Joint Unmanned Aerial Vehicles
Joint Test & Evaluation

Presenter: CAPT Roy Rogers
775-426-4653
### Joint Unmanned Aerial Vehicles Joint Test & Evaluation

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Prescribed by ANSI Std Z39-18
Briefing Contents

- NAS Fallon History/Missions
- JT&E Basics
- UAV Problem Background
- Our Proposed Test
- Our Legacy
Where is Fallon and why is the Navy in Nevada?
NAS Fallon
Missions/Functions

- USN/Fallon history dates to 1942
- STRIKE U/Air Wing Training in 1984
- NSAWC (Naval Strike & Air Warfare Center) established July ‘96 with merger of “STRIKE”, “TOPGUN”, “TOPDOME”
- Primary authority for graduate level aviation strike warfare training
  * Air Wing Training * Individual Training
- Real World Operational Support
- 3000 Pers, 68 AC, 42K Sorties/Year
Range Ops/Capability

- 57 Threat Systems - Operators in the loop
- Tracking/Instrumentation (TACTS)
- FAA Waiver for UAVs
- 6.5 million acres, 600 people
“JTE 101”

- Chartered by OSD Acquisition, Tech & Logis. (ATL)
  Senior Advisory Council (SAC)
  - 5 SES-5s from OSD  - 6 Flag/General Officers (1/2 star)
- “Do better with what we have”
  - Joint Tactics, Techniques & Procedures
  - Lead service commits for infrastructure
  - All services commit for people
  - Typically a 3 year test – Approx $13M
- 8 JTEs in existence (JUAV plus:)
  - Theater Distribution  - Close Air Support
  - Ship/Helo Integration  - BDA  - GPS Countermeasures
  - Cruise Missile Defense  - C2ISR
Why a Joint Test?

- **USA Initiatives**
  - Hunter Stand-off Killer Team (HSKT) ACTD
  - Shadow OpEval/IOC

- **USN/USMC Initiatives**
  - UAV/Air Wing TACD&E
  - Pioneer/USMC (CAX)

- **AF Initiatives**
  - Predator Hellfire Demo
  - Hunter Night CAS Demo
  - FAC/A Role (15th RS)
JUAV - JTE Test Objective:
Develop Joint Tactics, Techniques and Procedures for UAVs in a Tactical Role

Standardized

• Command & Control
• Deconfliction
• Target Designation
• Mission Procedures
**JUAV-JTE Focus**

- Tactical and above classes of vehicles
  (No micro, mini, small)
- **Mission Areas**
  - Air Interdiction/Armed Reconnaissance
  - Fire Support
  - Special Operations (NEO and CSAR)
Develop Alternatives

Simulation/Rehearsal

Field Tests

Joint Exercises

Existing TTPs

Alternatives

ROE

Scenario ATO

JFC Guidance

Flag Officer Panel
Working Groups

Pubs

IBAR

MUSE

Venues

Assets

Legacy Products
OEF UAV C2

C2 Links

UAV Sensor Data

UAV Flight Control

Airspace Mgmt
Asset Mgmt
Tgt Engagement
UAV Product Dist.

CINC TST

Target Engagement

OSD/NCA

Tgt Engagement

CAOC

BWO Functions

Airspace Mgmt
Asset Mgmt
Tgt Engagement
UAV Product Dist.

AWACS/E2

Engagement Execution

Msh Control Sta

L/R Control Sta

UAV

Weapon System

Target

Target Area

C2 Links

UAV Sensor Data

UAV Flight Control
Theater Numbers
(as of 1 June)

• 1200+ UAV sorties
• 12 UAVs in theater (2 losses)
• 700+ targets destroyed with UAV in a tactical role
  - Hellfire
  - Laser for TacAir
  - TacAir "Talk-Ons"
## JUAV Products/Customers

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<td>2-01.1: Intel Support to</td>
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<td>2-01.3: JTTP for Joint Intel Preparation of the Battlefield 3-07.5: JTTP for NEO 3-09.1: JTTP for Laser</td>
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Summary

- UAVs in a tactical role are here to stay
- By Fall 2002 USAF Predators will be Laser Design and Hellfire equipped
- Shadow IOC is early 2003 (4 Systems)
- Interim Deliverables by 31 Dec 2002 (Sim Results)
- JUAV-JTE as a Joint TTP clearinghouse
- Must do better with UAV before we get to UCAV

Contact Info: CAPT D.A. Roy Rogers
rogers.roy@fallon.navy.mil
775-426-4653