Testimony before The National Commission on Military, National, and Public Service

Military Service Hearing: Creating New Pipelines to Service and Fostering Critical Skills
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Dear Chairman Heck, Vice Chairs Gearan and Wada, members of the Commission:

Thank you for the work you are doing and for the opportunity to share my perspectives with you. Continuing to attract and retain world class human capital is, in my opinion, the greatest long term challenge facing our Armed Forces. I know how much effort these commissions involve and so appreciate your willingness to serve.

By way of background, I've been fortunate to enjoy a career grounded in both the public and private sectors. After graduating from college, I joined the Air National Guard as an F-16 pilot and continue to serve on a reserve basis. I also had the opportunity to lead the Defense Innovation Unit, bringing the technology ecosystem and the Department of Defense (DoD) together to deliver warfighter capabilities. On the civilian side, I've founded and funded several cyber security startups. I hope my perspectives from three different vantage points; wearing a uniform, managing a government organization, and running a small business, contributes to the discussion.

Today, I wish to submit two arguments on why we need to broaden the pool of talent assessed into the military. The first is the need for tech-savvy leaders to deter and prevail in conflicts in a rapidly changing threat landscape; the second is that a healthy, stable democracy requires strong relationships and a visceral understanding between the public and private realms.

First, technology is transforming every entity in the world - all organizations are now tech organizations, whether they know it or not. Advancements in artificial intelligence, automation, and connectivity have forced companies to foundationally change their workforces. This is not limited to just start-ups in Silicon Valley. For example, of Goldman Sach's 36,000 employees, over 25% are hardware and software engineers. Similarly, companies in seemingly traditional industries from insurance to shipping, recognize that IT and software development are core to their competitive success and all have heavily invested in attracting or acquiring high tech human capital.

The DoD is no different, as emerging, software driven capabilities, including AI and autonomy, will play a decisive role on the battlefield of the near future. The continual upgrade and employment of such technologies will require uniformed officers and enlisted with deep expertise in software development. While organisations like the Defense Digital Service and the Defense Innovation Unit have done a tremendous job attracting civilians for short tours of service, this human capability cannot be solely outsourced to contractors or even civilians. We need uniformed members, both officer and enlisted, to combine their tech-nativity with the credibility and authority inherent under Title 10.

Unfortunately, officer accessions from our leading computer science and engineering programs have dropped precipitously. In 1960, Stanford and MIT, each graduated over 100 ROTC members, today it's less than a dozen. While these elite schools do not have a monopoly on the best talent, it should be of great concern that our Armed Forces cannot attract a meaningful number of graduates from our top institutions nationwide.

Second, the growing civil-military divide has longer term implications for our nation's ability to come together, particularly in response to a military crisis. If our public and private sector leaders have not walked in one another other's shoes, how can they develop the necessary empathy and mutual understanding to navigate such thorny issues as the ethics of AI or appropriate level of collaboration between the tech sector and the Pentagon?

In 1980, 64% of congress and 59% of Fortune 500 CEO's were military veterans. Today, those numbers have fallen to 19% and 6% respectively.   Military service in the US is also becoming a hereditary trait.   From the DoD's own reporting in 2013, 80% of new recruits have extended family that are veteran and 25% have a parent that has served. Coupled with the fact that less than 1% of the US population currently wears a uniform, we risk US military service being predominantly borne by a warrior caste - similar trends in history have not shown to be accretive to democratic stability. The moral hazard problem of military adventurism is ascendant when the familial costs to decision makers is so minimal. Further isolating this class is the fact that most of our military bases located in major populations centers, like New York, Chicago, Los Angeles, and San Francisco have been shuttered.

If these trends go unchecked our nation will be denied the depth and breadth of military leaders and veterans necessary to maintain long-term national security.

Fortunately, the DoD and Congress have several tools at their disposal to make meaningful improvements and leverage the high level of respect and interest in the mission amongst young Americans. While I believe that the debate on conscription should be reopened, in

the interest of achievability, I submit five initiatives the committee may wish to investigate further.

1. Generate awareness and relationships by reopening bases in underrepresented areas, particularly in technology centers like San Francisco and Boston. The human relationships between military families and their civilian neighbors is a powerful way of exposing potential recruits to the military and help cut through false narratives. I'm a bit biased as this is my personal story. I'm the first in my family to ever join the Armed Forces - the fact I grew up in a town with a large air force base is not coincidental.

2. Expand ROTC opportunities. Students at leading engineering colleges have tremendous choices - make it easier for them to choose ROTC. For example, push to reopen ROTC on campuses like Stanford - currently students there have to drive through 1-2 hours of traffic to drill at Berkeley.

3. Expand the size of the reserve component (National Guard and Reserves). The flexible career paths offered by the reserve component can be quite attractive for recruits interested in uniformed service but also have significant private sector opportunities. To maximize this effect, portions of the reserve component would need to return its historical posture of being a strategic reserve rather than an unit with equal readiness and deployability as its active duty brethren.

4. Re-invigorate programs for immigrants to gain accelerated pathways to citizenship through uniformed service, particularly for foreign STEM graduates. From Henry Kissinger to John Shalikashvili, there is a long history of immigrants serving in uniform.

5. Better retain high-performing members. In our booming economy, all the services are struggling to retain their most valuable members.
   a. Flexible careers for Active Duty (AD): build pathways for members to leave for the private sector for a set number of years and then return to AD.
   b. Greater opportunities for AD members to join the reserve component rather than separate fully.
   c. Reform DoD's talent management / human capital IT systems - the lack of modern HR infrastructure hampers retention.
   d. Expand opportunities for AD members to attend civilian institutions in lieu of professional military education

Commissioners, thank you again for the opportunity to speak today and I look forward to your questions.