

## Joint Concept for Robotic and Autonomous Systems: A Vision for Future RAS Employment

LtCol Hank Lutz, USMC Ground Systems Lead Joint Staff Robotic and Autonomous Systems Team Joint Staff J-8 April 2015



## The Need for Innovation

"We appear therefore to be entering a time of political, strategic, and technological uncertainty; yet a period where the threats seem more indeterminate. Western military institutions confront a future in which they will not receive anything similar to the funding and resources they received throughout the Cold War despite rapid technological change and innovation. Thus, they must innovate with less money and greater ambiguity about potential opponents and the nature of wars they will have to fight."

"The interaction of technical change and organizational adaptation within a realistic strategic assessment determines whether good ideas turn into real military capabilities."

- Williamson Murray and Alan R. Millett, Military Innovation in the Interwar Period

"To maintain our technological superiority as we transition from one warfighting regime to another, we must begin to prepare now. In addition to new technologies, a new offset strategy will require innovative thinking, the development of new operational concepts, new ways of organizing, and long-term strategies."

- Deputy Secretary of Defense Robert Work

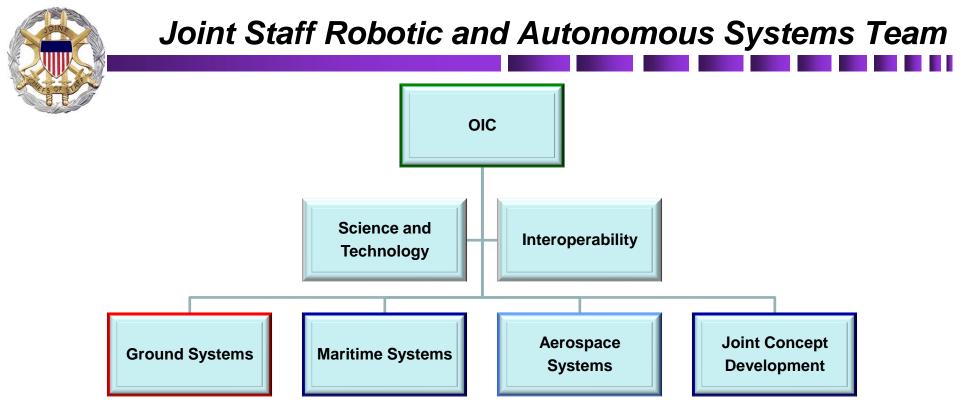












## Lines of Effort

- 1 Develop and publish a Joint Concept for RAS
- 2 Identify and advance opportunities for increased interoperability between humans and RAS
- 3 Synchronize and encourage collaboration across the DoD RAS enterprise
- 4 Work with Industry, S&T, and academia to identify emerging RAS technologies and align them with DoD requirements
- **5 Provide a forum for development of DoD policies concerning RAS**











## **Questions?**