MEMORANDUM FOR SCUSA 74

1. **Issue:**

   How can the government and military harness the power of US private enterprise as they take a leading role in technological development?

2. **Strategic Analysis:**

   Developing technologies such as Artificial Intelligence (AI) have shifted the context of the modern battlefield. The United States Military must be prepared to respond to a shift in the conduct of warfare. The utilization of more capable AI by adversaries is an emerging concern that will determine who controls information systems and lethal technologies. In essence, AI is a force multiplier in warfare. While the United States military must incorporate AI to address this issue, it lacks the expertise to produce the necessary AI. Currently, this expertise is concentrated in private sector companies that have the freedom to explore new technologies without the burden of government bureaucracy. The US Military must strengthen and better utilize the private sector to supplement this need.

3. **Relevant National Interests:**

   The military’s utilization of advanced technologies make innovation vital to national security. To assure the continued delivery of security, the United States Military must recognize and account for changes in global development, acquisition, and implementation of technology by both our allies and adversaries. The United States has been at the cutting edge of innovation for decades and must retain this advantage in the developing field of artificial intelligence and other technologies.

   The United States faces the threat of peer adversaries gaining technological overmatch. In order to maintain her status as the leading world power, the U.S. must take steps to innovate both technology and the capability to adapt in a rapidly changing digital environment. The United States Military can accomplish this pertinent task by re-examining its relationship with the private sector.

4. **Strategic Options:**

   1. **Private Sector Engagement:** US implementation of innovative capabilities is a critical part of countering adversarial innovation, especially when it comes to AI. We must update defense acquisition regulations to encourage greater private-sector engagement. Specifically, we must simplify the contract bidding process to make the adoption of innovations faster and more inclusive. However, with the implementation of these
measures, security risks are heightened due to rapid adoption of practices. With the introduction of non-government corporations, information security has the potential to be at risk. Also, large private sector companies may not be attracted to government contracts due to economic advantage in the civilian sector. Adjusting the contracting process may not necessarily erase the competitive disadvantages the military faces.

2. **US Military Organizational Efficiency:** The United States Military should maintain its current relationship with private corporations in the artificial intelligence acquisition process and focus on increasing its internal organizational efficiency in implementing technology. By prioritizing its extant programs, specifically the U.S. Army Engineer Research and Development Center and the Army Combat Capabilities Development Command Armaments Center, the Military may further incorporate developmental research strategies internally. Implementation of the strategy could prolong military technological innovation as a result of bureaucratic constraints.

3. **Expanding National Defense Production Act:** The U.S. government should seek to amend the National Defense Production Act of 1950 to explicitly include the threat of Artificial Intelligence and identifiable cyber security threats. This would ensure the United States has the ability to utilize emergency powers in order to transform civilian industries into producers for defense technologies for compensation. Expanding the National Defense Production Act and its influence over the military and civilian sectors may result in executive overreach. Outside of traditional armed conflict, this may present a slippery slope toward abuse of power.

5. **Recommendation:**

   Restructuring is recommended in regards to how the US military interfaces with US-based private sectors in terms of the acquisition process with the goal of attracting companies at the forefront of technology. Being able to attract a high caliber of technology will require a streamlined contracting process to ensure ease of access and a wider pool of applicants.

   The current defense acquisitions process presents a significant barrier for private sector companies. To better support companies and incentivize their partnership with the US military, the acquisition process must be revised and simplified.
MEMORANDUM FOR SCUSA 74

The current acquisition process consists of five stages, each of which can last for months or years. These companies are already on the cutting edge of AI and other information technology, so updating the acquisition process would streamline the adoption of innovative capabilities. The risk of obsolescence increases when the acquisition process significantly delays adoption of new innovation. Therefore, revising acquisition guidelines in terms of AI advancement from the private sector would help counter the pacing threat of adversarial innovation.

6. **Implementation:**

The military must review and streamline the current defense acquisition process. This process consists of five phases: (1) Material Solution Analysis, (2) Technology Maturation and Risk Reduction, (3) Engineering and Manufacturing Development, (4) Production and Deployment, (5) Operations and Support.

For successful implementation, it is crucial to modify phase 2, “Technology and Maturation and Risk Reduction.” This change will allow private companies that have already demonstrated capability with emerging technologies to accelerate development of innovative defense products. The process is in need of improvement when it comes to efficiency and cost-effectiveness. Streamlining the evaluation of technology readiness and risk mitigation can expedite development while ensuring robustness. Costs can be reduced through enhanced collaboration with technology-oriented partners. These changes aim to accelerate the acquisitions process while evolving defense needs more promptly. This can be done through the Arms Control Committee—an organization that oversees international agreements to limit weapons proliferation. Simplifying the contractor bidding process will give the military more opportunities to engage with companies with existing expertise in developing technologies. Private companies are already subject matter experts, and a streamlined defense acquisition process will allow the military to leverage that expertise.

7. **Point of Contact:**

The point of contact for this memorandum is CDT Mark Styles at mark.styles@westpoint.edu or (254)-833-2926.