



# *DoD Unmanned Systems Integrated Roadmap*

## *Joint Staff Perspective*

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**MG Bill Troy**

**Vice Director**

**Force Structure, Resources, & Assessment**

**Joint Staff, J-8**

# Development of a True DoD-Wide Unmanned Systems Roadmap...



***October 2007***

## **2007-2032 Integrated Roadmap (first version):**

- Captured existing inventories
- Little future vision
- No JROC interest



***November 2007***

## **General Cartwright, Vice Chairman of the Joint Chiefs of Staff, noted:**

1. Roadmap fell short in defining clear interoperability goals
2. Roadmap lacked far-sighted approach to take advantage of new technologies



***January 2009***

## **2009-2034 Integrated Roadmap (second version):**

- Captures existing and *projected* Unmanned Systems
- Projects a cross-domain future vision
- Lays out goals for numerous Unmanned Systems attributes including interoperability and standardization
- Establishes a Senior Council for mid-course assessment and adjustment

***Drew JROC Interest and Support***

# ...captured the JROC's Attention and Endorsement



THE JOINT STAFF  
WASHINGTON, D.C. 20318-8000

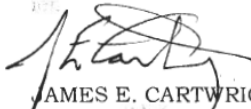
JROCM 045-09  
16 March 2009

**JOINT REQUIREMENTS  
OVERSIGHT COUNCIL**

MEMORANDUM FOR: UNDER SECRETARY OF DEFENSE FOR ACQUISITION,  
TECHNOLOGY, AND LOGISTICS

Subject: FY 2009-2034 Department of Defense Unmanned Systems Integrated  
Roadmap

1. The Joint Requirements Oversight Council (JROC) has reviewed and endorses the FY 2009-2034 Department of Defense Unmanned Systems Integrated Roadmap.
2. The JROC requests that the Services, Combatant Commanders, and other Department of Defense organizations utilize this Roadmap as they develop and employ unmanned systems and provide feedback and input for future updates to this Roadmap.

  
JAMES E. CARTWRIGHT  
General, United States Marine Corps  
Vice Chairman  
of the Joint Chiefs of Staff

Copy to:

Vice Chief of Staff, US Army  
Vice Chief of Naval Operations  
Vice Chief of Staff, US Air Force  
Assistant Commandant of the Marine Corps  
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Commander, US Transportation Command  
Commander, US Forces Korea



# *Why this Roadmap is important to the Joint Warfighter...*



***VADM Stanley***

***Director J-8 and Chairman of the Joint Capabilities Board:***

***“This Roadmap is a good, well structured product that presents a logical approach to a critical problem.”***

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***BOTTOM LINE:***

***The Joint Warfighter cannot successfully operate without standardization and commonality within and across Unmanned Systems domains.***

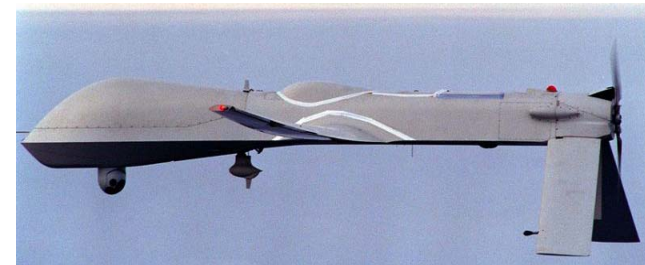


# *Real Interoperability Challenges...*



Army Unit in Afghanistan needs time-critical, focused UAS sensor coverage beyond the next ridge...

Air Force *PREDATOR* is overhead, but due to incompatibility between control stations, the Army Unit cannot redirect sensors on *PREDATOR* without first communicating with controllers in Nevada – the mission is now in jeopardy.



However, if an Army *SKY WARRIOR* was overhead, the Army Unit could immediately redirect its sensors and execute the mission.

*This Roadmap may have prevented these systems from being designed without the inherent ability to truly operate in support of the Joint Warfighter*

# *Why the Joint Warfighter benefits from the Roadmap...*



1. Lays out a coordinated, cross-domain path to capitalize on current and emerging UMS technologies
2. Promotes interoperability and standardization across domains and organizations
3. Encourages teaming between technology developers and users to be more responsive to emerging operational needs
4. Periodic Senior Council reviews allow for mid-course input, assessment and adjustment

*Overall, this Roadmap is a living, breathing tool that keeps all players in the Unmanned Systems arena moving in the same direction to deliver useful, interoperable solutions to the Joint warfighter*

