VII. Cultivating the Talent to Compete with China

Ultimately, the ability of the United States to shape the future of the Indo-Pacific will rest on whether America has the people and talent to continue fueling its economic power, innovation engine, government bureaucracies, and world-class military. With its democratic values, open economy, and diverse citizenry, the United States possesses a number of distinct advantages in the development of human capital. Nevertheless, while a common refrain in defense and technology circles is that people are America's greatest asset, in practice, senior leaders across sectors have treated human capital as a lesser or administrative concern. Without renewed focus, the American public and private workforce risks falling behind.

China, meanwhile, has recognized the imperative of developing and recruiting top talent. Beijing has initiated a top-down human capital agenda to increase investments in STEM education, target higher quality recruits for its military and civil service, and integrate its security and technology sectors. ¹⁰⁸ Notably, China has in part sought to re-create America's core strengths within the limits of its state-driven system. Although China lacks critical ingredients that power America's innovation culture, it is striving to make up for these gaps with far greater attention and resources than are currently being applied in the United States.

That said, China's momentum is worth studying, but not duplicating-the U.S. response should instead seek to leverage its own best attributes. 109 The United States remains light-years ahead of China in terms of its recruitment, retention, and management of a professional military force. Nevertheless, trends similar to those China faces—competition with the private sector, demands for a more technically skilled force, and large percentages of youth disqualified from accession-will strain the Department of Defense's ability to maintain the cutting-edge force it requires.¹¹⁰ DoD has made headway in addressing some obstacles to service, with steady reforms in talent management,111 broadening geographic recruitment,112 experimenting with lateral entry,113 and honing career fields. Despite these efforts, the demands of great-power competition will necessitate even greater creativity and flexibility in military recruitment, training, and education.

Washington must also reform and elevate its public-service sector. Limited leadership attention and reliance on an antiquated federal personnel management system have stymied the national security bureaucracy's

ability to grapple with the China challenge. Going forward, the federal government will need to take several steps to more effectively hire, retain, develop, and promote the diverse and highly skilled civilian experts it needs to build and sustain a more competitive strategy in the Indo-Pacific. 114 The United States should not take for granted that public service remains a top career choice for American youth and should dedicate the leadership necessary to maximize the potential of a diverse American federal workforce.

Finally, U.S. government, academic, and private-sector institutions should collaborate to build, source, and manage technical talent. A large proportion of technology workforce requirements in the public and private sectors is currently unmet.115 Private-sector competition with government for such talent is shaped in part by superior compensation and benefits, but bureaucratic and cultural factors are equally determinative. Publicprivate partnerships that might ease the strain of talent competition are difficult, with technology companies and workers often wary of cooperation with national security institutions. 116 While seeking to overcome these obstacles, the United States should also look to draw upon the best and brightest from around the world. The United States should revise policies that limit high-skilled immigration, which can bolster the American workforce.117

These changes will be all the more impactful if they are comprehensive, addressing human capital as a complex ecosystem: Investments in education without a military and public sector prepared to utilize such talent is a missed opportunity; reforming uniform and federal personnel systems without enabling permeability within and among these fields is an unnecessary constraint of talent; and strengthening the U.S. tech sector, while making no progress on its strained relations with key government agencies, is harmful to U.S. economic and security interests.

In the final analysis, people have to be at the core of America's strategy to compete with China in the Indo-Pacific. A diverse, skilled, and flexible American workforce—in uniform, in Silicon Valley, in government bureaucracy, and in the classroom—is essential to enhancing American competitiveness in the Indo-Pacific. But U.S. leaders must recognize that it is no longer sufficient to passively rely on inherent American advantages. America's mobilization of talent can and should be a primary advantage in strategic competition with China—but only if the U.S. government gives commensurate focus to this vital arena of the contest.

Recommendations for U.S. Policy

EMPOWER THE U.S. MILITARY TO COMPETE IN THE BATTLE FOR TALENT

Broaden military recruitment strategies to fully leverage America's talents

The Department of Defense should continue broadening its efforts to expand the pool of recruits into each of the services, reflecting the growing need for a highly skilled and diverse force. Today, a range of operational and cultural factors intersect to make military service less attractive to vital targets in the recruit population: two decades of high-tempo operations in the Middle East and Afghanistan; policies that fail to leverage the potential contributions of women and underrepresented minorities; limited connections between those in uniform and much of the population; and the belief that many high-demand skills will be better rewarded and utilized outside the military. Recent programs to recruit in traditionally underserved areas are a good first step but will need to be backed by wider civil-military engagement and education to demystify elements of military service. 118 A broader challenge is mobilizing the rich diversity of America and persuading populations who do not see themselves having a career in the military that their service is valuable.¹¹⁹ This will require addressing policies and regulations that unnecessarily deter vital pools of talent, as well as modernizing force management and military benefits, including health care, child care, and dual-military family services. 120 Other policies that reduce the propensity to serve among younger populations demand top-down attention and reversal, including recent transgender service bans, slow acceptance of women in leadership or combat roles, and medical prohibitions with little relevance to cyberwarriors. 121 Likewise, the Military Accessions Vital to National Interest program—which allowed recruitment of immigrants with special language, cultural, and technical skills that may prove uniquely useful in the Indo-Pacific-should be reinstituted.

Scale military talent management initiatives across active and reserve components

There already exist several pilot programs and task forces designed to make the best use of the present force and maximize its skills, knowledge, interests, and potential.¹²² There is no shortage of ideas and energy, and many military leaders publicly recognize the human

capital challenges they face: military skill requirements growing more technical, dual-career families requiring greater flexibility, informal networks and requirements driving promotions, and service members growing dissatisfied with how their expertise and expensive training is (or is not) used. These problems are exacerbated by frequent leadership transitions, insufficient or inaccessible service member data, obsolete evaluative metrics, and accommodation of antiquated systems and preferences.123 Military service leaders should elevate talent management to the top of their priority list, investing in end-to-end systems and institutionalizing worthwhile reforms early and across the full scope of active and reserve forces. They should in parallel demand regular feedback and red-teaming on implementation, modifying as needed to ensure new talent management systems do not result in the same old outcomes. At the same time, the military services need to excel at the back office basics, such as modernized data management, timely pay and reimbursement, or simple connectivity between the dozens of legacy personnel systems required as service members proceed through their career. While the personnel management and administrative backbones of all services are out of date, those of most reserve components are incapable of supporting today's operational tempo and tomorrow's demands.124 These challenges will only grow as the Reserves are able to access the wide variety of skills necessary for great-power competition.¹²⁵ Likewise, the services' growing need for permeability across active and reserve components—like a single appointment authority for officers—should reinforce the need to make these reforms a strategic priority, not an administrative afterthought.

Modernize military training, education, and incentives for technical, regional, and language skills

Given the difficulty of simply recruiting all of the personnel necessary for competing effectively in the Indo-Pacific, the U.S. military should do more to develop much-needed skills within the force. For example, the military services should look to the Air Force's Computer Language Initiative as a model for creating career-driven incentives for skill-building in high-demand areas. ¹²⁶ Incentivizing personnel to pursue Indo-Pacific languages and regional expertise—both within and outside the foreign area officer community—is another evident step, but will require demonstrating that such investments are rewarded with career advancement in the way of relevant assignments and promotion paths. ¹²⁷

STRENGTHEN THE CIVILIAN NATIONAL SECURITY WORKFORCE

Generate leadership expectations of human capital management, including national security civilian readiness metrics

Readiness measures exist in the U.S. military, but no civilian corollary exists. Senior administration officials across all national security agencies should make clear to their subordinates at all levels that they consider national security human capital to be among their top priorities. Appointees' performance must be judged by their attention to the health and strength of their workforce, and agency leaders should regularly engage their teams on whether they have the talent necessary to support National Security Strategy execution. With these inputs, the National Security Council should initiate a process to generate metrics for national security civilian readiness.

Modernize and reduce barriers in federal hiring processes

Without renewed and dedicated investment in recruiting and retaining talent, the U.S. government will struggle to develop and implement a more competitive approach to the Indo-Pacific. Too often, talented national security experts are deterred from federal service due to needless barriers that do not screen for quality. 128 Agencies continue to rely on belated, short-lived, and inefficient authorities to hire high-demand regional and technical talent, and inadequately utilize those experts emerging from federally funded academic studies. 129 Although government remains a top career interest for college students, 130 a wide range of government-controlled factors deters such service. As a consequence, America's federal workforce is aging and young talent is underrepresented, particularly when compared to the private sector.¹³¹ As a starting point to address these issues, the public sector should dedicate resources for regular retraining of managers and human resource specialists to access the full range of authorities and opportunities for hiring and managing a workforce.¹³² Moreover, as encouraged by recent Office of Personnel Management guidance, hiring managers need to be brought more closely into hiring processes, such as in the United States Digital Service system, in which they can regularly communicate with candidates.¹³³ National security agencies should also share lessons of pilot programs to recruit those with high-demand technical expertise—which vary considerably from DoD to the Department of Homeland Security—and make them permanent.

Jump-start civilian professional development to build high-demand skills

After years of underinvestment, national security agencies should allocate specific funds for professional development of their current workforce. Just as important as recruiting high-demand skillsets is upskilling present employees in technical and regional areas vital to the Indo-Pacific. 134 Investing in personnel fluency in technical policy matters relevant to artificial intelligence, 5G, quantum computing, and other advanced technologies will offer significant return. 135 Likewise, seasoned policymakers without substantial experience in the Indo-Pacific should receive additional training in the form of short courses on the region's cultural, political, and security dynamics. 136 Such investments should be linked to personnel assignments, service commitments, future professional development, and other talent management incentives as appropriate.

Enhance talent mobility across the national workforce

On- and off-ramps for the federal workforce are limited by both policy and culture. While federal employees once sought a three-decade career within a single agency, younger personnel have different expectations for career management. Likewise, many evolving fields (from STEM to regional expertise) benefit enormously from experts who can refresh their knowledge and experience by moving in and out of government, with simplified paths of exit and reentry. To create a flexible and permeable workforce, the Office of Personnel and Management should work with Congress and federal agencies to change present policies to allow prior government employees to be rehired noncompetitively at any level for which they are qualified.¹³⁷ Just as importantly, agencies should remove barriers to talent movement between departments and agencies-including excessive and slow security clearances and transfers. Finally, federal agencies should enable more seamless on-ramps for internship and fellowship programs.¹³⁸

Update federal education fellowships for greatpower competition

The U.S. government funds a wide range of national security programs for postsecondary and graduate education, with highly variable requirements for service, such as the Boren Scholarship and Fellowship, the National Defense Science and Engineering Fellowship,

Critical Language Studies scholarships, and the Foreign Language and Area Studies program. While these programs continue to have real merit, many deserve updating to reflect the demands of the modern economic and security environment. Hiring managers and human resources professionals have inconsistent understanding of their access to specific experts with service requirements, such as Boren Fellows, reflecting a real need for up-to-date training resources across national security agencies. 139 Scholars with no service requirements (such as Foreign Language and Area Studies) have little to no ongoing ties to national security institutions after degree completion; in fact, many scholars who pursue field research and study find themselves at a disadvantage for cleared positions in practice, despite their federally invested knowledge. Although adjusting these programs to require federal service may deter participation, sponsoring agencies should explore other options to make better returns on investment, including giving preferred status for civil service hiring for veterans of these programs; voluntarily enrolling them as government consultants for relevant agencies; making security clearance allowances for program alumni; and making term-limited appointments available for short periods. Agencies could also consider creating new, frequently updated fellowship programs reflecting current regional, language, and technical needs for the Indo-Pacific. Regardless, the United States should increase its investments in language, area-relevant studies, and high-demand STEM field education.

INVEST IN THE PUBLIC-PRIVATE TECHNOLOGY WORKFORCE

Surge support for science, technology, engineering, and math education across secondary, postsecondary, vocational, and workforce retraining levels

The United States is not meeting critical public and private technology workforce requirements. In response, the U.S. government should further invest in STEM education at all levels. Although the United States still possesses many of the world's leading institutions in STEM research and education, young Americans continue to lag globally. And despite some signs of progress in increasing testing levels overall, unequal access to STEM higher education across gender, ethnic, and socioeconomic groups remains a considerable problem. As a consequence, the United States faces an acute personnel shortfall in critical high-technology

areas, such as cybersecurity and artificial intelligence. The White House has already generated a strong and practical strategy for STEM education under the auspices of its National Science and Technology Council. 141 The strategy is comprehensive, emphasizing the need for widespread STEM literacy in the general public, diversity and inclusion in STEM educational opportunities, and preparing the STEM workforce for the future, with specific potential actions across these goals. But implementation and follow-through will be critical. The NSTC should work collaboratively with Congress to develop an implementation plan to execute the council's recommendations, task specific agencies, generate sustainable resources, and partner productively with the private sector and academia.

Raise the overall cap for H-1B visas and remove the cap for advanced-degree holders entirely

To compete effectively with China, the United States should attract and leverage high-tech talent from around the world. U.S. technology companies have relied on H-1B visas to fill shortfalls in critical areas, yet the number of H-1B visas has been capped since 2005 at 85,000 per year, with 20,000 visas designated for those with graduate degrees. Meanwhile, the demand for foreign talent has surged, with 199,000 applicants in 2018. 142 Particularly at a time of historically low unemployment, this is a remarkable lost opportunity for the United States. Congress should move quickly to raise the overall H-1B cap and remove the cap entirely for advanced-degree holders.

Improve workforce mobility between private sector and government technology roles

Although political and mission differences will limit the eagerness of some high-tech workers to pursue short- or long-term stints in government, small investments could make some transitions easier and more attractive. The most obvious is the security clearance process, which is undergoing positive reform but whose complexity and backlog undoubtedly deter talented and interested personnel from pursuing government roles, even temporarily. Because of that, continuous focus on expediting the process and reviews and improving continuous monitoring should be a national security priority. Along with improving clearance processes, national security agencies should continue to carve out, to the extent possible, noncleared roles that enable working closely with technical talent on critical security challenges. The

United States Digital Service has been a notable success for temporary exchanges and should be sustained across administrations. Had Finally, agencies with high technical demands should consider bureaucratic and cultural shifts that might encourage more technical hires, such as permitting opportunities to work remotely, as well as making serious investments in the modern hardware and software both necessary and expected by today's technology workforce.

Identify and appropriately staff critical technology roles in government

Many vital policy and management functions within government demand technical expertise that may not be resident within the present federal workforce at senior levels or within the typical political appointee cadre. These pools of talent must be expanded at the leadership level, which requires revisiting the natural candidates for such jobs and the required skills. National security agencies should begin the process of identifying required technical skills for specific senior roles-management officers, technology and information officers, cybersecurity policy overseers, acquisition officials, and more-doing what they can to highlight needs and match them to external recruits. The technical skills needed to advise policymakers will differ from those necessary to build management systems, test weapons platforms, or purchase software.