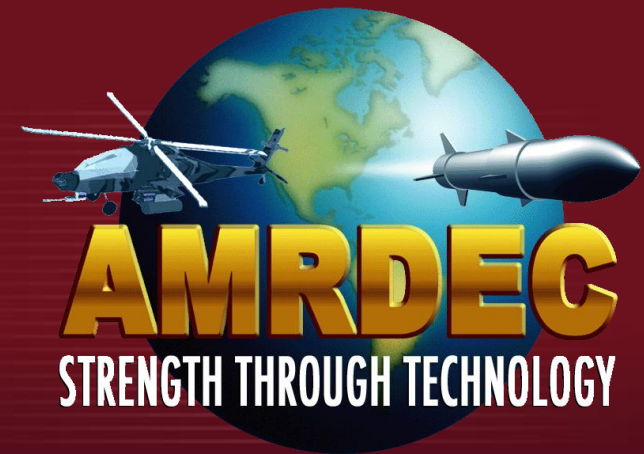


**RDECOM**

US Army Human Systems Integration UAS Efforts

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August 2001. Other requests for this document shall be referred to the U.S.
Army RDECOM, ATTN: AMSRD-AMR.



TECHNOLOGY DRIVEN. WARFIGHTER FOCUSED.

11 August 2009

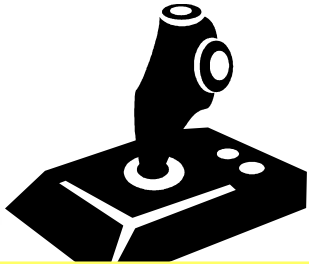
Presented by:

Jay Shively, AFDD

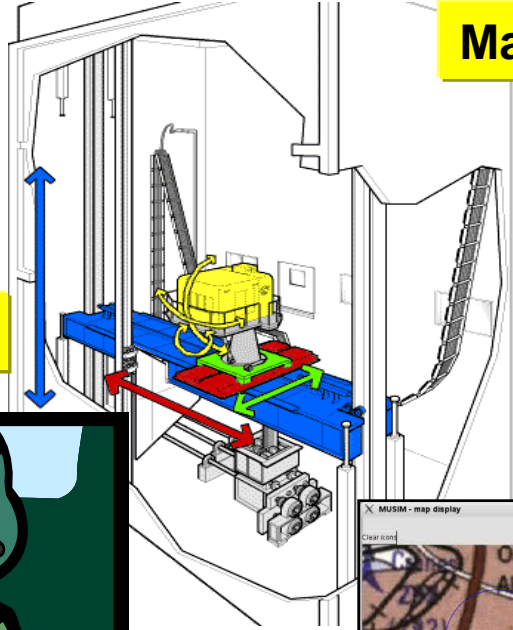
**Human Systems Integration, Lead
Aviation and Missile Research,
Development and Engineering Center**

TECHNOLOGY DRIVEN. WARFIGHTER FOCUSED.

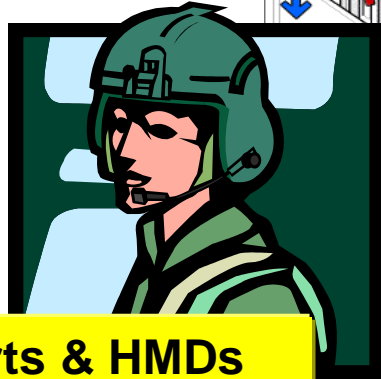
Single Operator Background



Payload Control Devices

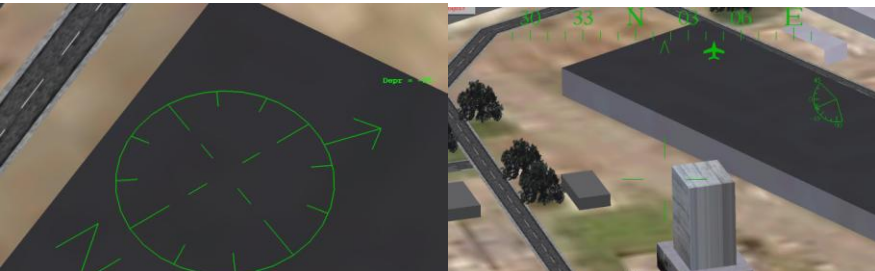


Manned-Unmanned Teaming



3-D Audio Alerts & HMDs

Multi-UAV Control

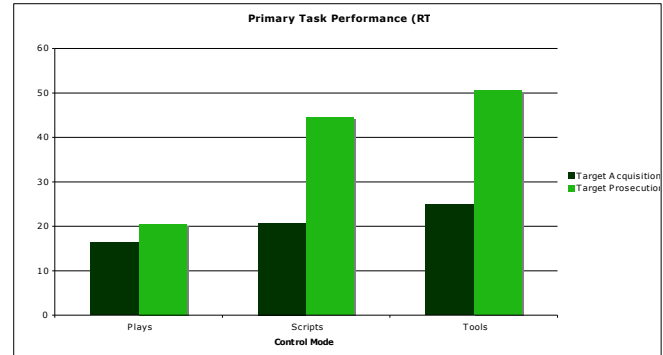


Payload Symbology Assessment

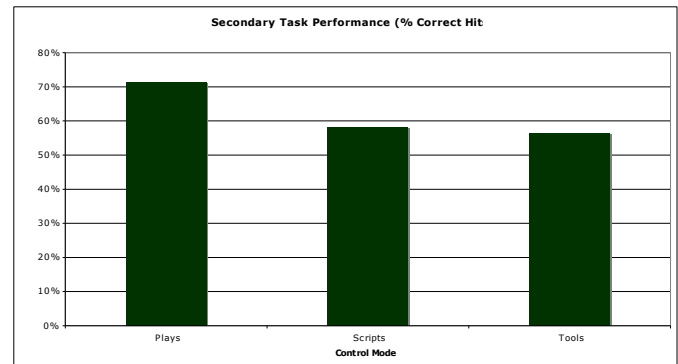
UNCLASSIFIED
**Delegation Control:
 Playbook**



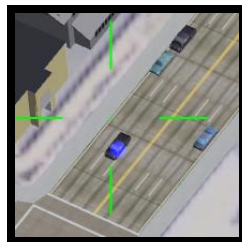
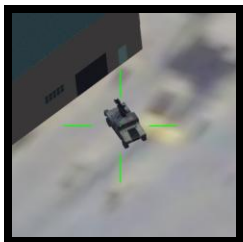
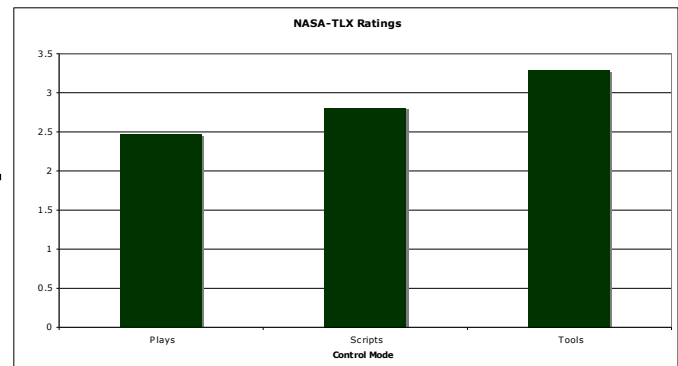
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Goal:

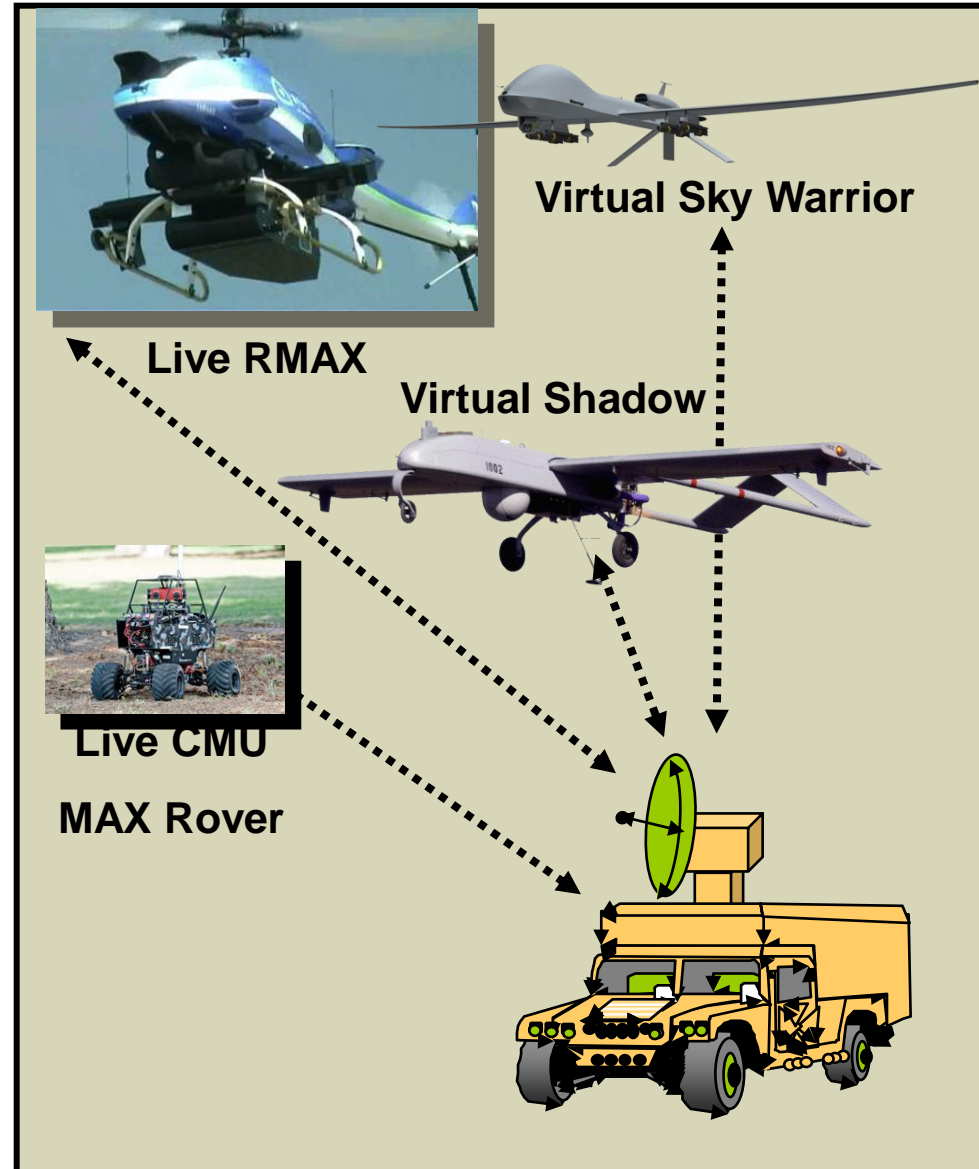
- Demonstrates Delegation Control (Playbook) in flight – supervisory control of multiple air/ground assets in MOUT Scenario

Method:

- Live/Virtual Demo – Controlling RMAX, CMU MAX Rover and 2 virtual UAS with Delegation Control
- Voice RGN Control (USAF)

Features:

- Delegation control human-machine interface supports control and monitoring 4 payloads
- Automation Transparency
- Live UGV-UAV coordination for slung load drop
- Reduced operator workload/ high situation Awareness



- Single operator control of Multiple UAS
- Airspace De-confliction
 - NAS
 - Battlefield
- Interoperability
 - Training/Selection
- Manned-Unmanned Teaming
- Sensor Interpretation/Augmentation