
Development and talent management disparities, providing specific reports tightly aligned with the root causes identified for disparities in the service members' achievement of developmental milestones	<ul style="list-style-type: none"> • REG breakouts for completion of key developmental milestones for E-5–E-7 bench 	<ul style="list-style-type: none"> • REG breakouts for completion of key developmental assignments for captains
Retention disparities, providing specific attrition analysis by race, ethnic group, and gender at key milestones within the career field life cycle	<ul style="list-style-type: none"> • REG Cumulative Continuation Rates for 1–4 years of service and 5–9 years of service 	<ul style="list-style-type: none"> • REG officer career field cumulative continuation rates
Promotion disparities, providing specific reports tightly aligned with the root causes identified for promotion disparities	<ul style="list-style-type: none"> • REG breakouts for promotion test scores, promotion recommendations, and promotion results to SSgt and TSgt (incorporating disparity flags used in the 2021 database tools) • REG breakouts for promotion recommendations and promotion results to CMSgt 	<ul style="list-style-type: none"> • REG breakouts for promotion recommendations and promotion results to Maj and Lt. Col. (incorporating disparity flags used in the 2021 database tools) • REG breakouts for promotion recommendations and promotion results to Col
DAF cultural impacts, providing periodic measures of the attitudes of airmen and guardians in the career field regarding the impacts of disparities on the career field climate and culture	<ul style="list-style-type: none"> • REG breakouts for career field specific responses to climate and opinion survey questions that mirror the IG survey as reported in the RDR (p. 89) and DR (p. 81) 	

The raw presentation of these specific data sets could again lead to information overload risks for DTs. We recommend organizing these data in the form of a decision support tool modeled after decision support systems that are extant in the consumer financial services sector. Managing DAF human capital warrants the same kinds of tools as managing financial capital. Such designs have the

⁷⁷ Note that these are suggested data sets. The diversity management needs of the DAF and future disparity issues may require the need for different configurations of these data or new data sets.

capability to present the precise data and information that represent complex relationships between factors, but in a format that is understandable and actionable.

Figures 4.2 through 4.4 present the concept design features for a barrier analysis decision support tool. As shown in Figure 4.2, the dashboard would be designed as an intuitive, highly customizable set of spreadsheets. As shown in Figure 4.3, the dashboard would permit DTs and CFMs to make side-by-side comparisons of talent development and promotion analysis to determine reasons for disparities. As shown in Figure 4.4, the dashboard would also provide the capability to manage action plan implementation and completion. The barrier analysis dashboard would be populated by analyses from organizational sources that produced the supporting data for the 2021 barrier analysis.

Figure 4.2. Barrier Analysis Dashboard, Career Field at a Glance View

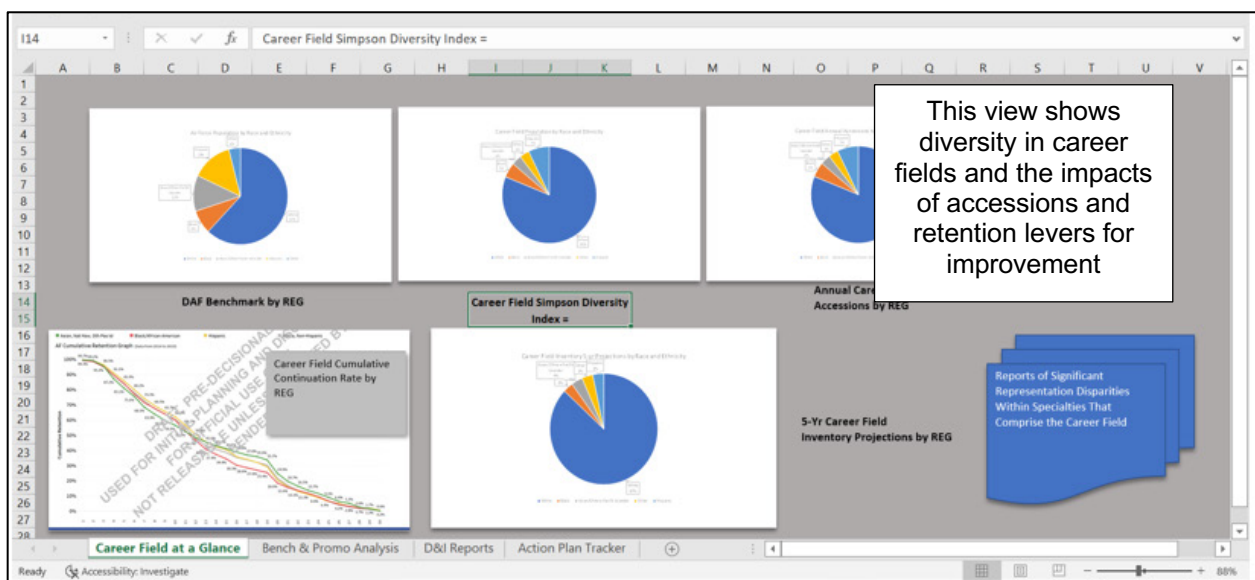
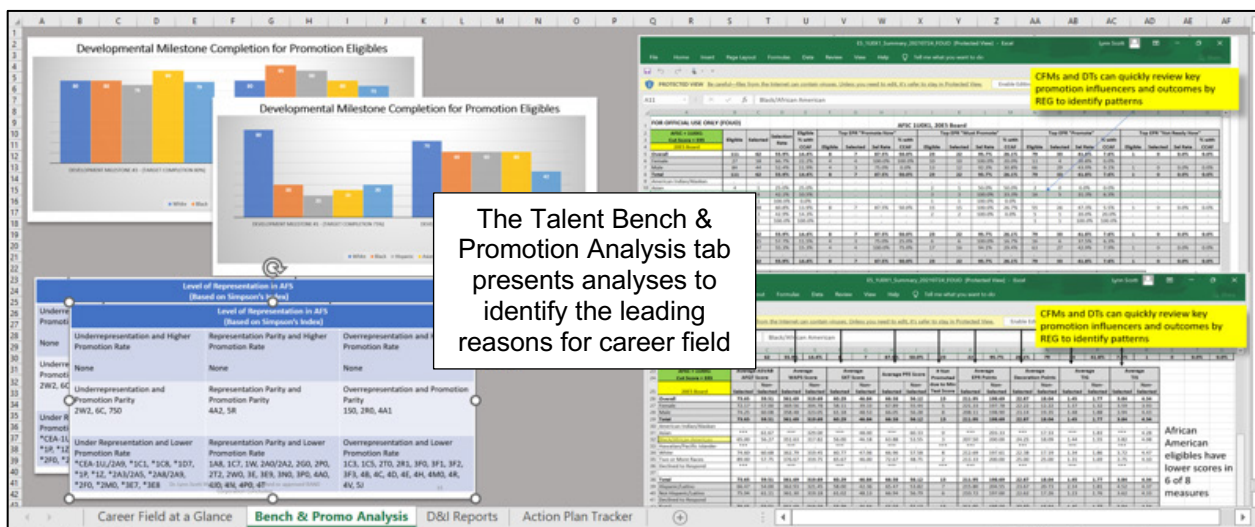


Figure 4.3. Barrier Analysis Dashboard, Talent Bench and Promotion Analysis View



Career Field Barrier Analysis Action Plan Tracker (V 0.1)

To begin, directly substitute your information in the cells below)

☐ Click to highlight initiatives due within 3 MONTHS

COMPLETION COLOR BAR LEGEND: 5% 25% 75%

What Actions Will Be Accomplished to Correct Identified Disparities and Barriers?	Level and Type of Leader to Implement Actions	OPR and POC	Primary OPR and POC	Additional OPRs and POCs	Approving Authority for Action Plan	Start Date	Due Date	Progress	Percent
Action Plan 6	Career Field Managers	Career Field Manager	SAF/DI	A1D	PH	3/4/2023	7/21/2023	<div><div></div></div>	42%
Action Plan 5	DT Chair	DT Chair	SAF/DI	A1D	PH/CPM	1/5/2023	7/31/2023	<div><div></div></div>	50%
Action Plan 6	Group Commanders	Career Field Manager	A1D	SAF/DI	PH/CPM	1/6/2023	8/10/2023	<div><div></div></div>	30%
Action Plan 7	Wing Commanders	Functional Manager	A1D	SAF/DI	PH	1/12/2023	8/20/2023	<div><div></div></div>	35%
Action Plan 8	Squadron Commanders	Career Field Manager	A1D	SAF/DI	PH	4/30/2023	12/15/2023	<div><div></div></div>	25%
Action Plan 8	AFRC/DO	AFRC/DO	SAF/DI	A1P	SAF/PH	2/15/2023	1/10/2024	<div><div></div></div>	10%

The Action Plan Tracker tab provides the essential information to manage the elimination of barriers in the career field

Career Field at a Glance | Bench & Promo Analysis | D&I Reports | **Action Plan Tracker**

As described at the beginning of this chapter, the barrier analysis methodology encompasses three kinds of activities: (1) the organization of review of data and analysis to identify possible disparities (triggers), (2) a method to identify actual barriers, and (3) the development and implementation of action plans to eliminate the barriers. The preceding section discussed how data and analysis could be organized and presented to improve DTs' identification of triggers. In the next sections, we will present recommendations to improve the methodology to identify barriers and the successful development and implementation of action plans.

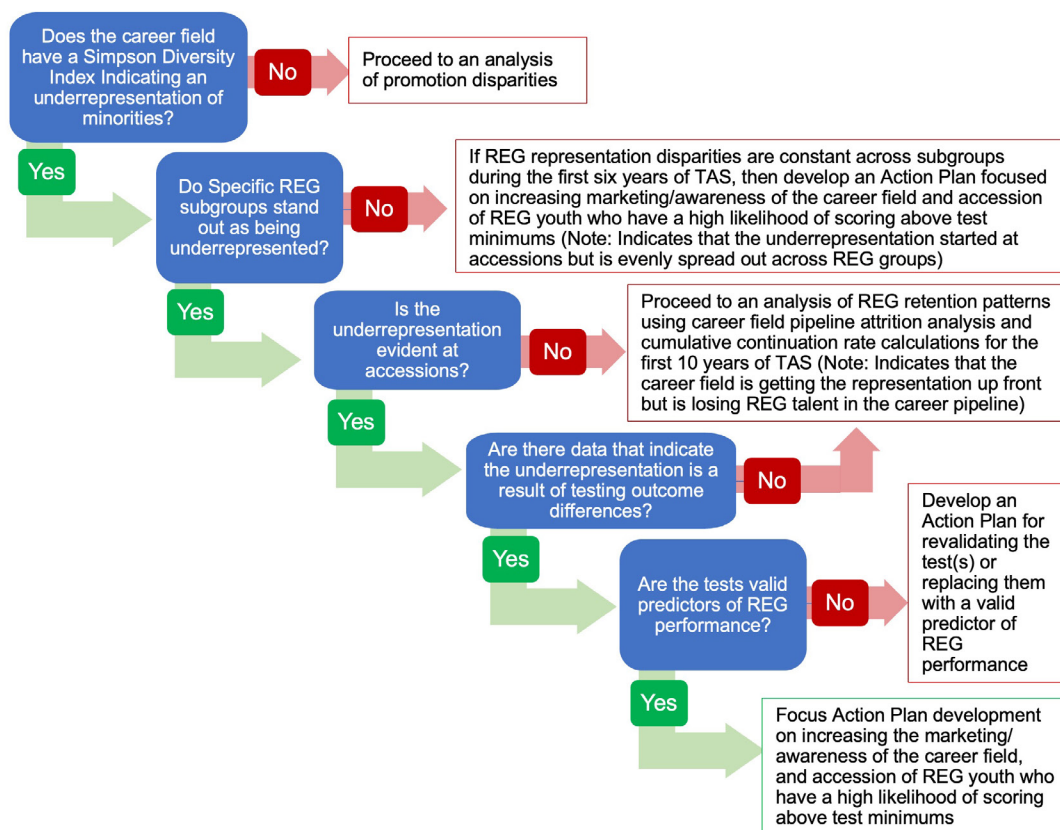
The barrier analysis methodology could be improved if it is grounded in deductive reasoning to determine the extent to which the observed disparities in a career field can be attributed to the root causes for disparities identified in the RDR and DR. If DTs have a decision support tool like the proposed dashboard and employ a deductive reasoning process, then the threats to validity, reliability, and precision of both the barrier analysis and action plans should be reduced.

1. If a career field has REG underrepresentation at designated inventory phase points (e.g., SSgt, TSgt, Major, Lt. Col.), then
2. the CFM/DTs can determine if the underrepresentation is due to recruiting/accesion practices and/or classification testing, then
3. the CFM/DTs can review career field retention statistics by REG to determine the extent of disparities are due to attrition patterns, then
4. using inventory projection tools created by AFPC and AF/A1 staffs, the CFM can evaluate the corrective effects of recruiting/accesions/retention changes that, if sustained, will result in the career field reaching representation parity with the DAF average within a specified time, then

5. the CFM and FM can identify the specific career field actions and resource requirements and other specific stakeholder actions needed to accomplish the representation parity action plan, then
6. the FM and CFM can submit the action plan(s) to SAF/DI for coordination, tracking, and periodic review.

Figure 4.5 shows the specific deductive logic steps that DTs would follow for analyzing barriers to representation and developing action plans.

Figure 4.5. Logic Steps for DT Underrepresentation Barrier Analysis and Action Plan Development



NOTE: The SDI for each career field was calculated by DAF analysts and was included in the barrier analysis tool kit for DTs. It is a measure of the overall diversity of the career field population and does not specify REG subgroup differences. TAS = Total Active Service.

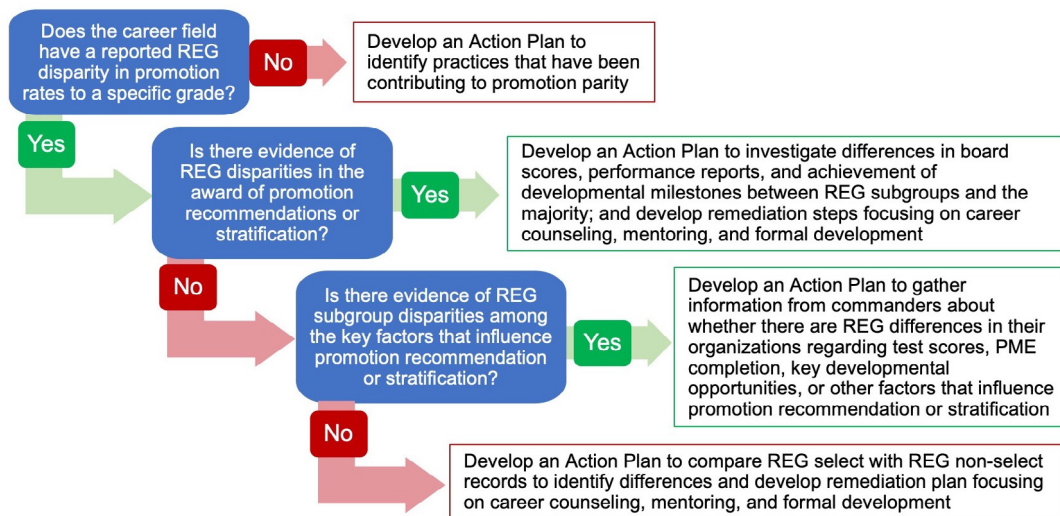
The revised methodology would follow these steps to correct lower REG promotion rates in career fields:

1. If a career field has lower promotion rates for REG subgroups than the majority, then
2. the CFM/DTs can determine if the lower promotion rate is due to REG disparities in promotion recommendations, then

3. the CFM/DTs can determine if the lower promotion rate is due to REG disparities in key factors that influence promotion recommendations, then
4. the CFM/DTs can determine if the lower promotion rate is due to REG disparities in the completion of developmental milestones instrumental to promotion, then
5. using inventory projection tools, the CFM can evaluate the corrective effects of eliminating disparities in each of the preceding categories, that if sustained will result in the career field reaching REG promotion parity, then
6. the CFM can identify the specific career field actions and resource requirements and other specific stakeholder actions needed to accomplish the promotion parity plan, then
7. the FM and CFM can submit their plan to SAF/DI for coordination, tracking, and periodic review.

Figure 4.6 shows the steps for analyzing barriers to promotion and develop action plans.

Figure 4.6. Logic Steps for DT Promotion Barrier Analysis and Action Plan Development



Both logic steps highlight essential components of the deductive barrier analysis methodology. The first component emphasizes data and analysis that would be linked to the root causes of disparities. The second is the sequential verification or elimination of factors, using evidence, that could be associated with the observed disparities. The final component is the tight coupling of the action plans to the deductive analysis and the use of additional analyses from different organizational stakeholders to further understand the disparities or to support solutions articulated in the action plan.

We recommend that DTs and CFMs treat action plans as the first step toward improving diversity management in a career field. In doing so, they will be highlighting the importance of the supporting analyses and organizational coordination that CFMs will need to implement, evaluate, and, if necessary, revise their action plans. Under the current procedure, DTs submit their completed barrier analysis and action plans to SAF/DI after approval from their functional authority. Each 2021 DT barrier analysis action plan references either policy initiatives, operational processes, or

operational actions that are within the responsibilities of different DAF staffs and organizations (e.g., AF/A1, AETC, AFRS, and AFPC). However, there is little specification about how coordination occurs across DAF stakeholders referenced in DT action plans to implement change. Consequently, formal coordination among these stakeholders is critical for success. Adding formal coordination processes ensures that action plans will be subject to the proper analytical support and due diligence for their successful implementation and sustainability. The next section provides recommendations to achieve this objective.

Recommended Changes to Action Plans' Implementation

The DT action plans are intended to achieve specific diversity objectives within a specific time. They are intended to be iterative, relying on periodic assessments of impact to determine if refinements or revisions are needed. Currently, there is no specification of either an individual authority or organization that is accountable for the successful implementation and sustainment of a DT action plan. Moreover, there is no requirement for periodic assessment of action plan effectiveness. These shortcomings could be corrected by assigning accountability for action plan implementation to the CFMs to ensure a reasonable span of management control. The formal assessment processes for action plan success should be achieved through coordinated processes among the CFM, DAF staff, and/or the organizational stakeholder(s) implementing the action plan.

The SAF/DI 2021 barrier analysis report presents the focus areas of the enlisted and officer action plans for representation and promotion disparities. Figure 4.7 for enlisted members and Figure 4.8 for officers show the reported distribution of the primary DT action plan focus areas, which include nearly every aspect of the personnel life cycle, and by association every DAF organization responsible for those policy and operational domains.⁷⁸ For example, noteworthy percentages of enlisted and officer DT action plans for underrepresentation are directed at either recruitment or accessions (48.9 percent for enlisted and 70 percent for officer), and significant shares of solutions for promotion disparities are directed at development or mentoring (24.4 percent for enlisted and 36.6 percent for officer).

⁷⁸ SAF/DI, 2022b.

Figure 4.7. Focus Areas of Enlisted DT Action Plans

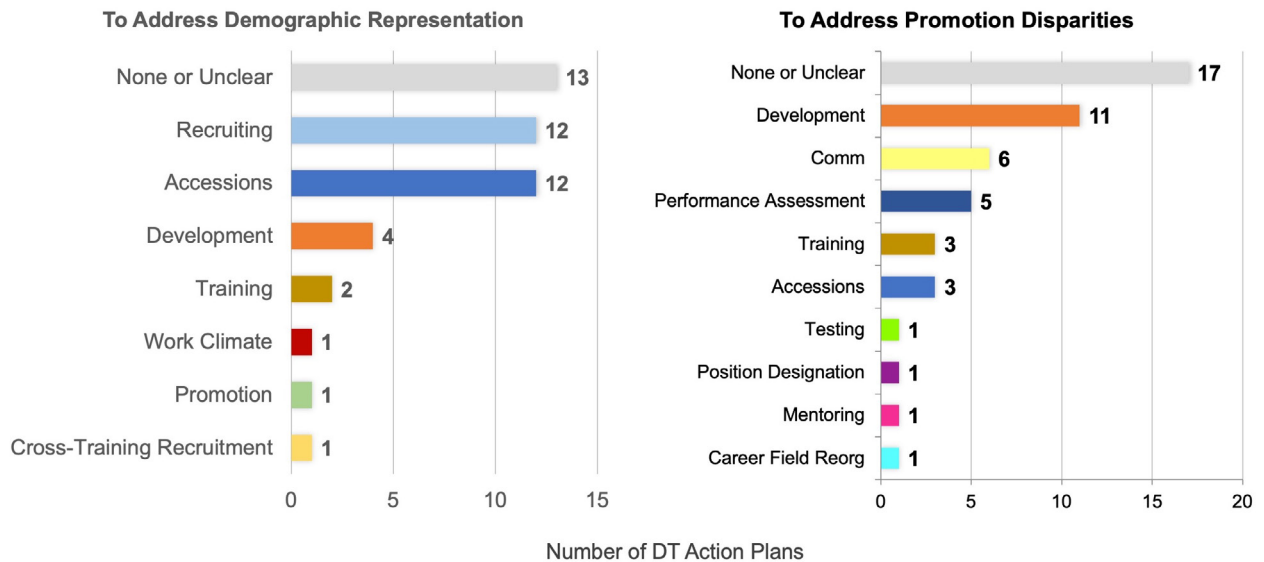
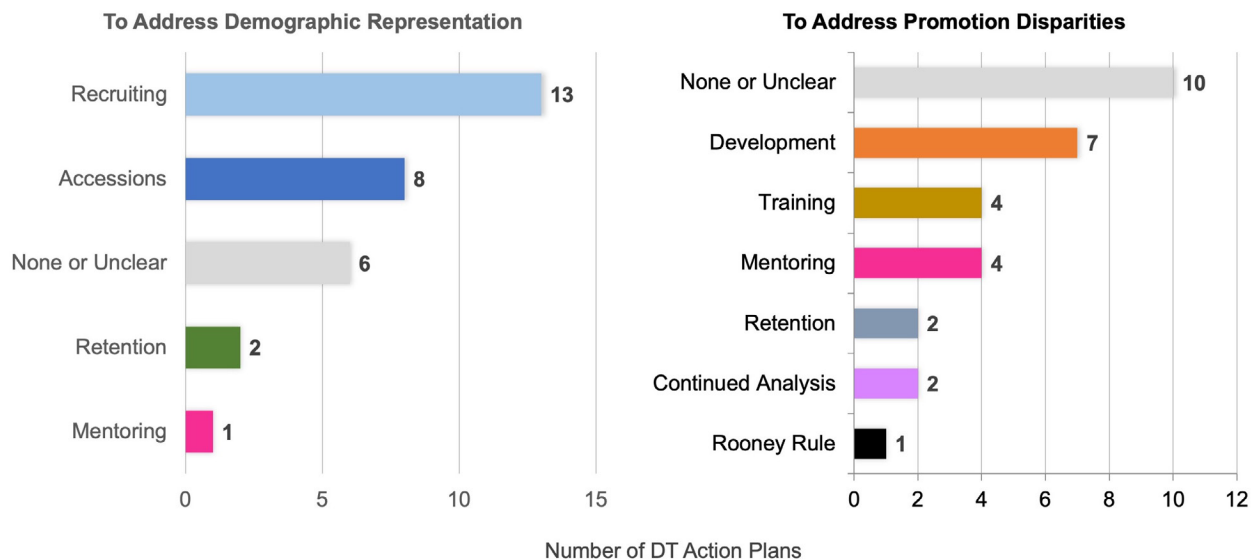


Figure 4.8. Focus Areas for Officer DT Action Plans



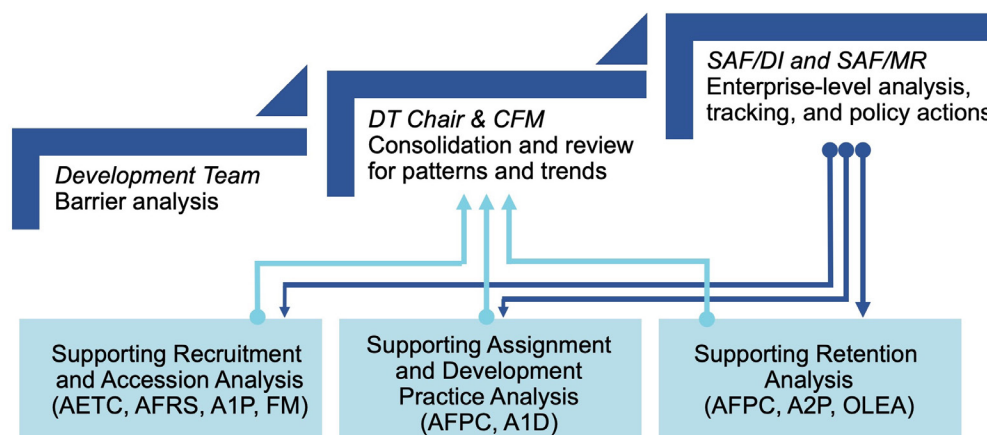
NOTE: “Adopted in 2003, the Rooney Rule is an NFL policy requiring every team with a head coaching vacancy to interview at least one or more diverse candidates. In 2009, the Rooney Rule was expanded to include general manager jobs and equivalent front office positions. The Rooney Rule is named after the late former Pittsburgh Steelers owner and chairman of the league’s diversity committee, Dan Rooney” (NFL Communications, “NFL Expands Rooney Rule Requirements to Strengthen Diversity,” press release, December 12, 2018).

For the recruiting and accessions action plans to be fully informed and successfully implemented, CFMs will need the active engagement of stakeholders in AF/A1P, AETC, AFRS, AFPC, and the

Office of Labor and Economic Analysis⁷⁹ to provide supporting analyses that will (1) demonstrate the feasibility of the action plan, (2) specify realistic milestones and timelines for action plan goals, (3) identify the resource requirements for implementation, and (4) contribute to the development of evaluation measures. For robust action plans addressing development and mentoring, CFMs will need policy and analytical inputs from AF/A1D and AFPC for the same components of implementation and sustainability. CFMs designing action plans for other focus areas would need similar analytical support from relevant stakeholder organizations.

The analytical support for CFM action plan implementation and sustainability would be complemented by analyses to respond to enterprise-level disparity and barrier trends. The barrier analysis process generates a structural hierarchy of analysis findings, moving from the DT findings, to consolidation at the CFM level for patterns and trends, to approval from an FM, and then to SAF/DI for enterprise-level consolidation. SAF/DI's responsibilities to conduct enterprise-level analysis, tracking, and policy actions will be best supported by coordinated analytical input from the same stakeholder organizations.⁸⁰ This level of analysis support would be in response to enterprise-level trends requiring (1) evaluation of policy impacts on generating disparities; (2) the consideration of policy revisions and new policies for classification, development, utilization, retention, and promotion to eliminate disparities; (3) strategic-level assessments of the long-term impacts of disparities on recruitment, retention, and force management; and (4) the determination of resource requirements to make enterprise-level course corrections to achieve DAF diversity objectives. Figure 4.9 notionally depicts these synchronized analytical hierarchical and support relationships.

Figure 4.9. Synchronized Analytical Relationships for Barrier Analysis and Action Plan Implementation



NOTE: OLEA = Office of Labor and Economic Analysis.

⁷⁹ The Office of Labor and Economic Analysis is a newly established office located at the Air Force Academy that is responsible for developing tools to conduct attrition analysis through each stage of the career life cycle.

⁸⁰ SAF/DI is assigned these responsibilities as specified in SAF/DI, *Diversity, Equity, Inclusion and Accessibility Strategy 2021–2026 Draft*, current as of October 18, 2021, p. 14, and Inspector General, Department of the Air Force, 2021a, pp. 23–25.

Summary

The 2021 DT barrier analysis efforts marked the first simultaneous investigation of classification, development, and promotion barriers for DAF enlisted members and officers. Moreover, it was the first such effort to be conducted after the findings of the RDR and the DR. These barrier analyses were supported by comprehensive databases and required focused efforts by DTs and CFMs. These efforts surfaced a wide range of actionable issues that, if acted upon, could further DAF's stated diversity and inclusion objectives. While the formal establishment of this practice has been achieved, it is also evident that the next iteration of DAF barrier analysis needs to be reshaped in the following areas: (a) tailoring the amount and presentation of data supporting DT barrier analysis through a decision support tool, (b) revising the specific barrier analysis methodology so it is based on a deductive process aligned with established root causes, (c) establishing CFMs as accountable for the coordination of DT barrier analysis findings and action plans with stakeholders, and (d) establishing implementation and assessment processes for barrier analysis action plans that are grounded in synchronized analytical support from stakeholder organizations.

Key Observations and Recommended Actions

Since 2020, the DAF has invested significant effort into understanding and addressing the root causes of the racial, ethnic, and gender disparities reported by the IG. It has developed an extensive array of countermeasures designed to improve the representation, development, and promotion disparities that affect thousands of airmen and guardians.

RAND researchers examined multiple innovative diversity initiatives that the DAF is already implementing in various facets of HCM, which should be monitored for effectiveness and return on investment.⁸¹ However, the RAND team's assessment of current disparity countermeasures and initiatives also found gaps in coverage across root causes, governance and implementation accountability, and resourcing, which are described in Chapter 2. This chapter recommends additional actions the DAF should consider to accelerate desired change and institutionalize progress.

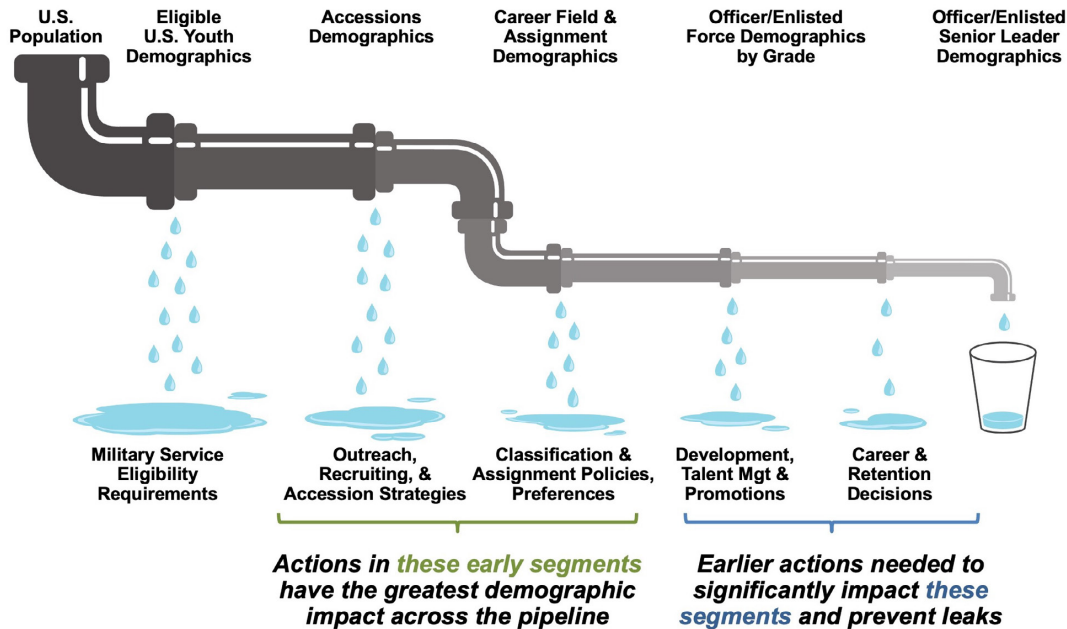
RAND's project team employed a *leaky pipeline metaphor*⁸² to conduct our data analyses, assess current strategies and policies, and formulate recommendations. To illustrate this perspective, we adapted the MLDC's personnel life cycle segments affecting military demographic composition⁸³ to construct Figure 5.1.

⁸¹ Our analysis did not find significant or standardized return on investment criteria for current DAF racial, ethnic, and gender disparity countermeasures. While outside the scope of this study, the authors recommend that return on investment measures be defined for all current countermeasures and the recommended actions contained in this chapter.

⁸² See Jason M. Sheltzer and Joan C. Smith, "Elite Male Faculty in the Life Sciences Employ Fewer Women," *Proceedings of the National Academy of Sciences (PNAS)*, Vol. 111, No. 28, July 15, 2014.

⁸³ See MLDC, *From Representation to Inclusion: Diversity Leadership for the 21st Century Military*, Final Report, March 15, 2011, p. 45.

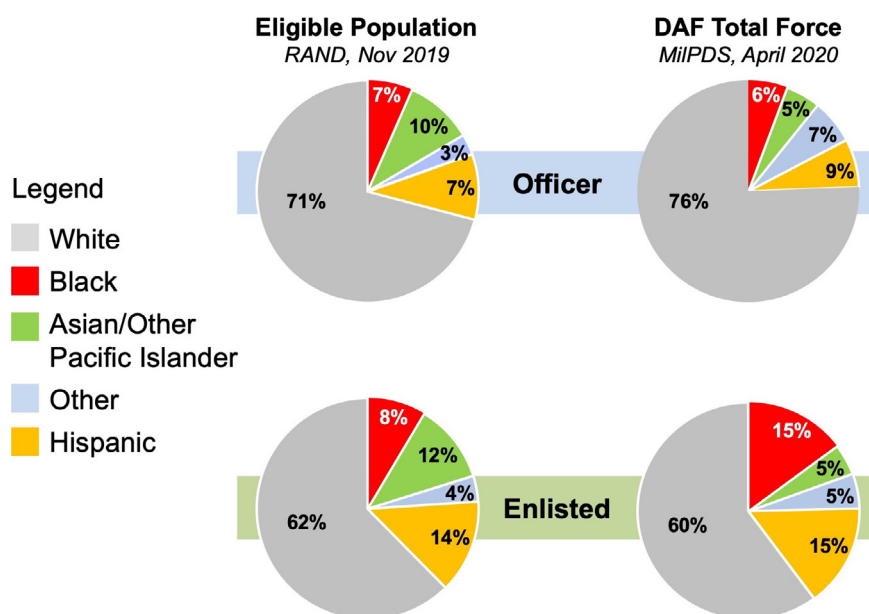
Figure 5.1. Military Human Capital Management: Leaky Pipeline View



Notably, in multiple discussions throughout this study, DAF stakeholders articulated a belief that current quality standards should be held constant across segments of the pipeline—for recruits, officer/enlisted accessions, and currently serving members—even as the DAF implements strategies to address disparities in representation and promotions.

DAF data reveal that IG-identified disparities in REG representation are more acute in the officer corps than the enlisted corps, particularly in the officer operational career fields and in the field and senior grades (see Figure 5.2). The project team’s recommendations are accordingly weighted to this reality.

Figure 5.2. Population Versus Eligible Recruiting Pools Versus Current DAF Officer and Enlisted Total Force Composition by Race/Ethnicity



SOURCE: Features data from U.S. Census, RAND, and DAF (presentation to the Chief of Staff of the Air Force's [CSAF's] Monthly Diversity and Inclusion Council, May 2020, provided by USAF Holm Center to authors via email, August 2022).

This chapter categorizes observations and recommended actions aligned to roles and functions that occur in specific pipeline segments of the military personnel management pipeline and those that have an impact across all segments of the pipeline. These include

- recommendations addressing recruiting, accessions, and classification (career field assignment)
- recommendations addressing development, talent management, promotion, and retention
- recommendations addressing institutional barrier analyses
- recommendations addressing strategic narrative/transparency/trust, resource investments, and assignment of enterprise responsibilities.

To assist the DAF with assigning implementation agencies/organizations, our 22 recommendations are binned into Force Inflow, Force Management, and End-to-End pipeline segments.⁸⁴

The project team recognizes that taking these actions will likely not be easy. Eliminating documented, persistent, and unwanted disparities requires sustained commitment at all DAF organizational levels, rigorous and regular analysis, well-coordinated comprehensive implementation

⁸⁴ For a summary graphic depiction of the project team's 22 binned recommendations, see Figure 5.3 at the end of this chapter.

of well-crafted solutions, and dedicated and consistent resourcing.⁸⁵ While they are realistic about these implementation challenges, all DAF stakeholders and workshop participants we interacted with stated that closing these disparities is a mission imperative.

Recommendations Addressing Recruiting, Accessions, and Classification

Officer and Enlisted Recruiting

The RAND project team found multiple innovative efforts and countermeasures undertaken by AFRS. These include improved data analytics and marketing efforts to underrepresented populations, untapped geographic regions, and MSIs; outreach to affinity-based professional organizations/events; and networking with STEM groups. In addition, AFRS has implemented “Inspire Ops” events and engagements to introduce airmen, technologies, and experiences to a wider cross-section of the American public and inform audiences, influence propensity, and inspire the next generation of Air Force leaders and aviators. AFRS is also leveraging Air Force General Officers (GO), connecting them with AFRS recruiters across the country to target specific demographics, areas, and communities where recruiting is difficult by interacting with community leaders and encouraging propensity to serve among youth and influencers.

While most of these efforts are relatively new and still being developed to scale, they could also be expanded for additional impact. A few examples are posting videos of GO Inspire presentations (like TED Talks) or headshot videos on the AF.mil website or on the Air Force YouTube channel. Inspire Ops and other messaging campaign events could include one or more of the 12 Outstanding Airmen of the Year, members of local base company grade officer councils, or members of base enlisted advisory councils.

Acknowledging these significant efforts, the project team recommends additional recruiting initiatives derived from the promising practices identified by participants across the seven workshops.

Recommendation 1. Expand Use of Published Racial, Ethnicity, and Gender Stretch Goals for Officer and Enlisted Recruitment, Accessions, and Career Field Classification

A desire to see the DAF widely publish recruiting stretch goals⁸⁶ on the record was a theme that emerged in multiple stakeholder workshops. Three main reasons were given: (1) Published goals are useful for communicating commitment to diversity, inclusion, opportunity, and institutional growth; (2) goals align disparate stakeholder objectives, actions, and resourcing in pursuit of desired outcomes;

⁸⁵ The authors recognize that there are societal factors—socioeconomic, educational, and cultural norms and biases—present in some communities and groups that likely contribute to racial, ethnic, and gender disparities among DAF recruits and current members, but over which the DAF has no direct control over and little ability to influence. Recommendations in this chapter focus on factors that the authors believe to be *within* the DAF’s control or ability to influence.

⁸⁶ The authors define *stretch goals* as desired outcomes published to align and drive coherent policies and actions across a large, dispersed group of institutional stakeholders and to enable the organization to measure progress over time. This report does not advocate quotas, which, in contrast, compel decisions to meet mandated targets.

and (3) goals provide the impetus for data collection, analyses, and periodic review. The DAF has documented improvements when previously employing stretch goals. For example, in 2014 the SECAF and CSAF published officer applicant pool goals by REG for USAFA and AFROTC. Table 5.1 documents goal attainment and/or upward trendlines year over year for most REG goal categories, in both the USAFA and AFROTC officer applicant pools.

Table 5.1. 2014 USAFA and AFROTC Officer Applicant Pool Goals Versus Year-over-Year Actual

Race, Ethnicity, Gender	USAF Goal	USAFA Applicant Pool by Class				
		2020	2021	2022	2023	2024
American Indian/Native Alaskan ^a	1%	1.30%	1.30%	1.30%	1.20%	1.20%
Asian American ^a	8%	8.50%	9.10%	9.60%	9.80%	10.40%
Black ^a	10%	15.00%	15.30%	13.50%	13.30%	12.90%
Native Hawaiian/Other Pacific Islander ^a	1%	1.80%	1.30%	1.60%	1.80%	2.10%
Hispanic/Latino ^a	10%	12.70%	12.90%	13.10%	13.40%	13.90%
Female	30%	29.30%	27.40%	25.00%	28.30%	30.20%
^a Excludes international students						
		AFROTC Applicant Pool by Academic Year (AS100, 200, 250 Enrollment Averages)				
		AY16–17	AY17–18	AY18–19	AY19–20	AY20–21
American Indian/Native Alaskan	1%	1.00%	1.00%	1.00%	1.00%	1.00%
Asian American	8%	8.00%	7.00%	7.00%	7.00%	8.00%
Black	10%	10.00%	8.00%	8.00%	8.00%	8.00%
Native Hawaiian/Other Pacific Islander	1%	1.00%	0.00%	1.00%	1.00%	1.00%
Hispanic/Latino	10%	14.00%	14.00%	15.00%	16.00%	15.00%
Female	30%	27.00%	28.00%	28.00%	30.00%	31.00%

SOURCE: USAFA data are from Inspector General, Department of the Air Force, 2020, p. 37. AFROTC data were provided to authors by the Holm Center via email, August 2022.

NOTE: AY = academic year.

In August 2022, the SECAF published new officer applicant pool stretch goals, increasing the desired percentages. The goals, described as aspirational and not intended to nullify merit-based processes, require AETC and USAFA to submit outreach plans designed to achieve the goals and to report annually on progress made.⁸⁷

⁸⁷ SECAF, *Officer Source of Commission Applicant Pool Goals*, Official Memorandum to AETC Commander and USAFA Commander, August 31, 2022. The memo is quad signed by SECAF, the Under Secretary of the Air Force, CSAF, and the Chief of Space Operations.

Table 5.2. 2022 Officer Applicant Pool Race, Ethnicity, and Gender Goals

Race (Overall Goal)^a	White (67.5%)	Black/African American (13%)	Asian (10%)	American Indian/ Native Alaskan (1.5%)	Native Hawaiian/ Other Pacific Islander (1%)	Hispanic/ Latino (15%)
Male (64%)	43%	8.5%	6.5%	1%	0.5%	9.5%
Female (36%)	24.5%	4.5%	3.5%	0.5%	0.5%	5.5%

SOURCE: Features data from SECAF, 2022.

^a Total of race goals equal 93%; excludes multiracial category of 7% (4.5% male/2.5% female).

Recommendation 2. Bolster the Air Force Recruiting Enterprise to Enable Wider Reach and Earlier Engagement

There was broad consensus across the workshops on the need for expanded recruiting outreach and earlier engagement of eligible youths to diversify pipeline accessions. AFRS is already pursuing these imperatives. We suggest several parallel alternatives the Air Force should consider to further augment its dedicated recruiting enterprise. Building on promising practices identified by workshop participants, we recommend that the DAF take the following actions:

- Seek additional duty/volunteer officer and enlisted personnel at DAF wings/installations across the nation to engage in coordinated community outreach with youths at middle schools, high schools, and community centers in locales bordering their bases.
- Assign AFRS-coordinated local outreach objectives to local wing command teams. This would enable wings to:
 - Leverage AFRS data analytics on youth candidate pools.
 - Receive current, regularly updated recruiting and program information materials to facilitate youth and community engagements, such as Aviation Inspiration Mentorship, Aim High Flight Academy, Air Force Junior Reserve Officer Training Corps (AFJROTC), and Civil Air Patrol.
 - Support BAWG-sponsored outreach and recruiting initiatives to national, regional, and local affinity groups.⁸⁸
- In areas that do not have an Air Force base, explore ways to make greater use of the Air National Guard's presence for enterprise outreach and recruiting efforts.
- Assign or align USAFA/AFROTC admissions liaison officers to DAF installations to enable timely counseling of prospective recruits early in their high school careers regarding academic courses of study, leadership, and extracurricular activities that are valuable for scholarship applicants. Counseling prospects would be identified through the base's school and community outreach initiatives discussed above.

⁸⁸ The project team learned about a great example of this when the Air Force Hispanic Empowerment and Advancement Team (HEAT) facilitated engagement with the Hispanic community at a festival in New Mexico to allow the community to associate their ethnicity and culture with similar faces within the DAF. HEAT also engaged in a "Back to School" initiative that put Hispanic servicemembers in front of more than 8,000 students from different schools in order to engage them earlier in the pipeline.

Officer Accessions

In the arena of officer accessions, we again found ongoing innovative countermeasures undertaken by AETC, AFRS, Holm Center/AFROTC, and USAFA. Noteworthy among these are the HBCU-100 and J-100 Character in Leadership targeted AFROTC scholarship programs addressing fiscal and academic barriers experienced by many racial and ethnic minority cadets and the AFROTC Cadet Language Immersion Program (CLIP) to address language and cultural challenges faced by many cadets for whom English is a second language.

Previous RAND research for the DAF documents predictors of officer promotion success to senior grades, which are present and/or built at the earliest stages of their careers. RAND's data analysis also reveals that officer promotion prospects taper off at each rank for minorities, who are statistically less likely to have these predictors, many of which are present at recruiting and accession.⁸⁹ These earlier research findings align thematically with multiple promising practices identified in the officer CFM, MSI detachment commander, and DT chair workshops conducted for this study.

To counter this “start behind, stay behind” dynamic in minority officer accessions, we recommend that the DAF considers the additional actions outlined below, which employ a twin-track approach. The first track seeks to boost commissioning rates of racial and ethnic minority cadets at AFROTC MSI detachments. The second track provides tools to draw more entrants to AFROTC and Officer Training School from the very well qualified pools of racial and ethnic minority students at highly selective colleges and universities.

Recommendation 3. Increase MSI Commissioning Rates by Addressing Fiscal, Educational, and Other Barriers to Entry

The project team's assessment of the ongoing and relatively new scholarship initiatives highlighted above is that they are fundamentally sound approaches that should be continued and monitored for effectiveness. However, these programs may not be enough to overcome historically low racial and ethnic minority MSI cadet commissioning rates.⁹⁰ Therefore, we recommend that the DAF innovate a new AFROTC academic support program for cadets who enter with low SAT or ACT test scores.

Data provided by the Holm Center show that traditional AFROTC High School Scholarship Program selectees have significantly higher academic performance/standardized test scores at entry than required for J-100 scholarship consideration:

- Average High School Scholarship Program scholarship awardees have a grade point average of 3.88 and an SAT score of 1381.
- To qualify for J-100 scholarship consideration, the required grade point average is 3.0 and the required SAT score is 1100.⁹¹

⁸⁹ See Lim et al., 2014, pp. xvii–xviii.

⁹⁰ For example, the African American FY 2016–2020 AFROTC graduating class commissioning rate at historically Black colleges and universities (HBCUs) was just 87 commissioned of 1,082 enrolled, or 8 percent (Holm Center, *DAF Recruitment and Exposure at HBCUs*, Holm Center Background Paper, undated, provided to authors via email August 2022).

⁹¹ Holm Center, undated.

Based on the previous RAND research cited above, it is likely that differences in “start behind” academic performance and standardized test scores correlate to some extent to suboptimal commissioning rates, particularly for racial and ethnic minority cadets at MSI colleges and universities,⁹² where academic entry requirement thresholds are even lower than the J-100 scholarship qualifications.

We believe building an AFROTC academic support program drawing on the USAFA Preparatory School’s math, English, and science curricula would leverage an impactful approach used by the Air Force Academy to boost the academic aptitude of prospective cadets.⁹³ This program could mitigate the impact of entry requirement differences at many MSI detachments. Several MSI detachment commanders shared initiatives that they had undertaken locally with their host colleges to provide catch-up academic assistance and test-taking skills courses. These targeted AS100 cadets who entered with low (or no) standardized test scores and were struggling academically in their first year of college or in their initial AFOQT. Well-intended and innovative, these ad hoc programs varied in execution and were resourced out of hide.

Expand the Cadet Language Immersion Program for ESL Cadets

Most of the detachment commanders in our workshops who were assigned to Hispanic-serving colleges and universities see a need to address language and cultural challenges that some cadets experience. A consistent theme was the difficulties that many ESL cadets had taking the AFOQT. Several of these detachment commanders were also working with their local colleges to provide extra assistance to their cadets. All were aware of and eager to see AFROTC’s CLIP expand beyond the Puerto Rico beta test.⁹⁴ Conducted in the summer of 2021, this test showed promising results: 65 percent of the 45 participating cadets increased their AFOQT verbal score, and 51 percent successfully passed the AFOQT overall—a 17 percent improvement over historical rates.⁹⁵

Assess/Update the Air Force Officer Qualifying Test to Address Any Racial/Ethnic Disparities

The DAF has already initiated this effort as this project report was being written. MSI detachment commanders in our workshops advocated for a major review of the AFOQT to ensure that it remains valid while not being majority-group-centric. They also wanted AFROTC to enable detachments to offer its cadets formal AFOQT prep courses. While the group acknowledged that the AFOQT was necessary and useful, they agreed that it was a barrier to entry for minority students with weak primary education and from impoverished households prior to college. Multiple detachment commanders also noted that, for some of their minority cadets, extremely low initial AFOQT scores undermine already tenuous self-confidence and instill doubt about applying for flying operations careers.

⁹² A reference listing of MSIs can be found at Rutgers Graduate School of Education Center for MSIs, “MSI Directory,” webpage, undated.

⁹³ Most USAFA Prep School students (cadet candidates) do not meet USAFA academic entry requirements. At the end of the ten-month prep school program, approximately 75 percent (190 of 240), are typically offered USAFA appointments in the following year’s freshman class (USAFA Prep School, “Mission Briefing,” August 22, 2022).

⁹⁴ Per the Holm Center, the formal title is “Puerto Rico Project Language (PRPL) English Language Immersion Beta Test.”

⁹⁵ Holm Center, *PRPL/CLIP Compilation of CSAF Updates*, undated, provided to authors via email, August 2022.

Equip MSI Detachment Cadre with Tools to Help Cadets Overcome Academic, Financial, Mental Health, and Social Challenges

MSI detachment commanders demonstrated awareness of the variety of socioeconomic and familial circumstances in their cadets' lives, both before and after their arrival on campus. They also witnessed how these circumstances can impact cadets' academic and military performance in AFROTC and beyond. During a benchmarking visit to the USAFA Preparatory School for this study, we discovered that the prep school was using multiple tools to equip its faculty and staff to support students through these challenges,⁹⁶ whether through one-on-one mentoring or structured, group settings, including Air Officer Commanding–led “critical conversations” held during nonacademic training periods. Among these tools are courses and courseware offerings such as

- eCornell Diversity & Inclusion training⁹⁷
- Appreciative Advising⁹⁸
- *On Course: Strategies for Creating Success in College, Career, and Life*⁹⁹
- USAFA faculty development courses.¹⁰⁰

By equipping its faculty and staff to better assist USAFA Preparatory School students with their real-life challenges, the prep school aims to provide future USAFA cadets with critical life skills that will enable them to be more successful and effective officers and leaders. Based on our MSI detachment commander workshop observations, we recommend that AFROTC consider a similar approach or courseware to equip its MSI detachment cadre and incorporate “critical conversations” concepts into the AFROTC leadership curriculum.

Recommendation 4. Provide Competitive Tools to Recruit Racial and Ethnic Minority Officer Candidates at Selective, Upper-Tier STEM Colleges and Universities

The second track of recommended DAF actions to counter the “start behind, stay behind” officer accessions dynamic is designed to provide new competitive tools to attract more entrants to AFROTC and Officer Training School from the very well qualified pools of racial and ethnic minority students at highly selective colleges and universities.

Innovate Flexible and Competitive Recruiting Tools

This action builds on a key recommendation from previous RAND research to recruit more minority cadets with the same level of qualifications, on average, as their White counterparts.¹⁰¹

⁹⁶ The average prep school class size is 240 students, approximately two-thirds of whom are racial and ethnic minority students (USAFA Prep School, 2022).

⁹⁷ See eCornell, “Diversity, Equity, and Inclusion Cornell Certificate Program,” webpage, undated.

⁹⁸ See Florida Atlantic University College of Education, “Office of Appreciative Education,” webpage, undated.

⁹⁹ See Skip Downing and Jonathan Brennan, *On Course: Strategies for Creating Success in College, Career, and Life*, 9th ed., Cengage, 2020.

¹⁰⁰ These faculty development courses are offered by the USAFA Center for Character Leadership and Development (USAFA, “Center for Character and Leadership Development,” webpage, undated).

¹⁰¹ See Lim et al., 2014, p. xviii.

Multiple participants in our officer stakeholder workshops—squadron commanders, MSI detachment commanders, officer CFMs, and DT chairs—expressed the strong belief that the DAF needs new tools to attract these highly sought-after recruits. Suggested options included full-tuition AFROTC scholarships, on-the-spot signing bonuses, and college loan payoffs—any of which could be used independently or in combination. Participants also recognized value in new “aligned incentives” for cadets to stay in AFROTC and reduce attrition once selected.

Explore Partnership Opportunities with Civilian Recruiting and Headhunter Firms

The project team believes that partnership with civilian recruiting or headhunter firms¹⁰² could be a valuable, though nontraditional, resource to help the Air Force identify and engage additional high-performing racial/ethnic minority recruiting pools at upper-tier STEM colleges and universities. In addition, these firms may be able to help the DAF benchmark on-campus incentives and packages used by such firms as Amazon, Google, Microsoft, Facebook/Meta, and IBM to recruit minority candidates in these competitive pools. This would further enable the DAF to shape and tailor new recruiting tools and incentive packages to more successfully directly compete with Fortune 500 companies and increase the DAF’s share of these pools.

Officer Classification (Career Field Assignment)

Recommendation 5. Ensure That Multiple Rated Diversity Improvement Countermeasures Are Coordinated, Resourced, and Measured for Their Effectiveness

The DAF has initiated multiple countermeasures via its Rated Diversity Improvement strategy to address minority group underrepresentation in operational career fields. These pre-commissioning and commissioning source introductions to flying programs include AFJROTC Flight Academy, AFRS Det 1 Aim High Flight Academy, USAFA Prep School’s Early Path to Wings program, and the AFROTC You Can Fly stipend program. All these innovative programs are demonstrating promise at addressing entry barriers—fiscal, exposure, and belief—experienced by many racial/ethnic minority officer recruits. However, our research found that these programs are executed in different Air Force organizational stovepipes, and we were unable to determine the level of coordination across these programs. Therefore, we recommend that the DAF create a central coordinating office of responsibility and overarching governance mechanism to focus resources, measure and maximize the impact of each program, and avoid the potential for unintentional duplication or overlap.

Recommendation 6. Increase Awareness Among Internal and External Audiences and Influencers of Programs That Serve as Introductions to Operations Career Opportunities

Over the course of the stakeholder workshops conducted for this study, we observed a lack of

¹⁰² The authors recommend a blend of civilian recruiting agency data-driven approaches to identifying source pools of highly qualified candidates, combined with personal touch strategies employed by headhunter firms, though not exclusively focused on executive hires.

knowledge across organizational boundaries on the full spectrum of Rated Diversity Improvement countermeasures. Considering this, we recommend additional emphasis on internal DAF-wide advertising of these programs, their target audience(s), their purpose, eligibility, and how to apply. The goal would be to equip a larger segment of the serving Air Force population to function as informal recruiters for such programs as Aim High Flight Academy and Civil Air Patrol. Multiple workshop participants also advocated for additional external engagement targeting younger students at the middle school level by exposing them to successful racial and ethnic minority Air Force operations role models on the social media platforms that they frequent (e.g., “day in the life” videos on YouTube, anime on TikTok, Instagram).

Recommendation 7. Place Successful Minority Officers with Operations Backgrounds as MSI Detachment Cadre to Engage with Prospective Recruits to Operations Career Fields, and Boost Participation in You Can Fly Programs

Many stakeholders strongly recommended deliberately placing successful racial and ethnic minority officers at MSI detachments—in leadership positions as commanders as well as instructor cadre—so cadets and potential cadets can visualize their own future success in Air Force operations career fields. Some of the MSI detachment commanders participating in our workshops commented that their racial identity did not align with their colleges’ and universities’ MSI designation (e.g., Hispanic at Hispanic-serving institutions, African American at HBCUs) but believed it would be very beneficial to Air Force recruiting efforts if they were. These same MSI detachment commanders further lamented that their AFROTC instructor staff did not include African American or Hispanic officers who were representative of their detachment’s cadets either.

In a later workshop, we discussed this recommendation with multiple DT chairs. All agreed that this promising AFROTC practice should be pursued but that it must be accompanied by careful individualized career management (e.g., timing of an assignment outside primary career field, tour length, outplacement plans) to avoid negative career impacts for the minority officers placed in these detachments. DT chairs also noted that prioritizing You Can Fly scholarships to MSI detachments should occur in parallel to maximize these officers’ impact with a critical tool for increasing exposure to and interest in an Air Force career in aviation.

Rated diversity improvement stakeholders also suggested conducting research in two related areas: seeking a “critical mass,” also known as clustering, of minorities and women students in training settings and the importance of placing women and minority role model instructors in high-pressure training environments. Social science research has provided empirical evidence of the educational benefits of diversity and the importance of a critical mass of underrepresented students for mutual support leading to successful outcomes. However, as discussed by Malcom and Malcom-Piqueux, critical mass is more than numbers.¹⁰³ Likewise, Undergraduate Pilot Training (UPT) is a high-pressure training environment. There is growing research indicating that role models in STEM help increase diversity success in STEM fields. We believe that research is needed to access the potential corollary for improving the completion rates of minority and female officer students at UPT.

¹⁰³ See Shirley M. Malcom and Lindsey E. Malcom-Piqueux, “Critical Mass Revisited: Learning Lessons from Research on Diversity in STEM Fields,” *Educational Researcher*, Vol. 42, No. 3, 2013, for more discussion.

The project team believes a final note in this section is worthy of mention as it speaks to the culture present in the DAF today. Workshop participants across all career fields—rated and nonrated operations, as well as support—recognized the value of diversity to DAF mission effectiveness and the overall health and climate in their functional squadrons and subordinate units. Universally, these leaders all desired more diversity in their career fields, wanted the pace of change to accelerate, wanted more DAF resources applied to these efforts, and articulated a personal commitment to continue working to eliminate disparities identified in the RDR/DR reports.

Recommendations Addressing Development, Talent Management, Promotion, and Retention

This next set of recommendations targets the development, talent management, promotion, and retention segments of the Air Force's HCM pipeline. Our recommendations are grouped according to whether implementation is primarily at the institutional or local base/wing levels.

Institutional Implementation

Recommendation 8. Expand Analyses of Racial and Ethnic Minority Promotion and Retention Outcomes

Informed by our discussions with workshop participants, the project team recommends that the DAF conduct systematic post-board analysis of the records of minorities not selected for promotion. Workshop participants also highlighted the need to gain more granular understanding of retention drivers for various racial and ethnic minority and female members.

We recommend the DAF invest in new timely, dynamic survey mechanisms to enable easy member participation and near-real-time feedback loops.¹⁰⁴ Workshop participants expressed frustration with time-lag/latency and spotty coverage of current exit feedback surveys, stating that if they received the data at all it was out of date and of limited utility to their decisionmaking. Surveys could also provide data/insight about the reasons minority officers may not be opting in to compete for selective developmental and leadership opportunities, such as developmental education and squadron command.

Recommendation 9. Build Predictive Success Models to Enable Active Management Decisions by Year Group Based on Current, Standardized Data Sets and to Enable Pre-Board Analysis

Traditional military promotion and retention analyses have largely been rearward facing and reactive. Advancements in computing power, commercial human capital decision support applications, and artificial intelligence offer opportunities to develop highly adaptable and capable, near-real-time success modeling tools. The goal of these new tools would be to enable proactive management

¹⁰⁴ Amazon's real-time delivery notification and customer review processes were mentioned by workshop participants as hyper-fast, technologically available approaches worth benchmarking to implement dynamic, near-real-time DAF surveys.

employing a year group approach—pre-board analysis, actions, and policy adjustments—replacing the reactive post-board analyses, actions, and policy adjustment approaches of the past.

Base/Wing Implementation

These recommendations require effective, coordinated execution by senior raters, unit commanders, and senior enlisted leaders at the local wing level. Some actions will need overarching DAF policy to ensure consistency across the force, while others will benefit from more flexibility to leverage local initiatives, foster innovation, and adapt to mission- and installation-specific contexts.

Recommendation 10. Implement Wing-Level Processes to Actively Manage Development Opportunities by Year Group

Returning to our reference terminology of the military HCM pipeline, year-group management is essential to effective pipeline flow management. Developing and actively managing talent by year groups minimizes gaps that impact mission and career field health while also ensuring that sources of workforce talent are neither overlooked and left behind nor overloaded. This approach also facilitates employing a diverse slates policy for internal wing-level development opportunities in addition to those required for external Senior Rater nominative non-statutory boards and developmental positions such as residence PME, command, instructor/recruiter special duty, aide-de camp, command chief, first sergeant, officer/enlisted CFM, and STARNOM/CAPNOM positions.¹⁰⁵

Recommendation 11. Inculcate Deliberate, Active Mentoring by Local Wing Leadership

Workshop participants observed that regularly scheduled, face-to-face mentoring with trusted local leaders is more effective and personal than the current MyVector or other electronic mentoring. These local mentoring sessions can encourage minority members to seek opportunities valued by promotion boards and to set goals and objectives. Mentors may also provide helpful counsel and perspective as members consider other career decisions (e.g., reenlistment, special duty assignment, career broadening opportunities).

Recommendation 12. Add Wing-Level Checks and Balances to Increase Confidence

Senior enlisted workshop participants advocated that demographic representation be a key feature of all wing boards and panels engaged in local enlisted force management to serve as checks and balances to mitigate potential biases. The most visible first action in this regard is to ensure that EFDP membership matches the demographic makeup of the eligible population. This would leverage an approach already used to determine officer promotion board composition.

¹⁰⁵ See AFI 36-2110, *Total Force Assignments*, Appendix 18: “Diverse Slates for Key Developmental Positions,” August 2, 2021. STARNOM refers to nominations for certain positions in which the commander gets to pick the person for the job, such as 4-star aides. CAPNOM refers to nominations for positions such as Enlisted Aide to CSAF, Military Assistant to the Deputy Secretary of Defense, etc.

A second recommendation is to formalize an objective panel review of administrative, judicial, and nonjudicial punishment actions (e.g., control rosters, LOCs, letters of reprimand, etc.). Considering published RDR/DR report findings in the arena of military justice, the project team believes that formal panel reviews of these actions would serve to increase enlisted and officer corps confidence by mitigating potential biases in the chain of command.

Recommendation 13. Support Base-Level Acculturation and Socialization for Racial, Ethnic and Gender Minorities

Participants in the BAWG workshop highlighted isolation challenges that many racial, ethnic and gender minorities experience while acclimating to a new unit or training setting as a “minority of one.” They noted the strength that can be gained from supportive association with others who are similarly acclimating or who previously did so. We recommend that the DAF sponsor base-level Employee Resource Groups and affinity groups to build resilience to meet these challenges. This recommendation leverages documented best practices used by many private-sector businesses and organizations.¹⁰⁶ With thoughtful local wing leadership support and participation, these base-level groups can encourage racial/ethnic affiliation while also promoting an inclusive, high-performance military culture.

Recommendation 14. Develop and Proliferate Comprehensive, Recurring Unconscious Bias Training

Increasing unconscious bias training was identified as a promising practice or a component of other promising practices during multiple workshops. Participants considered the current unconscious bias training to be insufficient in both its content and coverage. They advocated for implementing comprehensive unconscious bias training across the military HCM pipeline. This includes incorporating it into basic military training, annual wing training cycles, resident/non-residence PME, DT meetings, promotion boards, etc. Studies have shown that single unconscious bias training sessions do not result in significant behavioral changes, but recurring sessions over time can reduce bias impacts.¹⁰⁷

The project team recommends comprehensive, recurring training to address multiple unconscious biases that can impact unit climate, perceptions of acceptance, performance evaluation ratings, stratification, and identification and nomination for opportunities. These biases include racial/cultural bias, halo effect, primacy effect, recency bias, and confirmation bias. Relevant components of this training should be tailored and delivered at the local base/wing level and at the full spectrum of officer/enlisted training and education venues. We also recommend that the DAF evaluate all current and future unconscious bias training offerings for effectiveness in eliminating unwanted behaviors.

¹⁰⁶ See Leslie Adrienne Payne, “DE&I Across the Public and Private Sectors: How Do DAF Initiatives Compare?” in Douglas Yeung and Nelson Lim, eds., *Perspectives on Diversity, Equity, and Inclusion in the Department of the Air Force*, RAND Corporation, PE-A909-1, November 2020.

¹⁰⁷ For a summary of the literature on the pitfalls of unconscious/implicit bias training and examples of strategies to ensure that such training effectively reduces unconscious/implicit bias, see Hanover Research, *The Impact of Implicit Bias Training*, March 2019, pp. 7–10.

Given the differences at base and training venue settings, we want to emphasize the importance of tailoring unconscious bias training to the purpose and audience.

Recommendation 15. Hold Commanders Accountable for the DEI Climate in Their Units

The project team noted an undercurrent in multiple workshops concerning accountability. Some participants stated that they did not trust senior raters and commanders to make completely objective decisions regarding racial, ethnic, and gender minorities, particularly ones related to discipline and stratification. The project team recognizes the unique responsibilities that Title 10 and the Uniform Code of Military Justice place on commanders, as well as the information-sharing limitations of the Privacy Act. Still, we believe that the DAF can take an important, visible step to increase commander accountability and transparency. We recommend that the DAF make all unit Defense Organizational Climate Survey (DEOCS) results public and report them up the chain of command. We further recommend including unit DEOCS ratings on the annual performance reports of both the unit commander and senior enlisted leader (i.e., document in their permanent records).

Recommendations Addressing Institutional Barrier Analyses

Barrier analyses are critical tools that the DAF is employing to inform and assess the effectiveness of its diversity initiatives and achieve its diversity objectives. Initial DAF barrier analyses have been useful for expanding awareness of, and in some cases consensus around, barriers encountered by racial, ethnic and gender minority members. However, the project team believes that further actions—centered on a more comprehensive standard methodology employing standard collected data—are needed to improve DAF-wide consistency, validity, reliability, and precision across all DT barrier analyses. Our analysis revealed ad hoc data usage and variances in methodology across DTs. Our recommendations in this area impact all segments of the Air Force HCM pipeline.

Recommendation 16. Standardize Data Feeds and Data Sets, and Focus Analytical Approach and Methodology

The data feeds and data sets used by DTs were not standard across the barrier analyses that the project team examined for this study. This resulted in uneven analytical utility across career fields and inhibited comparability between specialties. We believe that common data sets are needed to measure and monitor accession and representation disparities, development and talent management disparities, retention disparities, and promotion disparities.

Because data accuracy and currency are critical to conducting these analyses, we recommend that the DAF consider tasking one of its software factories to build a comprehensive DT barrier analysis data pull, decision support, and dashboard display portal. Alternatively, this functionality could potentially be incorporated into new digital cloud-based commercial software applications that the Air Force is now fielding to host personnel data and automate legacy feedback, evaluation, and promotion records processes.

Standardized data feeds and a common data portal will enable the DAF to standardize a barrier analysis methodology across DTs and ensure year-to-year consistency that enables trend analysis. In addition, a common approach will provide greater granularity to determine how specific career field disparities are contributing to the RDR/DR disparities and root causes at large. We also suggest that the DTs provide their analytical results and countermeasure initiatives to the appropriate BAWGs. This would provide BAWGs with current, authoritative data enabling them to calibrate complimentary BAWG initiatives or propose and create new ones to address gaps.

Recommendation 17. Publish Barrier Analyses Outcomes and Resulting Diversity Initiatives to an All–Air Force Portal That Is Accessible via Common Access Card

Several BAWG members participating in our workshops said that the rank-and-file airmen, minority and majority alike, at their bases are unaware of their respective DTs’ barrier analysis activities, results, and initiatives and, to some extent, the work of the BAWGs themselves. This is a significant impediment to implementing lasting changes. The project team recommends that the DAF publish its barrier analyses outcomes and resulting diversity initiatives to a widely publicized portal that is accessible via Common Access Card (CAC) and available to all Air Force members. A common and current one-stop, all-access portal will increase transparency, build needed trust, and form the basis for common understanding across the force.

Recommendation 18. Resource Dedicated Core Staff to Routinize DT Barrier Analyses

The DAF should invest in dedicated core staff to assist DTs in conducting barrier analyses. Both DT chairs and BAWG representatives participating in our workshops said that all their work to analyze and address disparities has been an additional duty to this point. Dedicated, interorganizational analytical support will enable coordinated career field and enterprise-level objectives, as well as consistency in the analyses of recruitment and accession strategies, assignment and development practices, retention approaches and results, and promotion outcomes.

Recommendation 19. Institute an Annual DT Barrier Analyses Summit Co-Chaired by SECAF and CSAF

The DAF would benefit from a central DEI strategic guidance and decisionmaking forum. We recommend that the DAF charter an annual summit, co-chaired by SECAF and CSAF, to receive DEI updates, policy, and decision recommendations from SAF/DI, the CSAF Diversity and Inclusion Council, officer and enlisted DT chairs, Headquarters Air Force (HAF) deputy chiefs of staff, and Air Force offices of primary responsibility for racial, ethnic and gender minority countermeasures. We further suggest that representatives from each BAWG attend and participate. Holding this event in conjunction with an annual CSAF Total Force Wing Commanders Call would also enable Air Force–wide local wing representation, which the project team also believes would be extremely beneficial for extending awareness and buy-in across the force.

Recommendations Addressing Strategic Narrative/Transparency/Trust, Resource Investments, and Assignment of Enterprise Responsibilities

The project team drew the final interrelated, enterprise recommendations in this section from recurring themes raised by workshop participants—DT chairs, commanders, senior enlisted leaders, officer/enlisted CFMs, and BAWGs—and from the RAND team’s own key observations. These recommendations impact all segments of the officer and enlisted pipelines related to addressing the root causes of RDR/DR-identified racial disparities.

Recommendation 20. Communicate an Action-Oriented Strategic Narrative, and Increase Data Transparency

We observed a lack of trust in the institution and leaders in multiple stakeholder workshops among a cross-section of participants. There were also perceptions that the Air Force lacked commitment to the sustained investments required to implement effective improvements and needed changes to reduce documented disparities. Trust in the institution and its leaders is essential to military good order and discipline, warfighting effectiveness, and the viability of the all-volunteer force.

To address these troubling observations, we recommend that the DAF begin to regularly publish comprehensive DEI findings and actions to the force through commander channels and all public affairs/social media channels, whether good, bad, or ugly. The initial priority should be to communicate that the bevy of post-RDR/DR activity and work are not wasted efforts. The DAF should document what has been accomplished so far: positive changes, new policies based on BAWG feedback or barrier analyses, agenda items that are still works in progress, initiatives suggested or attempted that that did not work or are unsustainable, and updated disparity data and trends.

The DAF should create a single CAC-accessible repository for authoritative demographic data and regular diversity and inclusion action updates. Similar to an earlier recommendation, we suggest tasking an Air Force software lab with building a comprehensive Air Force diversity data portal. The portal should have automated data feeds enabling it to be regularly updated and always current, and it must be available for review by all Air Force members. It should include race/ethnicity/gender force composition data by career-field demographics, promotion rates, command/senior enlisted leader selections, and PME selection comparisons. The success of this approach is based on ultimate transparency: a current, common, authoritative diversity picture viewable by all airmen to foster a common understanding of the diversity reality in the Air Force and build trust.

Recommendation 21. Commit to Dedicated, Consistent DEI Resource Investments

Nearly all workshop participants advocated for consistent funding, manpower, and other resources dedicated to racial, ethnic and gender disparity improvement initiatives. This issue was almost universally deemed an implementation challenge across promising practices identified in each workshop. Our analysis highlights specific resource requirements throughout this report, many of which are essential to multiple recommended actions. Among these requirements are additional recruiting tools, targeted AFROTC scholarships, new academic catch-up and ESL support programs,

rated career “You Can Fly” programs, adding dedicated support staff for DT barrier analyses and currently all-volunteer/additional-duty BAWGs, an automated data analytics/decision support system, and transparency portals. More than words, sustained resourcing demonstrates enduring institutional and leadership commitment.

Recommendation 22. Assign Clear Lines of Authority, Responsibility, and Accountability to Conduct Racial, Ethnic, and Gender Disparity/Barrier Analyses, Implement Diversity Improvement Initiatives/Barrier Countermeasures, and Assess Effectiveness

Finally, we recommend that SECAF designate leads, stakeholders, authorities, and accountability for each major diversity initiative, as well as an overall DAF lead coordinating authority. This report documents multiple areas with potentially overlapping responsibilities and no clear Air Force–wide lead for cross-cutting countermeasures, recruiting and accessions initiatives, and diversity improvement efforts. Lack of governance and accountability were raised in many of our workshops as significant implementation challenges to accelerating the change(s) required by most of the promising practices.

The DAF lead coordinating authority would be responsible for gathering, collating, and presenting recurring and comprehensive diversity progress reports to the SECAF and CSAF. To demonstrate DAF commitment to diversity improvement and transparency, the coordinating authority should also centrally publish the same SECAF and CSAF recurring progress reports to the Air Force Diversity and Inclusion data portal so that they are accessible to all airmen.

Recommendation Prioritization and Sequencing

Figure 5.3 summarizes our recommendations addressing specific HCM pipeline segments and those that address gaps end to end. Parallel implementation of recommendations across of the HCM pipeline is necessary to accelerate the pace of change. However, if the DAF decides to sequence DEI efforts because of bandwidth, resource, or other limitations, we recommend the following prioritization.

The highest-priority recommendations are those impacting the Force Inflow segments of the HCM pipeline. Our analyses, along with previous RAND research, strongly indicate that actions taken in these early pipeline segments—to include scaling up current DAF countermeasures and action plans—offer the greatest leverage for steady progress and lasting improvements toward demographically representative racial and ethnic diversity across all pipeline segments.

Next in priority would be recommendations addressing the Force Management segments of the HCM pipeline. In general, earlier deliberate actions in these development and talent management pipeline segments are needed to prevent promotion and retention leaks impacting later pipeline segments.

Finally, it is critical to note that key requirements for implementation success and essential elements for change in the force inflow and force management segments flow directly from our recommendations to DAF senior leadership, which impact HCM pipeline segments end to end. These include the need to communicate a comprehensive, action-oriented strategic narrative; increase

transparency to increase trust; commit to consistent resource investments; and assign enterprise DEI responsibilities. These actions are necessary to close current gaps across root causes, governance, resourcing, and implementation accountability.

Eliminating documented, persistent, and unwanted disparities requires sustained commitment at all DAF organizational levels, rigorous and regular barrier analyses, well-coordinated comprehensive implementation of well-crafted solutions, and dedicated and consistent resourcing. While realistic about implementation challenges, the DAF stakeholders and workshop participants who we engaged for this project repeatedly advocated closing these disparities as a mission imperative.

Figure 5.3. Summary of Recommendations

FORCE IN FLOW	Officer and Enlisted Recruiting	
	Recommendation 1. Expand use of published racial, ethnicity and gender stretch goals for officer and enlisted recruitment, accessions, and career field classification	Recommendation 2. Bolster the Air Force recruiting enterprise to enable wider reach and earlier engagement
	Officer Accessions	
	Recommendation 3. Increase AFROTC MSI commissioning rates by addressing fiscal, educational, and other barriers to entry	Recommendation 4. Provide competitive tools to recruit high performing racial and ethnic minority officer candidates at selective, upper-tier STEM colleges and universities
FORCE MGMT	Officer Classification (Operations Career Field Assignment)	
	Recommendation 5. Ensure multiple rated diversity improvement countermeasures are coordinated, resourced, and measured for their effectiveness	Recommendation 7. Place successful minority officers with ops backgrounds as AFROTC MSI detachment cadre to engage with prospective recruits to ops career fields, and boost participation in You Can Fly programs
	Recommendation 6. Increase awareness among internal and external audiences/influencers of programs that serve as introductions to operations career opportunities	
	Institutional Implementation	
END TO END	Recommendation 8. Expand analyses of racial and ethnic minority promotion and retention outcomes	Recommendation 9. Build predictive success models to enable active management decisions by year group based on current, standardized data sets to enable pre-board analysis
	Base/Wing Implementation	
	Recommendation 10. Implement wing-level processes to actively manage development opportunities by year group	Recommendation 13. Support base-level acculturation and socialization for racial, ethnic and gender minorities
	Recommendation 11. Inculcate deliberate, active mentoring by local wing leadership	Recommendation 14. Develop and proliferate comprehensive, recurring unconscious bias training
END TO END	Recommendation 12. Add wing-level checks and balances to increase trust and confidence	Recommendation 15. Hold commanders accountable for the DEI climate in their units
	Institutional Barrier Analyses	
	Recommendation 16. Standardize data feeds/data sets, focus analytical approach and methodology	Recommendation 18. Resource dedicated core staff to routinize DT barrier analyses
	Recommendation 17. Publish barrier analyses outcomes and resulting diversity initiatives to an "All-Air Force" CAC accessible portal	Recommendation 19. Institute an annual DT Barrier Analyses Summit co-chaired by SECAF and CSAF
END TO END	Strategic Narrative/Transparency/Trust, Resource Investments, and Enterprise Responsibilities	
	Recommendation 20. Communicate an action-oriented strategic narrative, and increase data transparency	Recommendation 22. Assign clear lines of authority, responsibility, and accountability to conduct REG disparity/barrier analyses, implement diversity improvement initiatives/barrier countermeasures, and assess effectiveness
	Recommendation 21. Commit to dedicated, consistent DEI resource investments	

List of RDR Countermeasures

RDR Problem 2.2: Problem Statement—Per DAF IG’s Independent RDR, December 2020, and results of data analysis and surveys of 123,000 Airmen, Black/African American service members are underrepresented in operational career fields and overrepresented in support career fields.

- 2.2.3.1. Provide more resources and information on operational career paths to potential recruits, via Air Force Work Interest Navigator (AF-WIN) and new enhanced job counseling platform.
- 2.2.3.2. Leverage Air Force Recruiting Service (AFRS) quarterly job matching scheme to provide up to 5 months to encourage and place recruits in the right job; initial implementation and full implementation.
- 2.2.3.3. Improve marketing efforts towards underrepresented populations and untapped geographic regions, academic sources, Minority Serving Institutions, affinity-based professional organizations/events/outreach, and networks with science, technology, engineering, arts, and mathematics (STEAM) groups.
- 2.2.3.4. Create deliberate minority recruiting strategy to ensure minority recruiters from operational career fields are best used to inspire, engage and recruit other minority candidates into operational career fields.
- 2.2.3.5. Initiate communication campaign targeting recruiters to highlight their critical role in promoting enterprise diversity and inclusion priorities.
- 2.2.3.6. Perform operational pipeline analysis to determine where Black/African Americans are departing training and/or cross-training and creating plan to address findings.
- 2.2.3.7. Review and update screening measures, as appropriate, with emphasis placed on Predictive Success Models (PSMs) targeting operational career fields.
- 2.2.3.8. Review and update Armed Forces Qualification Test (AFQT) and Pilot Candidate Selection Method (PCSM) as recommended by the AFQT and PCSM working group.

RDR Problem 2.3: Problem Statement—Black/African American officers are being nominated for IDE/SDE at higher than the overall nomination rate but designated to attend at a lower rate.

- 2.3.3.1. Re-allocate IDE and SDE school quotas in accordance with DAF core, institutional, command, staff, and joint requirements.
- 2.3.3.2. Establish deliberate selection criteria and scoring tools for “Definitely Attend” (DA) allocations and review feasibility of continuing DA policies.
- 2.3.3.3. Implement a Central PME Board scoring tool with objective unbiased criteria to assist in scoring records.

RDR Problem 2.5.1: Problem Statement—Black/African American enlisted members were consistently underrepresented in all promotion categories and ranks except E-8 and E-9, with the largest disparities in the ranks of E-5 to E-6.

- 2.5.1.3.1. Develop and implement a point multiplier in the EES point allocation system that accounts for performance and experience.
- 2.5.1.3.2. Implement Situational Judgment Test (SJT) items as part of Weighted Airman Promotion System testing to better capture leadership potential; also link SJT and knowledge questions to foundational and occupational competencies to complement existing measured content.
- 2.5.1.3.3. Develop a panel charge for Enlisted Forced Distribution Panels (EFDP), which may be used by Large Unit Force Distributors if they decide to utilize an EFDP process.
- 2.5.1.3.4. Establish policy that requires Force Distributor to provide a post-EFDP outbrief to eligible members to provide formal feedback and increase transparency of the EFDP process.
- 2.5.1.3.5. Implement updated barrier analysis training materials and provide training to the Career Field Managers (CFM) at the Officer, Enlisted, and Civilian CFM Forums.
- 2.5.1.3.6. Develop and deploy DAF Unconscious Bias Mitigation Architecture Plan and training materials.
- 2.5.1.3.7. Enhance survey capability in MyVector Mentoring to collect and analyze data about the quality of voluntary mentoring.
- 2.5.1.3.8. Strengthen mentorship match capability by providing CFMs the ability to assign mentors to mentees in MyVector Mentoring.
- 2.5.1.3.9. Provide resources and tools to commanders and supervisors to support mentoring toward Airmen and Guardians' development and career objectives.

RDR Problem 2.5.2: Problem Statement—Black/African American officers and officers from other underrepresented groups consistently promoted below the overall average rate and below White officers' rate in almost every IPZ board to O-4, O-5, and O-6.

- 2.5.2.3.1. Implement developmental categories to allow greater development agility and evaluation among closer cohorts.
- 2.5.2.3.2. Generate and annually review functional Career Development Briefs for SECAF approval to aide in officer career development and planning and to serve as a reference to educate mentors, hiring authorities, and promotion board members about the career field.
- 2.5.2.3.3. Reallocate IDE and SDE School Quotas in accordance with AF core, institutional, command, staff, and joint requirements.
- 2.5.2.3.4. Establish policy requiring diverse pools of candidates for consideration for key military developmental nominative positions such as Executive Officer (Wing & above), Aide-de-Camp, Military Assistant, Command Chief, Senior Enlisted Advisor, Career Field Manager (Officer & Enlisted), Commander's Action Group Chief and STARNOM/CAPNOM positions to enable slates that better reflect the broad demographic diversity of the DAF.

- 2.5.2.3.5. Implement updated barrier analysis training materials and provide training to the Career Field Managers (CFM) at the Officer, Enlisted, and Civilian CFM Forums (Complete).
- 2.5.2.3.6. Develop and deploy DAF Unconscious Bias Mitigation Architecture Plan and training materials.
- 2.5.2.3.7. Enhance survey capability in MyVector Mentoring to collect and analyze data about the quality of voluntary mentoring.
- 2.5.2.3.8. Strengthen mentorship match capability by providing CFMs the ability to assign mentors to mentees in MyVector Mentoring.
- 2.5.2.3.9. Provide resources and tools to commanders and supervisors to support mentoring toward Airmen and Guardians' development and career objectives.

RDR Problem 2.7: Problem Statement—Military and Civilian Development Teams' (DTs') barrier analysis reports were not standardized and lacked specificity, resulting in incomplete and/or insufficient reporting details and actionable plans. This may contribute to racial disparity within the DAF DTs' Vectoring and Board processes. Additionally, many completed reports lacked sufficient details to be actionable because provided barrier analysis guidance was inadequate, failed to clearly articulate expectations, and did not provide standardized templates for use by the DTs.

- 2.7.3.1. Review stakeholder roles and responsibilities (SAF/DI, AF/A1D, DTs, etc.) as outlined in AFI 36-7001, AFI 36-2710 and AFI 36-2670.
- 2.7.3.2. Update and implement new training materials and provide training to the CFMs at the Officer, Enlisted, and Civilian CFM Forums.
- 2.7.3.3. Provide policy and guidance via 2021 FM/DT Guidance Memorandum.
- 2.7.3.4. Equip DTs with additional historical civilian/military personnel data (officer/enlisted promotion history, officer developmental education, completed standardized civilian health of career field data).
- 2.7.3.5. Task DTs via TMT [Task Management Tool] to conduct required Barrier Analysis reports.
- 2.7.3.6. Monitor and track DT Barrier Analysis progress.
- 2.7.3.7. Compile and analyze Barrier Analysis reports and action plans.
- 2.7.3.8. Draft, coordinate, and publish AF Enterprise Barrier Analysis Report.
- 2.7.3.9. Schedule and Conduct DT Barrier Analysis Reporting and Action Plan briefings to senior leadership venues.

Abbreviations

ACT	American College Testing
AETC	Air Education and Training Command
AF/A1	Deputy Chief of Staff for Manpower, Personnel, and Services, Headquarters U.S. Air Force
AF/A1D	Air Force Directorate for Force Development
AF/A1P	Director of Military Force Management Policy, Deputy Chief of Staff for Manpower, Personnel and Services, Headquarters U.S. Air Force
AF/A1PP	Air Force Office of Military Force Policy
AFI	Air Force Instruction
AFJROTC	Air Force Junior Reserve Officer Training Corps
AFMAN	Air Force Manual
AFOQT	Air Force Officer Qualifying Test
AFPC	Air Force Personnel Center
AFPD	Air Force Policy Directive
AFQT	Armed Forces Qualification Test
AFROTC	Air Force Reserve Officer Training Corps
AFRS	Air Force Recruiting Service
AFSC	Air Force Specialty Code
ASVAB	Armed Services Vocational Aptitude Battery
BAWG	Barrier Analysis Working Group
CAC	Common Access Card
CFM	career field manager
CLIP	Cadet Language Immersion Program
CO	commanding officer
CSAF	Chief of Staff of the Air Force
DA	designated to attend

DAF	Department of the Air Force
DEI	diversity, equity, and inclusion
DEOCS	Defense Organizational Climate Survey
DoD	U.S. Department of Defense
DR	<i>Report of Inquiry (S8918P): Disparity Review</i>
DT	development team
EES	Enlisted Evaluation System
EFDP	Enlisted Forced Distribution Panel
EPR	Enlisted Performance Report
ESL	English as a second language
FM	functional manager
FY	fiscal year
GO	General Officers
HBCUs	historically Black colleges and universities
HCM	human capital management
HEAT	Hispanic Empowerment and Advancement Team
HPO	high-potential officer
IDE	Intermediate Developmental Education
IG	Inspector General
IPZ	in-the-promotion-zone
LOC	letter of counseling
MLDC	Military Leadership Diversity Commission
MSI	minority-serving institution
ODI	Office of Diversity and Inclusion
PAF	Project AIR FORCE
PCSM	Pilot Candidate Selection Method
PME	professional military education
POC	point of contact
RCA	root cause analysis

RDR	<i>Report of Inquiry (S8919P): Independent Racial Disparity Review</i>
REG	racial, ethnic, or gender
SAF/DI	Secretary of the Air Force Office of Diversity and Inclusion
SAF/MR	Secretary of the Air Force for Manpower and Reserve Affairs
SDE	Senior Developmental Education
SDI	Simpson's Diversity Index
SECAF	Secretary of the Air Force
SJT	Situational Judgment Test
STEM	science, technology, engineering, and mathematics
USAF	U.S. Air Force
USAFA	U.S. Air Force Academy
UPT	Undergraduate Pilot Training
VCSAF	Vice Chief of Staff of the Air Force

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AFI—See Air Force Instruction.

AFMAN—See Air Force Manual.

AFPD—See Air Force Policy Directive.

AFRSI—See Air Force Recruiting Service Instruction.

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