SCUSA 74 Roundtable Topic: Effects of Innovation on US Military Affairs

In an era characterized by the rapid evolution of technology, the convergence of innovation and military strategy holds unprecedented importance. The ever-changing landscape of modern warfare is continually molded by groundbreaking advancements in fields like artificial intelligence, cyber warfare, and unmanned systems. These emerging technologies, when coupled with shifts in force structure and doctrine, possess the potential to fundamentally redefine the nature of future conflicts.

Nonetheless, military institutions often grapple with the challenge of adapting in the face of profound technological progress. A stark illustration of this struggle was evident during World War I, as massed infantry assaults persisted despite the emergence of technologies like machine guns, barbed wire, and improved artillery, rendering such tactics exceedingly costly.

Complicating the situation further, the U.S. military confronts obstacles in its pursuit of innovation due to a shift in research and development. This transition has moved research activities from primarily publicly funded laboratories and research centers to private enterprises whose primary focus lies in profit rather than national security.

Proposed Topics and Questions for Discussion:

1. How could current technological advancements, coupled with changes in force structure and doctrine impact the character of future wars?

Readings:
The Economist. “A New Era of High-Tech War Has Begun.”

“Office of the Director of National Intelligence - Global Trends.”


2. Innovation in military affairs have the potential to shift the international balance of power. Who will gain the most benefit from changes in military affairs?

Readings:


3. The private sector is playing an increasingly dominant role in the development of new technologies. Rather than technologies being developed for military use and spun-off for civilian purposes, national security professionals now seek opportunities to leverage advancement in civilian technology for military advancement. What are the implications of this new relationship in research and development?

Readings:


4. How have recent advancements contributed to the democratization of military capabilities?

Readings:


5. What are the potential benefits and drawbacks associated with additive manufacturing in the context of national security and military innovation?

Readings: