

Warfighting Innovation in the Pacific



*U.S. Marine Corps Forces Pacific
Experimentation Center (MEC)*

3 October 2008



U.S. Marine Corps Forces Pacific Experimentation Center (MEC)

Introduction:

- *Parent Activity: U.S. Marine Corps Forces Pacific*
- *History: Established in 2001*
- *Purpose: Support MFP and PACOM community Experimentation and Assessment Requirements*
- *Location: Camp Smith, HI with satellite locations at Kaneohe Bay, HI and 29 Palms, CA*

Services: *Provide one stop shop for planning and executing operational tests, demonstrations, experiments and Military Utility Assessments*

Product: *Warfighter Assessment and Feedback*

Operating Philosophy:

- *Warfighter pull – Efforts based on MFP and PACOM warfighter requirements*
- *Get advanced technologies in the hands of operators early for operational assessments*
- *Experiment as we exercise and operate*
- *Act as honest broker – no technology bias*
- *Minimal intrusion on operational forces*

On-Going Experimentation Efforts :

- *Cobra Gold 09, Balikatan 09, Talisman Saber 09 Technology Experimentation*
- *Military Utility Assessments for ACTD/JCTDs and other DoD sponsored technology programs*

We Help the S&T Community Help The Warfighter



MEC Integration Facility



Bldg 1389 Capabilities

Located at Marine Corps Base Hawaii, Kaneohe Bay

- *Approximately 3000 sq. ft. of floor space*
- *19' x 10' office and 8' x 60' office/ bench work area, air conditioning, storage above both office areas*
- *Open high bay*
- *Electricity and phones*



Bldg 1386 Capabilities

Located at Marine Corps Base Hawaii, Kaneohe Bay

- *Approximately 1800 sq. ft. of floor space*
- *Three offices, tool room, conference room, covered enclosed work area, head with a shower, air conditioning, and secured outdoor patio*
- *Commercial high-speed Internet, telephones*
- *Alarmed strong room with safe and SIPRNET access*



Western Area Research, Testing and Evaluation Center (WARTEC)



Local Capabilities:

Located at the Marine Corps Air-Ground Combat Center, 29 Palms, CA, MEC personnel coordinate the use of existing facilities to include Expeditionary Airfield (EAF), various other landing and drop zones, 4 MOUT ranges, range communications system, range control facility, 21 unnumbered ranges and 22 fixed ranges.

Special MEC Capabilities:

The WARTEC provides the complete range of facilities and services to support the deployment of people, equipment and supplies to 29 Palms; the complete range of on-site support during testing and evaluation; and finally, retrograde support.

Resources available include two (2) 1000 sqft K-Spans, one (1) 1500 sqft maintenance K-Span, high speed Internet, radios, classified storage, HMMWV, tentage, portable generators and other equipment items to support field testing.

One Stop Shopping:

- *Provide venue, tool sets, and coordination planning for Experiments, Demonstrations, & Assessments*
- *Test and Demonstration planning*

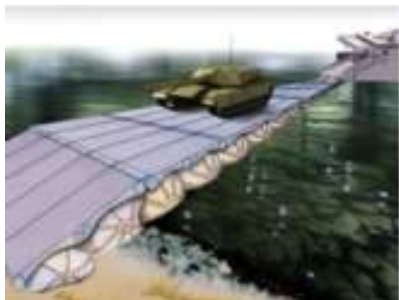
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Current MEC Efforts



**Joint Enable Theater Access
Seaports of Debarkation
(JETA SPOD) ACTD**



**Naval Expeditionary
Overwatch (NEO)**



**Mobile Modular Command
and Control (M2C2)**



**Hawaii Technology
Development Venture**



CRATR JCTD



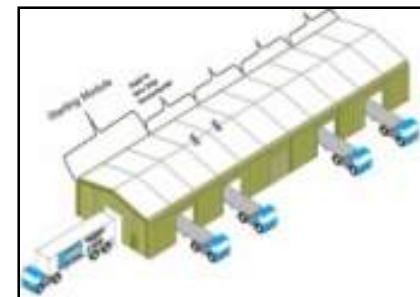
Wolf Pack Platoon



Robotics



Gunslinger



**Deployable Distribution
Center (DDXX)**

**Machine Language
Translation**



25W Fuel Cells



**Wearable Power
Prize Competition**



Project Management Activities

- **Coordinate warfighter participation**
- **Document requirements**
- **Develop CONOPS**
- **Coordinate with external agencies such as technical managers, leadership, sponsor/headquarters**
- **Conduct warfighter workshop**
- **Coordinate venue access**
- **Coordinate user training**
- **Write letter of instruction / demonstration execution plan**
- **Coordinate demonstration execution**
- **Write After Action Report**

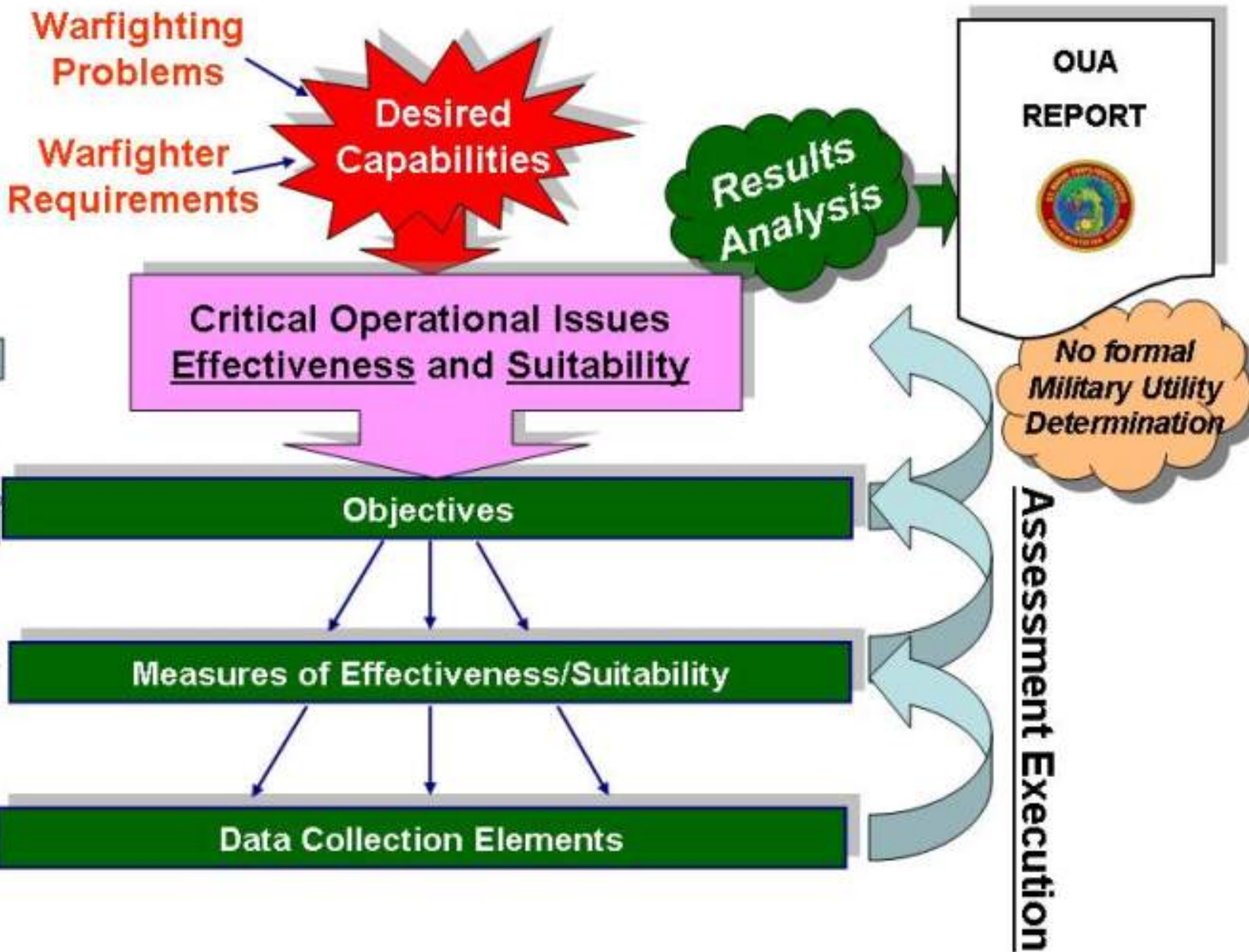


Operational Assessment Activities

- **Develop overarching assessment plan**
- **Develop overarching assessment methodology**
- **Collaborate with technical test group**
- **Develop detailed operational assessment plan for each event**
- **Develop tailored forms, questionnaires, and data collection tools**
- **Collect and input data**
- **Analyze results**
- **Write initial draft report**
- **Incorporate comments from review process, version control**
- **Publish Final Report**



Operational User Assessment Process



OUA Demonstration and Assessment Master Plan (DAMP)

Assessment Execution

Warfighting Problems
Warfighter Requirements

Desired Capabilities

Results Analysis

Critical Operational Issues Effectiveness and Suitability

OUA REPORT

No formal Military Utility Determination

Objectives

Measures of Effectiveness/Suitability

Data Collection Elements



OUA Timeline – HTDV UAV

Operational User Assessment

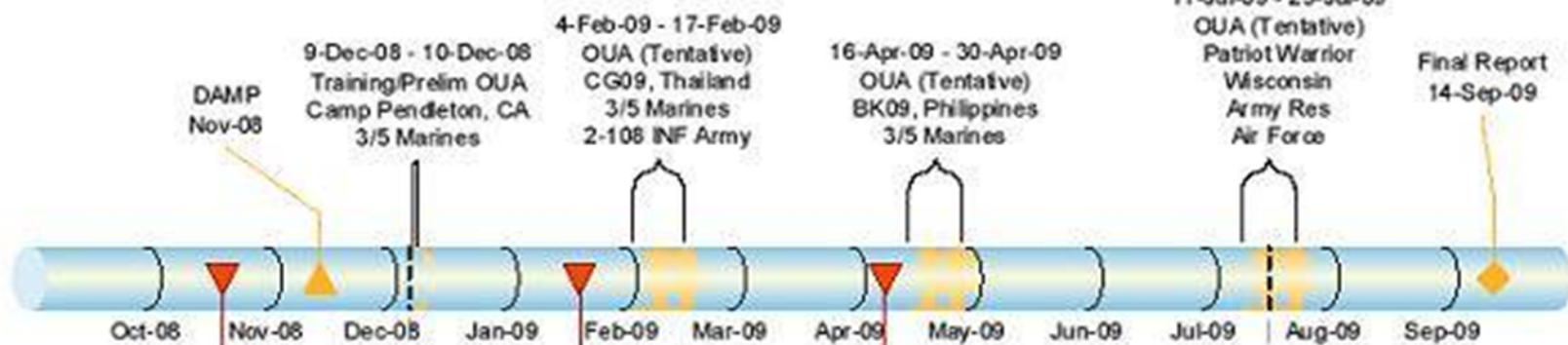
Tuesday, September 23, 2008



Nightstalker II MiniUAV

11-Jul-09 - 25-Jul-09
OUA (Tentative)
Patriot Warrior
Wisconsin
Army Res
Air Force

Final Report
14-Sep-09



Oct-08

Nov-08

Dec-08

Jan-09

Feb-09

Mar-09

Apr-09

May-09

Jun-09

Jul-09

Aug-09

Sep-09

Oct-08

Redesigned NanoShrike
with NGC Payload
Delivered (x?)

NanoShrike MicroUAV



Jan-09

Waterproof NanoShrike
with NGC Payload
Delivered (x?)

Apr-09

Nightstalker II
with NGC Payload
Delivered (x?)

Dec 08 - Jul 09

User Evaluation Period

Exercise Planning Schedule

CG09 Exp Wkshp – 30-31 July
CG09 IPC – 15-19 Sept
BK09 IPC/MDC – 13-17 Oct
CG09 FPC – 10-14 Nov
BK09 FPC – 12-16 Jan
PW09 Conf - ?



FY09 Experimentation Opportunities



Premiere USPACOM Events

Assessments

Displays

Demonstrations

Nov 08	Dec 08	Jan 09	Feb 09	Mar 09	Apr 09	May 09	Jun 09	Jul 09	Aug 09	Sep 09
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★
4-17 Feb 09
Cobra Gold 09
Thailand

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16-30 Apr 09
Balikatan 09
Philippines

11-25 Jul 09
Patriot Warrior
Wisconsin

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13-25 Jul 09
Talisman Saber 09
Australia

TBD Aug 09
SEACAT 09
Singapore

**Mohave
Viper
29 Palms**

**COCX
K-Bay**

**HCAX
PTA**

**Routine
Garrison
Activities**



FY10 Exercise dates and locations approximately the same. Next Talisman Saber in FY11.