



Precision Engagement Capabilities for the Future

July 27-28, 2005

Precision Strike PEO Forum 2005 Agenda

Keynote Address: **Major General Robert W. Chedister**, USAF, Air Force Program Executive Officer for Weapons, and Commander Air Armament Center, Air Force Materiel Command, Eglin AFB, FL

PRECISION ENGAGEMENT - U.S. AIR FORCE PERSPECTIVE:

- Acquisition at the Air Armament Center, **Mr. Thomas Robillard**, Director Air-to-Missile Systems Wing, Eglin AFB, FL

PRECISION ENGAGEMENT - U.S. ARMY FORCE PERSPECTIVE:

- PEO Ammunition, **Mr. James Sutton**, Deputy Executive Officer, Ammunition
- Excalibur XM982 , **Mr. Chris Grassano**, Deputy Product Manager, XM982 Excalibur
- Viper Strike Overview, **LTC John Oxford, USA**, Product Manager, Viper Strike
- Precision Mortar Systems Overview, **Mr. Greg Bischer**, Test & Evaluation Lead, Precision Guided Mortar Munition (PGMM)

JOINT FIRES: PROGRAM MANAGER PERSPECTIVE:

- Joint Fires Integration and Interoperability Team (JFIIT) - Executive Overview, **Colonel David Brown, USAF**, Integration & Interoperability Team, HQ USJFCOM

PRECISION ENGAGEMENT - U.S. NAVY FORCE PERSPECTIVE:

- Precision Strike Capabilities for the Future Battlefields, **Rear Admiral Timothy Heely, USN**, PEO for Strike Weapons & Unmanned Aviation

PRECISION ENGAGEMENT - U.S. MARINE CORPS PERSPECTIVE:

- USMC Precision Strike **Brigadier General Martin Post**, USMC, Assistant Deputy Commandant for Aviation

PRECISION ENGAGEMENT:

- Precision Engagement, **Mr. Randy Bigum**, Deputy Executive Officer, Ammunition

PRECISE EFFECTS VICE PRECISE MUNITIONS:

- Precision Effects v. Precision Munitions, **Brigadier General Philip D. Coker, USA**, Director, Capabilities Developments, Futures Center, United States Army Training and Doctrine Command

WEAPONS DATALINK NETWORK (ACTD):

- Air Armament Capability for the Future, **Ms. Lynda Rutledge**, Program Manager, NCW-Network Weapons ACTD

JOINT BATTLESPACE MANAGEMENT COMMAND AND CONTROL (AFED):

- The Challenge of Achieving Joint Command and Control in a Network Centric Environment, **Mr. Frank Caravella**, Program Manager, Raytheon Network Centric Systems
- Imagine....and act, **Mr. Greg Gardner**, Vice President, Oracle, Homeland Security

PRECISION STRIKE PEO FORUM
JULY 27-28, 2005
EMERALD COAST CONFERENCE CENTER
FT. WALTON BEACH, FL

KEYNOTE ADDRESS:

Major General Robert W. Chedister, USAF

Air Force Program Executive Officer for Weapons, and Commander Air Armament Center, Air Force Materiel Command, Eglin AFB, FL

PRECISION ENGAGEMENT—U.S. AIR FORCE PERSPECTIVE:

Thomas Robillard

Director, Air-to-Air Missile Systems Wing, Eglin AFB, FL

PRECISION ENGAGEMENT TO ENSURE DOMINANT MANEUVERS—U.S. ARMY PERSPECTIVE PANEL:

- ☐ **James Sutton**
Deputy Program Executive Officer, Ammunition
- ☐ **Chris Grassano**
Deputy Product Manager, XM982 Excalibur
- ☐ **LTC John Oxford, USA**
Product Manager, Viper Strike
- ☐ **Greg Bischer**
Test & Evaluation Lead, PGMM

JOINT FIRES: PROGRAM MANAGER PERSPECTIVE:

Colonel David Brown, USAF

Integration & Interoperability Team, HQ USJFCOM

PRECISION ENGAGEMENT—U.S. NAVY PERSPECTIVE:

Rear Admiral Timothy Heely, USN

PEO for Strike Weapons & Unmanned Aviation

PRECISION ENGAGEMENT—U.S. MARINE CORPS PERSPECTIVE:

Brigadier General Martin Post, USMC

Assistant Deputy Commandant for Aviation

PRECISION ENGAGEMENT:

Randy Bigum

Vice President, Strike Weapons Lockheed Martin Missiles and Fire Control

PRECISE EFFECTS VICE PRECISE MUNITIONS: What the Army sees as its critical capability gaps for precision, and view on interdependence.

Brigadier General Philip D. Coker, USA

Director, Capabilities Developments, Futures Center, United States Army Training and Doctrine Command

WEAPONS DATALINK NETWORK (ACTD):

Lynda Rutledge—Program Manager, NCW-Network Weapons ACTD

JOINT BATTLESPACE MANAGEMENT COMMAND AND CONTROL (AFEI):

Senior military leaders discuss successful use of information sharing in the operational context, and provide a look at future operations requirements for net-centric capabilities that support the military end-user.

- ☐ **Frank Caravella, PM**—Raytheon Network Centric Systems
- ☐ **Greg Gardner, Vice President**—Oracle, Homeland Security



USMC Precision Strike



BGen "Wiley" Post
Assistant Deputy Commandant for Aviation



Generating Precision Effects

- Accuracy, speed, lethality

- The right weapon
- In the exact place
- At the right time



- Generating and maintaining information pedigree

- The ability for a Marine to generate highly accurate targeting data at the tactical level
- Insert that information into a network that maintains pedigree
- Machine to Machine data transfer



Tactical Targeting Systems

- Implications of the digital trend
 - Increased situational awareness at tactical level
 - Precision targeting at the tactical level
 - Rapid request and employment of precision fires
- Reduced lulls in C2 tempo inherent of legacy analog/voice systems by increasing accuracy, speed and situational awareness
- MAGTF objectives more rapidly achieved
 - GCE enabled by rapid and precise combined arms effects





USMC

Target Location & Designation Handoff System (TLDHS)



LOCATE



MENSURATE



COORDINATE



A ruggedized handheld computer, imbedded GPS, laser range finder, and radio with the ability to process lased target as a fire mission for ground, air, and naval surface fires simultaneously or separately and then passes that fire mission digitally to the firing agencies and aircraft.



CONTROL



Litening Pod Downlink & ROVER

- Sensor downlink from AV-8B/F-18A+/C/D
 - Developed by PMA-257/MAWTS-1 for offensive air support missions (CAS, ground aided strike)
 - Supplies GCE video feed of aircraft targeting sensor or UAV





-
- An aerial photograph of a shipwreck, likely the USS Arizona, with various text overlays. The text includes: 'FAIL SAFE' and 'TRNL' at the top; '23-34 07' and '1111' on the left; 'H 3223149' and 'H 11251721' on the right; 'CCD' and 'F-10780Y' in the center; 'H 1544' on the right; '2M -' and '2M +' on the left; 'DATA' and 'HTS' on the left and right; 'AREA 7T' in the center; 'VO/WR' and '9TBY' on the left and right; '1 50 5 8' and '186 98' at the bottom; and 'AR/PT INR' and 'LSS SLAVE' at the bottom. The shipwreck is visible as a dark, elongated shape in the center of the image.

Actual ground display

- ## Joint Effects Targeting System (JETS)



Questions?



Backup Slides

