JENNIFER J. LI. JULIA L. MELIN

Developing U.S. Space Force Organizational Culture with Future-Facing Intention

hen the National Defense Authorization Act for Fiscal Year 2020 was passed in December 2019, the U.S. Air Force Space Command was mandated to transform from a command within the U.S. Air Force (USAF) to a separate service within the Department of the Air Force. The U.S. Space Force (USSF) became the first new U.S. military service since the Air Force was established in 1947 and, before that, the U.S. Coast Guard in 1790, 157 years prior. Clearly, standing up a new U.S. military service is a rare event, and one with undisputedly long-lasting effects. In this paper, we spotlight how the Space Force's organizational culture—embodied by its de facto beliefs, values, and practices—will affect its outcomes. Whether fostered deliberately with intention or left to grow haphazardly, this organizational culture will drive the service's performance, operational effectiveness, and long-term success.

In its earliest stages, the Space Force carried over numerous values and practices from the Air Force, enabling continuity while a cadre of senior leaders developed new doctrine, structures, processes, values, and goals tailored to its space-



USSF culture will drive the service's performance, operational effectiveness, and long-term success.

centered warfighting mission. Now, just a few years in, the Space Force faces both opportunities and challenges in continuing to develop all of those things, along with its own space-centric identity and culture.

In this paper, we offer a framework to operationalize the concept of a Space Force organizational culture and give examples of how selected factors can shape it and have cascade effects on performance and organizational effectiveness. We close with thoughts on how the Space Force's senior leaders and all guardians, regardless of job or rank, can build a culture that best positions the service to fulfill its vision and mission.

Space Force Culture Will Drive Performance

The relationship between organizational culture and performance is widely accepted: A strong, positive organizational culture is associated with better organizational performance. Regarding culture's outsized role in performance, there is a saying often quoted in the private sector—"Culture eats strategy for breakfast"2—meaning that poor culture can overpower good strategy, and if strategy and culture conflict, culture wins every time. Furthermore, an article from McKinsey & Company asserts that

a clear cultural aspiration can serve as an organization's "secret sauce" and help to make it "future-proof."³

The USSF's Space Capstone Publication, *Spacepower: Doctrine for Space Forces*,⁴ articulates the following cornerstone responsibilities: *preserve freedom of action, enable joint lethality and effectiveness*, and *provide independent options*.⁵ It calls for space-specific approaches in many areas: in its doctrine, organizational structure, education and training, leader development, operations, acquisition, and more. About organizational culture, it says:

At a minimum, culture describes what an organization values as a collective group. Leadership plays an important role influencing culture, but a stable culture can only flourish once organizational purpose and identity are broadly understood and accepted across the group.⁶

Another document, *The Guardian Ideal*,⁷ describes the Space Force's aspirations for talent management and

Abbreviations

DEI diversity, equity, and inclusion

USAF U.S. Air Force USSF U.S. Space Force

organizational culture. The talent management objectives are to "connect in a collaborative environment; lead digital enablement; generate and engage talent; develop and employ talent; and integrate resiliency." About organizational culture, it states:

These objectives build upon each other to shape a new organizational culture with a focus on space as a warfighting domain, emboldening Guardians to produce game changing outcomes. Each objective is essential in strengthening the trust, transparency, and accountability necessary for our teams to excel.⁹

These documents provide points of departure but are arguably laden with artifacts from the Air Force and sister services. At this early stage, USSF senior leaders and members at all levels have an opportunity to shape Space Force culture with overarchingly strategic intention, rather than to let the culture grow on its own, with only modest tending, and try to correct or reshape it later. Decisions made today on nearly any aspect of organizing, training, and equipping space forces, although changeable, will have nontrivial effects on Space Force culture—and, thus, on performance and effectiveness—for years to come.

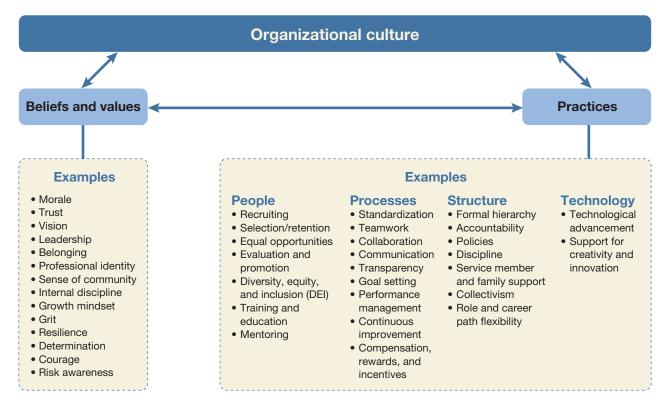
Defining Organizational Culture In the Space Force Context

Many definitions of *organizational culture* exist in the literature. For example, *organizational culture* has been defined as "the shared beliefs and values that are passed on to all within the organization." Others have described *organizational culture* as "organizational practices and the consequences of those practices." In *Organizational Culture and Leadership*, 4th ed., Schein defines *organizational culture* as "a pattern of shared basic assumptions that was learned by a group as it solved its problems of external adaptation and internal integration [and] that has worked well enough to be considered valid and, therefore, to be taught to new members as the correct way to perceive, think, and feel in relation to those problems" (p. 18). For this discussion, we referred to these and other definitions from military and organizational scholars. 12

Drawing from those definitions, we developed a framework, shown in Figure 1, to represent many of the key factors that shape culture in military organizations and will undoubtedly affect the USSF's organizational culture. The framework envisions organizational culture in terms of two key drivers: (1) *beliefs and values* and (2) *practices*. ¹³ These key drivers inform each other, and, together, they constitute what we refer to as *organizational culture*. The relationships between them are fluid and ongoing.

Of course, *beliefs and values* can exist apart from *practices*, and vice versa, but the interaction between these drivers (which can be compatible or conflicting) is what shapes the organizational culture. For example, individuals in an organization may believe in a principle, such as growth mindset, but, without practices that embody the prin-

What Will Shape USSF Culture: Beliefs, Values, and Practices



Founding leaders leave their imprint by instilling their own beliefs and values, which . . . then shape the organization's identity and define its distinctive competence.

-Schein, The Corporate Culture Survival Guide

It is not enough to fight. It is the spirit we bring to the fight that decides the issue. It is morale that wins the victory.

-General of the Army George C. Marshall

ciple, such as observable organizational support for trial and error, the organization will not develop an authentic growth-mindset culture. Furthermore, if its members recognize that the organization's *stated* beliefs and values are not actually carried out in standard practice, morale will likely suffer. On the other hand, if the organization's top leaders say they value growth mindset *and* the organization's policies and practices reflect that value by encouraging and rewarding well-informed trial and error, the value and practices will naturally become part of the culture. For example, if the organization regularly supports and seeks to learn from small, informed, exploratory efforts, even if those efforts fail to achieve the desired results, the organization will foster more openness to and participation in activities that lead to discovery and innovation.

Next, we unpack the concepts of *beliefs and values* and *practices*, give examples, and describe how both can affect USSF culture.

Beliefs and Values

At every stage of development, an organization's underlying beliefs and values are fundamental drivers of organizational culture. In the early stages of growth, a young organization's trajectory is deeply affected by the beliefs and values of its founders. Founders leave their imprint on the organization by instilling their own set of beliefs and values, which are eventually shared, seen as valid, and "taken for granted" throughout the organization. As Schein notes, these beliefs and values "then function in the organization as the basic glue that holds it together, the major source of the organization's sense of identity, and the major way of defining its distinctive competence." 16

The Space Force's founding and early senior leaders are tasked with developing an organization for a mission distinct from that of the USAF. Understandably, Chief of Space Operations General John Raymond expressed a desire to start with a "clean sheet of paper" in designing the new service, which will differ from the USAF not for the sake of being different, but in order to tailor itself to its mission. The organization's leaders, who may range from the highest-ranking officers and most prominent civilians to officers as early in their careers as captains, have the opportunity to establish a cultural blueprint by imparting

The idea of allowing low-risk mistakes to give people room to learn and grow is part of an organizational growth mindset.

-Luning et al., "A Culture of Organizational Grit"

beliefs and values that may be similar to and yet distinct from those of the USAF.

The literature on organizations, military culture, and management provides countless examples of the *beliefs* and values that shape military organizations. We call out a salient few:¹⁸

- Morale. The ability of a group's members to sustain belief in an institution, goal, or mission, particularly in the face of hardship.
- **Trust.** Having confidence in the professional competence and intent of one's peers, leadership, and institution.
- Leadership. Those responsible for cultivating and managing organizational culture uphold the values and guiding principles of the organization. They provide leadership through their decisions, words, and actions.

- **Professional military identity.** The motivation and willingness to internalize the Armed Forces' prevailing goals, values, and tasks; serving and fighting ethically as a means of defending the U.S. Constitution.
- **Belonging.** When group members feel seen, connected, supported, and proud to be part of a group or organization.
- **Growth mindset.** Operating within a culture of growth and development; openness to the value of ongoing learning.
- **Grit.** Determination and passion for achieving longterm goals, regardless of failures, setbacks, or turnover among leadership and membership.

In Table 1, we give examples of how selected organizational beliefs and values can add to or detract from the USSF's organizational culture, depending on how they are realized. The first column names the belief or value. The second column describes an outcome that is more likely to occur if the belief or value is strongly embedded in USSF culture, and the third describes a more-likely outcome if the belief or value is weakly embedded. These outcomes or effects are synthesized from various sources, including literature, discussions with military members and researchers, and project team expertise. Each pair of outcomes illustrates how these factors, which may be overlooked because they are less tangible, can have very consequential effects on performance. They also highlight the potential benefits of shaping each factor proactively, rather than allowing it to evolve unattended.

TABLE 1
How Selected Beliefs and Values Can Affect USSF Culture and Performance

Belief or Value	When Strongly Embedded	When Weakly Embedded
Morale ක්රීක්	 Guardians are deeply inspired and driven by the USSF mission. They believe in the institution and are dedicated to securing and defending U.S. interests in space. With strong morale, performance is high. 	 Guardians are ambivalent about the USSF institution and uncertain about its mission and goals. Morale, motivation, and performance suffer, leaving the nation's space interests more vulnerable.
Trust (Guardians believe in the competence and integrity of their institution, leaders, and peers. Collaboration among individuals, teams, and subgroups in the USSF is strengthened by a sense of confidence and trust. 	 Guardians do not have faith in their institution, leaders, or peers. With low trust among guardians, their commitment and professionalism wane, leading to inconsistent behavior and performance.
Leadership	 USSF leaders exemplify the service's ideals, live by its values, and inspire others to meet the same high standards. As a result, guardians have strong faith in leadership, which bolsters readiness and performance. 	 Leaders at various levels fail to uphold the USSF's values and high standards, motivated instead by self-interest or self-importance. Guardians notice the lack of integrity among those in positions of leadership, and some choose to perpetuate the behaviors, seeing them as a path to achievement. Morale goes down, along with organizational integrity and performance.
Military professional identity	 Guardians identify with the USSF mission and feel connected to their roles as professionals. Each member takes responsibility for securing and defending U.S. space interests, regardless of rank or role. 	 Guardians do not identify with their mission and do not consistently engage with the larger purpose of their jobs. Those with weaker ties to their military professional identity fail to uphold USSF standards of behavior and job performance. The reputation of USSF professionals is weakened in joint environments and elsewhere.
Belonging	 All guardians, regardless of rank, job, location, or personal characteristics, feel connected to and valued by their organization. This leads to greater cohesion and mutual support among guardians, strengthening individual and organizational performance. 	 Low sense of belonging leads to feelings of detachment, higher stress, social and emotional issues, and lower rates of retention. Over time, USSF recruiting and retention challenges grow, especially among marginalized groups, due to negative perceptions of guardian experience for those who don't "belong."
Growth mindset	 USSF leaders at all levels foster continuous learning and improvement for themselves, fellow guardians, and the institution. The service-wide value of ongoing learning allows for responsible risk-taking. Guardians have more freedom to innovate and continuously strive for the next level of excellence. 	 Supervisors are risk-averse, encourage conformity, and fail to support innovation. Guardians become reluctant to think beyond set boundaries. Creativity is undervalued, and innovation is stifled. The USSF is less able to attract and retain the talent it needs to stay on the leading edge of expertise.
Grit 💝	 Guardians demonstrate high levels of determination and persistence. They remain in the service longer and continue to grow in their careers. Attrition is low. The USSF has more success in longer-term efforts due to individual and institutional dedication to long-term goals. 	 Individuals and teams often lose motivation after initial setbacks. Morale suffers. The USSF struggles to achieve more-challenging goals due to a lack of collective passion and determination throughout the organization.

Practices

An organization's practices—the processes, structures, and procedures through which the entity and its members execute their work—are a product of the group's espoused beliefs and values along with the basic, tacit assumptions shared among members.¹⁹ There is no single, standard way to categorize organizational practices. After reviewing numerous approaches in the literature and devising several of our own, we chose to divide organizational practices into the four key areas of concern shown earlier on the right side of Figure 1—people, processes, structure, and technology. In Tables 2 through 4, we describe examples of practices in a military organization and give likely consequences of each one being implemented strongly or weakly in the Space Force. As in Table 1, the first column in each table names the practice. The second column describes an outcome that is more likely to occur if the practice is strongly implemented in the Space Force, and the third column provides a more-likely scenario if the practice is implemented weakly or poorly. As in Table 1, the outcomes or effects described in Tables 2, 3, and 4 are synthesized

from various sources, including literature, discussions with military members and researchers, and project team expertise. They illustrate only a few of the ways these practices can affect the institution's performance and effectiveness.

People-Related Practices

Table 2 describes how a small selection of people-related practices can impact organizational culture and subsequently performance. Ensuring the effective implementation of practices like these can prove critical for maintaining a competitive, cohesive, and ready force.

- **Selection and retention.** Identifying and selecting qualified applicants to serve and retaining them over an extended period.
- Training and education. The means through which an organization continually develops its personnel in terms of knowledge, skills, abilities, and attitudes.
- **Diversity, equity, and inclusion.** Creating a fair and inclusive organization that values different backgrounds and perspectives and thus attracts, recruits, and retains the best talent available.²⁰

We are professionals. We wear a uniform. We follow a code. The American public holds us to a higher sense of rules and responsibilities, and we hold ourselves to that same code of ethics and code of performance and action.

-Interviewee #14, U.S. military officer, in Luning et al., "A Culture of Organizational Grit"

TABLE 2 How People Practices Can Strengthen or Weaken USSF Culture

People Practice	When Implemented Strongly	When Implemented Weakly
Selection and Corretention X	 The USSF selects and retains high-performing individuals and leaders who embrace and embody the institution's values as warfighters and space professionals. These individuals excel in their roles and take personal responsibility for their part in strengthening U.S. spacepower. 	 The USSF lacks the quality and variety of candidates it needs to meet its mission. Some specialties are robust with qualified personnel, while others are unable to fill critical billets. Those who stay vary widely in motivation and performance, leading to a lack of cohesion, weakened morale, and diminished effectiveness.
Training and education	 All guardians, regardless of role or position, receive rigorous skill development and sufficient opportunities to learn and practice. Training is forward-thinking, innovative, and tailored to the demands of space defense mastery. Guardians have opportunities to practice and apply new skills after training. 	 Training and education for guardians remain piggybacked onto sister services' learning opportunities. The offerings fail to meet current needs for space warfighting expertise. After training, guardians lack opportunities to practice what they learned. Guardians' skills and abilities fail to keep up with the quickly evolving demands of the space domain. The USSF is outpaced by its adversaries in expertise and capabilities.
Diversity, equity, and inclusion (DEI)	 USSF leaders leverage the unique aspects of space operations (such as different expectations for combat and fewer permanent change of station [PCS] moves) to attract a broad pool of individuals. The larger pool of applicants enables the USSF to bring in top talent. Recruiting, retention, and promotion of women and members of racial/ethnic minority groups are robust, and the composition of the USSF more closely reflects the greater population. The USSF reaps the benefits of diversity in its strategic decisionmaking and performance.^a Over time, USSF becomes a destination career for more Americans due to its mission and climate of inclusion, among other attributes. 	 The USSF continues existing practices, and DEI remains challenging. The demographics of USSF leaders and guardians remain skewed. Women and individuals who identify with minoritized racial/ethnic, religious, gender, cognitive, and other less-represented groups feel less valued and face implicitly limited career paths. The promotion process inadvertently favors those who have historically been successful and discourages members of less strongly represented groups. The lack of DEI weakens the institution's image as it fails to reflect the heterogeneity of the nation. Decisionmaking is narrowed by the limited range of perspectives.

^a For example, see Dixon-Fyle et al., "Diversity Wins: How Inclusion Matters."

Organizational Processes

Next, we describe a small selection of organizational processes: *teamwork*, *communication*, *transparency*, and *performance management*. In Table 3, we provide notional scenarios of outcomes when each one is strongly or weakly implemented in the Space Force. These examples help illustrate how processes that are often treated as perfunctory have meaningful consequences for culture, organizational performance, and mission accomplishment. Every one of these practices has important consequences for guardians individually, their teams and deltas, the Space Force, and its joint collaborators:

- **Teamwork.** Effective and efficient collaboration between a group of people or groups of people within an organization.
- **Communication.** Activities through which information is shared between the organization and its personnel, as well as among groups and individuals.
- Transparency. Actions through which leaders develop trust, strengthen relationships, and bolster core beliefs and values by maintaining open and honest lines of communication and responsibly sharing pertinent information.
- **Performance management.** The process whereby supervisors assess the progress and achievements of individual service members, teams, and the organization according to a set of objective criteria.²¹

TABLE 3

How Selected Organizational Processes Can Strengthen or Weaken USSF Culture

Process	When Strongly Implemented	When Weakly Implemented
Teamwork	 The USSF fosters and promotes a "team of teams" mentality, fostering collaboration and coordination among individuals, among teams, and across deltas. Through effective team experiences, guardians are better prepared for the joint operations that are essential to the mission. Space Force leaders collaborate smoothly with one another and work effectively with government, allies, and external partners. 	 Guardians focus on parochial concerns rather than on team, delta, or institutional outcomes. Silos among specialties divide the force and lead to internal barriers, stovepiping, and "tribes" among commands. These divisions impede collaboration, cooperation, and organizational performance. Guardians carry the same weak teamwork practices to the joint environment, leading to less-effective joint collaboration and outcomes.
Communication 1=1	 USSF leaders treat effective communication as essential to daily operations and mission accomplishment. USSF leaders consistently convey their vision, core beliefs, goals, and priorities to fellow guardians, and they foster and establish processes for bottom-up and lateral communication within the force. Guardians at all levels take responsibility for effective communication both internally and externally. The USSF as an institution is effective and positively regarded, both internally and externally. 	 The USSF fails to value and develop effective communication as a core competency for every guardian, focusing instead on technical or other competencies. With weak communication practices (which may include top-down, bottom-up, and lateral), operations suffer from poor collaboration and information-sharing among individuals, teams, and deltas. Guardians are less effective in joint environments due to weak communication skills. The USSF is less prepared to meet its responsibilities regarding joint lethality and effectiveness.
Transparency	 USSF leaders engage the appropriate subordinates and stakeholders in transparent decisionmaking. Within the organization, leaders responsibly share information that affects guardians, their families, and their duties. Collaborative decisionmaking is common. Transparent communication fosters ethical decisionmaking. Guardians feel included and respected and experience higher morale, which strengthens job performance. 	 USSF leaders make decisions without involving the appropriate subordinates or stakeholders. Decisionmaking occurs in silos and without collaboration. Trust in the institution declines. Guardians lose faith in USSF core beliefs and values. Morale and performance suffer, with consequences to spacepower and national security.
Performance management	 All guardians, regardless of position, role, and unrelated personal characteristics, receive fair and accurate performance assessments. The feedback is shared in developmental terms that encourage learning and skill-strengthening. The performance management system allows the 	 Using a system of performance assessment that is not tailored to the contemporary context of space warfare, the USSF fails to measure guardians' performance accurately and reliably. Without fair and accurate assessment, the USSF risks errors in promotion decisions and may inadvertently

management



- calculated risk-taking needed for space operations and innovation, rather than expecting "zero defects."
- Guardians find performance feedback useful and feel encouraged to advance.
- reward those with weaker skills and overlook those with important strengths.
- These inconsistencies reduce trust and morale, weaken performance, suppress innovation, and lower overall performance.

Structural and Technology Practices

In Table 4, we describe a selection of structural practices—formal hierarchy, policies, service member and family supports, and role and career path flexibility—and one technology-related practice—support for creativity and innovation. In Table 4, we describe possible outcomes when these practices are implemented strongly or weakly. These examples demonstrate the potential effects of these practices on organizational culture and provide insight into their positive and negative impacts for aspects such as force effectiveness, attrition, and morale:

• **Formal hierarchy.** A system of labor characterized by a formal structure of ranked individuals and an official chain of command.

- **Policies.** Doctrine, official documents, and regulations that govern a service organization and its capabilities in wartime and peacetime.
- Service member and family supports. The provision of financial, psychological, educational, social, and logistic assistance to service members and their families.
- Role and career path flexibility. The ability of service members to expand their warfighting and occupational competencies in ways that are professionally and institutionally valuable and personally fulfilling.
- Support for creativity and innovation. Encouraging the responsible use of new systems, tools, and methods to reap the benefits of cutting-edge technology.²²

Officers are often forced to make a choice between loyalty to the institution or to their family. In the end, the military loses with either the officer departing the Service or providing less degree of commitment to mission accomplishment. If this trend continues, it may well impact the underlying culture of loyal and selfless service.

-Breslin, Organizational Culture and the Military

TABLE 4 How Selected Structural and Technology Practices Can Strengthen or Weaken USSF Culture

Structural or Technology Practice	When Implemented Strongly	When Implemented Weakly
Formal Ahierarchy	 The USSF has clearly defined authorities, roles, and relationships to the extent necessary for a military organization. These parameters are known to and respected by all. They are accompanied by other factors, such as growth mindset, teamwork, and effective communication, which keep the official hierarchy from becoming rigid and inflexible. 	 The formal hierarchy stifles practices that would support learning and innovation. Guardians prioritize structure over flexibility, continuous improvement, and novel approaches. The structural rigidity reduces motivation, morale, and organizational development and thus reduces performance and effectiveness.
Policies 🗐	 The USSF implements policies that promote responsible decisionmaking, support U.S. spacepower, and enable guardians to execute their duties. The institution updates policies and regulations at a pace aligned with the quickly evolving demands of space defense and warfare. Policies and updates are disseminated effectively, enabling guardians to stay current. 	 USSF leadership retains past policies that no longer align with the circumstances of present and future space warfare. The outdated regulations and policies become overly restrictive or irrelevant. Guardians face challenges in carrying out their duties effectively. Morale declines along with performance.
Service member and family supports	 Beyond existing U.S. Department of Defense programs, the USSF offers targeted community programs to help make everyday life easier for guardians and their families. Guardians' families have access to high-quality child care, spouse employment programs, and other medical and mental health services. Retention remains high, while attrition is limited. Supports are offered to help when a guardian transitions out of the USSF. 	 USSF family supports are limited and do not meet the needs of the guardian community. Guardians and their families feel undervalued and unsupported. Guardians' quality of life suffers, along with morale and retention, especially for members with family responsibilities.
Role and career path flexibility	 The USSF fosters meaningful career development by expanding members' ability to shape their own paths—within USSF needs. Guardians can acquire deep knowledge, skills, and experiences in multiple warfighting mission areas and occupational competencies. Collaboration, job satisfaction, and retention increase as a result. 	 Guardians are siloed in their jobs, face limited opportunities to advance, and lack career path flexibility. Attrition increases due to limited opportunities for growth and more attractive options elsewhere.
Support for creativity and innovation	 Guardians have the social, financial, and technological resources to innovate. Guardians build consensus throughout the innovation process. Leadership prevents interference or sabotage from risk-averse or hostile players. 	 Guardians have insufficient social, financial, and technological resources to innovate. Risk-averse or hostile players interfere with innovation or withhold resources from those with the initiative to test new ideas.

Shaping USSF Culture to Build the Future of U.S. Spacepower

USSF leaders today face a rare and tremendous opportunity—as Chief of Space Operations General John W. Raymond stated, to "pioneer a new Service and a new professional body of knowledge."23 In the sections above, we explored numerous ways in which the Space Force's organizational culture will continue to determine its effectiveness, now and in the future. In the five-chapter Space Capstone Publication, Spacepower: Doctrine for Space Forces, the authors mention culture only briefly, on the very last page, describing organizational culture as "difficult to define and harder to measure."24 To help define organizational culture, we offered a framework (in Figure 1) to operationalize organizational culture in terms of the beliefs, values, and practices that guardians engage in every day. We encourage today's guardians to recognize that every belief, decision, and action by every member of

the Space Force is *building a larger*, *highly consequential whole* with vast potential to strengthen the USSF as an institution, empower its members, and ensure a strong future for U.S. national spacepower. Simultaneously, the potential exists for any member to substantially weaken the institution through their beliefs, values, and actions. Regarding measuring organizational culture, although it may not be easy, it can be done.²⁵

This framing of organizational culture is a holistic perspective that integrates the disparate parts of a complex organization and empowers leaders and members to consistently connect their beliefs, decisions, and actions to the institution's success in ensuring U.S. national security. This approach may be well suited for warfighters who secure the domain of space, which itself involves multiple dimensions, relationships, and interlinkages, as noted in the quote below.

Space is more than an altitude. Space is more than just orbital flight; the concept of space operations must span a physical dimension, network dimension, and a cognitive dimension, among others, in order to understand the relationships and interlinkages with the other domains.

-U.S. Space Force, Spacepower: Doctrine for Space Forces

Shaping the Space Force's Future Culture Today and for the Future

With a spotlight on organizational culture as a driver of performance and operational effectiveness, the Space Force should focus on the beliefs, values, and practices that will shape its culture. We offer the following avenues for consideration.

Refine and Promote Shared Beliefs and Values

1. Clearly articulate and socialize a compelling statement of the Space Force's vision for the future.

Leverage it to instill in all guardians a shared sense of purpose. Author Simon Sinek wrote compellingly about how organizations that focus on why (they do what they do) before how (they will do it) and what (to do specifically) achieve more successful long-term results—and he detailed the human brain biology that explains this phenomenon. ²⁶ Sinek's principle of "Start with why" urges organizations to engage their workers through a shared, overarching why.

The USSF's exploration of its *why* is incomplete. Across a range of Space Force communications, including its mission, ²⁷ inaugural doctrine, ²⁸ planning guidance, ²⁹ and topic-specific vision statements, ³⁰ the prevailing emphasis is on *how* and *what* (e.g., responsibilities, traits, objectives, practices, foci). There is little or no anchoring to a compelling, shared vision. The Space Capstone Publication offers this as the service's purpose: "to cultivate, develop, and advance spacepower in order to ensure national prosperity and security." Whether this or some

- other statement is selected, it should be promoted and socialized as a shared value within the Space Force.
- 2. Expect some aspects of traditional military leadership to need to evolve. Adopt and promote a broader, more future-oriented perspective to leading through emerging challenges. One should expect that demands related to globalization, rapid technology development, talent shortages, social climate, and DEI will continue to grow. Furthermore, the career and lifestyle expectations of eligible youth and young adults will continue to evolve. The Space Force will need strong, dynamic, innovative leaders at all levels, not only in senior ranks. According to author and futurist Jacob Morgan, the mindsets and traits that will be most important for future leaders of work include being a perpetual learner, balancing technology and humanity, working to serve others, considering various future scenarios, practicing empathy, listening, motivating and engaging others across perceived boundaries, and being tech-savvy.32 Such perspectives will influence practices, such as personnel selection and retention, training, professional development, and performance management.
- 3. Embrace DEI and belonging as core values, not afterthoughts, and support those values with informed practices to counter implicit and explicit biases and barriers to inclusion. The business case for DEI in private-sector organizations has been widely documented.³³ More-diverse companies tend to perform better and have greater profits than those with less diversity. RAND researchers have conducted substantial research on DEI in military contexts.³⁴ Past studies confirm differences in representation,

- retention, and promotion for women and people of color³⁵ and in perceptions of belonging for lesbian, gay, bisexual, transgender, queer, and/or questioning individuals.³⁶ However, research also confirms that diversity is a strategic enabler in U.S. and UK military forces.³⁷
- 4. Take advantage of existing tools, data sources, and communication channels to gain a baseline understanding of the existing Space Force culture. For example, perhaps data from the Federal Employee Viewpoint Survey or the Status of Forces survey could be disaggregated to provide USSF-level results. For expediency, the USSF could use an existing commercial off-the-shelf engagement survey, such as the Gallup Q12 Employee Engagement Survey, ³⁸ which could be done quickly, although an existing survey would not include military-specific questions.

In addition, Space Force leaders at all levels should invite and reflect on feedback from fellow guardians and external collaborators as part of their day-to-day efforts. Leaders in any position do not need to wait for a survey to learn more about how they and their people are doing. Focus groups can be conducted in just an hour or two and can be done virtually to avoid the cost of convening participants in a single physical location. In addition, simply asking for and thoughtfully considering feedback from fellow guardians in the course of daily work costs little to nothing. When this practice is used constructively, it strengthens morale, trust, belonging, sense of community, teamwork, collaboration, and various other beliefs, values, and practices that drive performance and effectiveness.

- 5. Identify the areas in which gaps exist between the Space Force's desired beliefs and values and those of guardians to inform ongoing decisionmaking. With a baseline understanding of the current state gathered from the activities above, what areas for growth are surfacing? The early impressions may be limited but may provide enough information to surface actionable issues. The amount of resources needed will be determined by the nature and extent of the concerns.
- 6. Across the service, encourage guardians to relate their own decisions and practices to the service's desired core beliefs and values, and pay attention to alignment between the two. When they do not align, any guardian should ask, "Does this value, belief, or practice need to change?" and "In what ways can I contribute to a solution?" Over time, the answers to those questions will foster improvements. Avoid letting values and practices remain in conflict for long.
- 7. On a daily basis, foster habits of mind that relate organizational and individual decisions to the big picture of why and the implications for the organization's effectiveness. As mentioned earlier, even decisions that may seem perfunctory now can have meaningful consequences for Space Force culture, organizational effectiveness, and mission accomplishment in the future. Whether the culture is strong or weak, it will always have consequences, and an action by any guardian at any time can either strengthen or weaken Space Force culture.
- 8. Consider that a cost is involved, whether the Space Force chooses to develop its culture deliberately and with strategic intention or to let it grow haphazardly and with little tending. To shape Space Force

culture actively and intentionally now based on a set of thoughtfully crafted core values will undoubtedly require some effort and investment of resources in the near term. If well designed and well executed, the efforts will pay off for years to come. They will foster beliefs, values, and practices that positively affect guardians' careers and the Space Force's operational effectiveness. Conversely, letting Space Force culture grow with little tending will have a lower cost up front but is likely to incur greater costs later.

As explained earlier, a culture of some kind is already developing in the Space Force, and it will continue to become stronger and deeper, whether or not its leaders and members intend it. If the Space Force gives priority to policies and practices without connecting them to its big-picture why, its efforts can easily become unmoored. Alternatively, if the Space Force relies too heavily on existing beliefs and practices inherited from sister services, it risks institutionalizing perspectives that are ill-suited to its unique mission and aspirations for the future. In this sense, even if today's leaders avoid the up-front investment in mental labor required to shape culture positively now, tomorrow's leaders will incur the higher costs of undoing ill-suited beliefs, values, and practices. The choice is between a modest investment in organizational effectiveness now or a more costly investment in organizational change (and remediation) later—keeping in mind that some observable adverse effect will likely have occurred to the service's performance (and reputation) before any investment to change and improve it.

If you want to start something new, you have to stop doing something old.

-Peter Drucker, "Say No in the New Year!"

We close with the words of Peter Drucker: "If you want to start something new, you have to stop doing something old." While continuing to appreciate the rich history and tradition of the U.S. military and sister services, Space Force leaders face not only an opportunity, but also an imperative, to innovate in ways that have not yet been tried and to stand ready for problems not yet even known. Intentionally cultivating a strong, forward-looking, learning-oriented culture through every decision that affects beliefs, values, and practices—rather than allowing important aspects of the culture to grow untended—will better prepare the institution to meet the challenges to come.

Notes

- ¹ Denison, *Corporate Culture and Organizational Effectiveness*; Kotter and Heskit, *Corporate Culture and Performance*; Sørenson, "The Strength of Corporate Culture and the Reliability of Firm Performance."
- ² This quotation is often attributed to Peter Drucker, as in Engel, "Why Does Culture 'Eat Strategy for Breakfast'?"; Hyken, "Culture Eats Strategy for Breakfast, and Enterprise-Rent-a-Car Proves It"; and Walters, "Culture Still Eats Strategy for Breakfast," but this exact phrasing does not appear in any of his publications. However, Drucker did write, "Culture—no matter how defined—is singularly persistent" (Drucker, "Don't Change Corporate Culture—Use It!").
- ³ DiLeonardo et al., "Establish a Performance Culture as Your Secret Sauce."
- ⁴ USSF, Spacepower: Doctrine for Space Forces.
- ⁵ USSF, Spacepower: Doctrine for Space Forces.
- ⁶ USSF, Spacepower: Doctrine for Space Forces, p. 59.
- ⁷ USSF, The Guardian Ideal.
- ⁸ USSF, The Guardian Ideal, p. 2.
- ⁹ USSF, *The Guardian Ideal*, p. 2; emphasis added.
- $^{10}~$ Davidson, "Does Organisational Climate Add to Service Quality in Hotels?"
- $^{11}\,$ For example, Clayton et al., "Improving the Management of Overtime Costs Through Decentralized Controls."
- ¹² Such as Berberea, "Army Defines Identity of Professionalism"; Dandeker and Gow, "Military Culture and Strategic Peacekeeping"; Department of the Army, "Grit: A Look at Individual and Organizational Passion and Perseverance"; Duckworth et al., "Grit: Perseverance and Passion for Long-Term Goals"; Johansen, Laberg, and Martinussen, "Military Identity as Predictor of Perceived Military Competence and Skills"; Luning et al., "A Culture of Organizational Grit from the Perspective of U.S. Military Officers: A Qualitative Inquiry"; Meredith et al., Identifying Promising Approaches to U.S. Army Institutional Change: A Review of the Literature on Organizational Culture and Climate; Murphy and Dweck, "A Culture of Genius: How an Organization's Lay Theory Shapes People's Cognition, Affect, and Behavior"; Schein, Organizational Culture and Leadership, 3rd and 4th eds.; Sutcliffe and

- Vogus, "Organizing for Resilience"; and Taylor Kennedy and Jain-Link, "What Does It Take to Build a Culture of Belonging?"
- 13 The literature also discusses other relevant drivers of organizational culture, such as climate, with respect to cultural change (e.g., Martins, "Organizational Change and Development"). In this paper, we narrow the scope of our framework to include only beliefs, values, and practices. We do so for the sake of clarity and simplicity.
- ¹⁴ Schein, Organizational Culture and Leadership, 4th ed.
- $^{15}\,$ Schein, The Corporate Culture Survival Guide, 4th ed.
- $^{16}\,$ Schein, The Corporate Culture Survival Guide, 4th ed., p. 123.
- 17 This metaphor was written into the project description. The sentiment was further expressed by the sponsor and other USSF points of contact in discussions with the RAND team.
- ¹⁸ The definitions listed are drawn and summarized from "Army Defines Identity of Professionalism"; Dandeker and Gow, "Military Culture and Strategic Peacekeeping"; Department of the Army, "Grit: A Look at Individual and Organizational Passion and Perseverance"; Duckworth et al., "Grit: Perseverance and Passion for Long-Term Goals"; Johansen, Laberg, and Martinussen, "Military Identity as Predictor of Perceived Military Competence and Skills"; Luning et al., "A Culture of Organizational Grit from the Perspective of U.S. Military Officers: A Qualitative Inquiry"; Meredith et al., *Identifying Promising* Approaches to U.S. Army Institutional Change: A Review of the Literature on Organizational Culture and Climate; Murphy and Dweck, "A Culture of Genius: How an Organization's Lay Theory Shapes People's Cognition, Affect, and Behavior"; Schein, Organizational Culture and Leadership, 3rd and 4th eds.; Sutcliffe and Vogus, "Organizing for Resilience"; and Taylor Kennedy and Jain-Link, "What Does It Take to Build a Culture of Belonging?"
- ¹⁹ Schein, Organizational Culture and Leadership, 4th ed.
- These descriptions are summarized from Hajjar, "Emergent Postmodern US Military Culture"; Meredith et al., *Identifying Promising Approaches to U.S. Army Institutional Change: A Review of the Literature on Organizational Culture and Climate*; and Snider, "Will Army 2025 Be a Military Profession?"
- ²¹ These descriptions are drawn and summarized from the following sources: Asch, *Setting Military Compensation to Support Recruitment, Retention, and Performance*; Larkin, "Transparent Leadership: An Old Concept for Modern Times"; Luning et al., "A Culture of Organiza-

- tional Grit from the Perspective of U.S. Military Officers: A Qualitative Inquiry"; and National Academies of Sciences, Engineering, and Medicine, Strategies to Enhance Air Force Communication with Internal and External Audiences: A Workshop Report.
- ²² These descriptions are drawn and summarized from Breslin, *Organizational Culture and the Military*; Burrell et al., "The Impact of Military Lifestyle Demands on Well-Being, Army, and Family Outcomes"; Hajjar, "Emergent Postmodern US Military Culture"; and Price Jr., "US Military Innovation Fostering Creativity in a Culture of Compliance."
- ²³ USSF, Spacepower: Doctrine for Space Forces.
- ²⁴ USSF, Spacepower: Doctrine for Space Forces.
- 25 As, for example, in Sull, Sull, and Chamberlain, "Measuring Culture in Leading Companies," and in the Federal Employee Viewpoint Survey conducted by the U.S. Office of Personnel Management.
- ²⁶ Sinek, Start with Why.
- ²⁷ USSF, "United States Space Force Mission."
- ²⁸ USSF, Spacepower: Doctrine for Space Forces.
- ²⁹ USSF, Chief of Space Operations, Chief of Space Operations Planning Guidance.
- ³⁰ Such as USSF, Chief Technology Innovation Office, U.S. Space Force Vision for a Digital Service.

- ³¹ USSF, Spacepower: Doctrine for Space Forces.
- 32 Morgan, The Future Leader.
- ³³ For example, Dixon-Fyle et al., "Diversity Wins: How Inclusion Matters."
- ³⁴ See RAND National Security Research Division, "RAND Research on Diversity, Equity, and Inclusion in the U.S. Military," to access research briefs and full reports on RAND's research on DEI in the U.S. military.
- $^{35}\,$ For example, Lim et al., Improving Demographic Diversity in the U.S. Air Force Officer Corps.
- ³⁶ RAND National Defense Research Institute, Sexual Orientation and U.S. Military Personnel Policy: An Update of RAND's 1993 Study.
- ³⁷ Slapakova et al., Leveraging Diversity for Military Effectiveness: Diversity, Inclusion and Belonging in the UK and US Armed Forces.
- ³⁸ Gallup, "Q12 Employee Engagement Survey."
- ³⁹ Drucker Institute, "Say No in the New Year!"

References

Asch, Beth J., Setting Military Compensation to Support Recruitment, Retention, and Performance, RAND Corporation, RR-3197-A, 2019. As of August 17, 2021:

https://www.rand.org/pubs/research_reports/RR3197.html

Berberea, Marie, "Army Defines Identity of Professionalism," U.S. Army website, April 3, 2015. As of May 3, 2023:

https://www.army.mil/article/145828/army_defines_identity_of_professionalism

Breslin, Charles, Organizational Culture and the Military, U.S. Army War College, 2000.

Bumstead, Alaina, and Thomas E. Boyce, "Exploring the Effects of Cultural Variables in the Implementation of Behavior-Based Safety in Two Organizations," *Journal of Organizational Behavior Management*, Vol. 24, No. 4, 2004.

Burrell, Lolita M., Gary A. Adams, Doris Briley Durand, and Carl Andrew Castro, "The Impact of Military Lifestyle Demands on Well-Being, Army, and Family Outcomes," *Armed Forces & Society*, Vol. 33, No. 1, October 2006.

Clayton, Michael C., Thomas C. Mawhinney, David E. Lukem and Harold G. Cook, "Improving the Management of Overtime Costs Through Decentralized Controls," *Journal of Organizational Behavior Management*, Vol. 17, No. 2, 1997.

Dandeker, Christopher, and James Gow, "Military Culture and Strategic Peacekeeping," Small Wars & Insurgencies, Vol. 10, No. 2, 1999.

Davidson, Michael, "Does Organisational Climate Add to Service Quality in Hotels?" *International Journal of Contemporary Hospitality Management*, Vol. 15, 2003.

Denison, D. R., Corporate Culture and Organizational Effectiveness, Wiley, 1990.

Department of the Army, "Grit: A Look at Individual and Organizational Passion and Perseverance," white paper, 2015. As of September 3, 2021:

https://cgsc.contentdm.oclc.org/digital/collection/p16040coll2/id/18/

DiLeonardo, Alexander, Phelps, Ran Li, and Brooke Weddle, "Establish a Performance Culture as Your Secret Sauce," McKinsey Organization Blog, July 27, 2020. As of September 1, 2021:

https://www.mckinsey.com/business-functions/organization/our-insights/the-organization-blog/establish-a-performance-culture-as-your-secret-sauce?

Dixon-Fyle, Sundiatu, Kevin Dolan, Vivian Hunt, and Sara Prince, "Diversity Wins: How Inclusion Matters," McKinsey & Company, May 2020.

Drucker, Peter F., "Don't Change Corporate Culture—Use It!" Wall Street Journal, March 28, 1991.

Drucker Institute, "Say No in the New Year!" January 11, 2017. As of August 27, 2021:

https://www.drucker.institute/news-post/say-no-in-the-new-year/

Duckworth, Angela L., Christopher Peterson, Michael D. Matthews, and Dennis R. Kelly, "Grit: Perseverance and Passion for Long-Term Goals," *Journal of Personality and Social Psychology*, Vol. 92, No. 6, 2007.

Dunivin, Karen O., "Military Culture: Change and Continuity," *Armed Forces & Society*, Vol. 20, No. 4, 1994.

Engel, Jacob M., "Why Does Culture 'Eat Strategy for Breakfast'?" Forbes. November 20, 2018.

Gallup, "Q12 Employee Engagement Survey," webpage, undated. As of May 4, 2023:

https://www.gallup.com/workplace/356063/gallup-q12-employee-engagement-survey.aspx

Gerras, Stephen J., Leonard Wong, and Charles Allen, *Organizational Culture: Applying a Hybrid Model to the U.S. Army*, Army War College, 2008.

Hajjar, Remi M., "Emergent Postmodern US Military Culture," *Armed Forces & Society*, Vol. 40, No. 1, 2013.

Hyken, Shep, "Culture Eats Strategy for Breakfast, and Enterprise-Renta-Car Proves It," *Forbes*, December 5, 2015.

Johansen, Rino Bandlitz, Jon Christian Laberg, and Monica Martinussen, "Military Identity as Predictor of Perceived Military Competence and Skills," *Armed Forces & Society*, Vol. 40, No. 3, 2014.

Kotter, John P., and James L. Heskett, *Corporate Culture and Performance*, Free Press, 1992.

Koutroumanis, Dean A., and George Alexakis, "Organizational Culture in the Restaurant Industry: Implications for Change," *Journal of Organizational Culture, Communications and Conflict*, Vol. 13, No. 2, July 2009.

Larkin, Sean P., "Transparent Leadership: An Old Concept for Modern Times," National Air and Space Intelligence Center, 2013. As of September 3, 2021:

https://www.nasic.af.mil/News/Article-Display/Article/900995/transparent-leadership-an-old-concept-for-modern-times/

Lim, Nelson, 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. As of May 4, 2023:

https://www.rand.org/pubs/research_reports/RR495.html

Luning, Celeste Raver, Prince A. Attoh, Tao Gong, and James T. Fox, "A Culture of Organizational Grit from the Perspective of U.S. Military Officers: A Qualitative Inquiry," *Armed Forces & Society*, Vol. 48. No. 3, July 2022.

Martins, Luis L., "Organizational Change and Development," in American Psychological Association, APA Handbook of Industrial and Organizational Psychology, Vol 3: Maintaining, Expanding, and Contracting the Organization, 2011.

Meredith, Lisa S., Carra S. Sims, Benjamin Saul Batorsky, Adeyemi Theophilus Okunogbe, Brittany L. Bannon, and Craig A. Myatt, *Identifying Promising Approaches to U.S. Army Institutional Change: A Review of the Literature on Organizational Culture and Climate*, RAND Corporation, RR-1588-A, 2017. As of August 17, 2021: https://www.rand.org/pubs/research_reports/RR1588.html

Morgan, Jacob, *The Future Leader: 9 Skills and Mindsets to Succeed in the Next Decade*, John Wiley & Sons, 2020.

Murphy, Mary C., and Carol C. Dweck, "A Culture of Genius: How an Organization's Lay Theory Shapes People's Cognition, Affect, and Behavior," *Personality and Social Psychology Bulletin*, Vol. 36, 2010.

National Academies of Sciences, Engineering, and Medicine, Strategies to Enhance Air Force Communication with Internal and External Audiences: A Workshop Report, National Academies Press, 2016.

Price, John F., Jr., "US Military Innovation Fostering Creativity in a Culture of Compliance," *Air & Space Power Journal*, Vol. 28, No. 5, 2014.

RAND National Defense Research Institute, *Sexual Orientation and U.S. Military Personnel Policy: An Update of RAND's 1993 Study*, RAND Corporation, MG-1056-OSD, 2010. As of May 4, 2023: https://www.rand.org/pubs/monographs/MG1056.html

RAND National Security Research Division, "RAND Research on Diversity, Equity, and Inclusion in the U.S. Military," webpage, undated. As of June 20, 2023:

https://www.rand.org/nsrd/pubs/topics/diversity-equity-and-inclusion.html

Schein, Edgar H., Organizational Psychology, Prentice Hall, 1965.

Schein, Edgar H., Organizational Culture and Leadership: A Dynamic View, 1st ed., Jossey-Bass, 1985.

Schein, Edgar H., "Organizational Culture," American Psychologist, Vol. 45. No. 2, 1990.

Schein, Edgar H., Organizational Culture and Leadership, 2nd ed., Jossey-Bass, 1992.

Schein, Edgar H., Organizational Culture and Leadership, 3rd ed., Jossey-Bass, John Wiley & Sons, 2004.

Schein, Edgar H., The Corporate Culture Survival Guide, Jossey-Bass, 2009.

Schein, Edgar H., Organizational Culture and Leadership, 4th ed., Jossev-Bass, 2010.

Sinek, Simon, Start with Why, Penguin Books, 2011.

Slapakova, Linda, Ben Caves, Marek N. Posard, Julia Muravska, Diana Dascalu, Diana Y. Myers, Raymond Kuo, and Kristin Thue, *Leveraging Diversity for Military Effectiveness: Diversity, Inclusion and Belonging in the UK and US Armed Forces*, RAND Corporation, RR-A1026-1, 2022. As of May 4, 2023:

https://www.rand.org/pubs/research_reports/RRA1026-1.html

Snider, Don M., "Will Army 2025 Be a Military Profession?" *Parameters: Journal of the US Army War College*, Vol. 45, No. 4, 2015.

Sørensen, Jesper B., "The Strength of Corporate Culture and the Reliability of Firm Performance," *Administrative Science Quarterly*, Vol. 47, No. 1, 2002.

Sull, Donald, Charles Sull, and Andrew Chamberlain, "Measuring Culture in Leading Companies," *MIT Sloan Management Review* and Glassdoor, June 2019.

Sutcliffe, Kathleen M., and Timothy J. Vogus, "Organizing for Resilience," in Kim S. Cameron, Jane E. Dutton, and Robert E. Quinn, eds., *Positive Organizational Scholarship: Foundations of a New Discipline*, Berrett-Koehler Publishers, 2003.

Taylor Kennedy, Julia, and Pooja Jain-Link, "What Does It Take to Build a Culture of Belonging?" *Harvard Business Review*, June 21, 2021.

U.S. Office of Personnel Management, "Federal Employee Viewpoint Survey," webpage, undated. As of December 9, 2022: https://www.opm.gov/fevs/about/

USSF—See U.S. Space Force.

U.S. Space Force, "United States Space Force Mission," webpage, undated. As of May 4, 2023: https://www.spaceforce.mil/About-Us/About-Space-Force/Mission/

U.S. Space Force, *Spacepower: Doctrine for Space Forces*, Space Capstone Publication, June 2020.

U.S. Space Force, *The Guardian Ideal*, September 2021.

U.S. Space Force, Chief Innovation Technology Office, U.S. Space Force Vision for a Digital Service, May 2021.

U.S. Space Force, Chief of Space Operations, *Chief of Space Operations Planning Guidance*, November 9, 2020.

Walters, Ashleigh, "Culture Still Eats Strategy for Breakfast," *IndustryWeek*, March 31, 2022.

About the Authors

Jennifer J. Li is a senior management scientist at the RAND Corporation with expertise in organizations, management, leadership, culture, change, and communication. Her research addresses ways to strengthen organizations, systems, and workforces, such as through recruiting, training, and professionalism; career paths; diversity, equity, and inclusion; language education and training; and professional lexicons. She holds a Ph.D. in applied linguistics and an M.B.A. in management.

Julia L. Melin is an assistant professor of organizational behavior at the Tuck School of Business at Dartmouth College. Her research examines how cultural beliefs about gender influence organizational practices, including hiring and talent assessment, and how organizational practices can be designed to reduce gender inequality and improve women's organizational advancement. She holds a Ph.D. in sociology and a Ph.D. minor in management science and engineering.

About This Paper

As the recently established U.S. Space Force continues to transform itself from a command within the U.S. Air Force to a new, space-centered military service, its founding leaders are the pioneering set of guardians who will set a foundation for the organization's development and performance for years to come. In this paper, we describe how organizational culture—which is the product of an organization's beliefs, values, and practices—influences performance and mission accomplishment. Considering decisions in this frame gives Space Force leaders the opportunity to shape Space Force culture and the service's future performance with intention. This paper may be of interest to leaders in the U.S. Space Force, other U.S. military leaders, and service members with an interest in laying a foundation for strong organizational, group, and individual performance.

This paper was commissioned by the Chief Human Capital Officer, U.S. Space Force, and conducted within the Workforce, Development, and Health Program of RAND Project AIR FORCE as part of a fiscal year 2020 project, "Developing New Career Paths for U.S. Space Force Officers."

RAND Project AIR FORCE

RAND Project AIR FORCE (PAF), a division of the RAND Corporation, is the Department of the Air Force's (DAF's) federally funded research and development center for studies and analyses, supporting both the United States Air Force and the United States Space Force. PAF pro-

vides the DAF with independent analyses of policy alternatives affecting the development, employment, combat readiness, and support of current and future air, space, and cyber forces. Research is conducted in four programs: Strategy and Doctrine; Force Modernization and Employment; Resource Management; and Workforce, Development, and Health. The research reported here was prepared under contract FA7014-16-D-1000.

Additional information about PAF is available on our website: www.rand.org/paf/

This paper documents work originally shared with the DAF on September 16, 2021. The draft document, dated September 2021, was reviewed by formal peer reviewers and DAF subject-matter experts.

Acknowledgments

The authors wish to acknowledge the valuable insights shared by Ling Yung and Brigadier General Shawn Campbell through our many discussions on these and related topics. We also thank the Air Force and Space Force leaders who spoke with us during other RAND PAF projects and informed the earliest stages of our thinking. We thank our colleagues Lawrence Hanser, Chaitra Hardison, and Nelson Lim for their collegiality and discussions while this paper was percolating. Finally, we thank our reviewers, Michael Linick, Cortney Weinbaum, Colonel Erin Gulden, and Dwayne Butler, for their feedback, which strengthened the final product.

The RAND Corporation is a research organization that develops solutions to public policy challenges to help make communities throughout the world safer and more secure, healthier and more prosperous. RAND is nonprofit, nonpartisan, and committed to the public interest.

Research Integrity

Our mission to help improve policy and decisionmaking through research and analysis is enabled through our core values of quality and objectivity and our unwavering commitment to the highest level of integrity and ethical behavior. To help ensure our research and analysis are rigorous, objective, and nonpartisan, we subject our research publications to a robust and exacting quality-assurance process; avoid both the appearance and reality of financial and other conflicts of interest through staff training, project screening, and a policy of mandatory disclosure; and pursue transparency in our research engagements through our commitment to the open publication of our research findings and recommendations, disclosure of the source of funding of published research, and policies to ensure intellectual independence. For more information, visit www.rand.org/about/research-integrity.

RAND's publications do not necessarily reflect the opinions of its research clients and sponsors. RAND® is a registered trademark.

Limited Print and Electronic Distribution Rights

This publication and trademark(s) contained herein are protected by law. This representation of RAND intellectual property is provided for noncommercial use only. Unauthorized posting of this publication online is prohibited; linking directly to its webpage on rand.org is encouraged. Permission is required from RAND to reproduce, or reuse in another form, any of its research products for commercial purposes. For information on reprint and reuse permissions, please visit www.rand.org/pubs/permissions.

For more information on this publication, visit www.rand.org/t/PEA575-1.

© 2023 RAND Corporation

