Range Sustainment and Modernization to Meet Customer Needs

Targets, UAVs & Range Operations Symposium
New Orleans, LA

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Integrity - Service - Excellence
Air-Land-Sea Ranges are critical for testing weapon systems for tomorrow and training readiness for today.
URBAN WARFARE: FUTURE WEAPONS

Urban Warfare and Close Controlled Strike

Current State

State of Ground Strike

- SDB II
- AGM-114 (Hellfire)
- Selectable Effects Warhead
- N-Gen Small Weapon
- GBU-31&38
- SDB I & SDB FLM
- High Power A/G Laser on Med/Large Aircraft
- Counter-Electronics (CE)
- Laser Guided Bombs/Laser JDAM
- High Speed (>3+M) Short Range A/G Missile

Current State

State of Ground Strike
TEST HIERARCHY

Digital Modeling & Simulation
Measurement Testing
Hardware-in-the-Loop Testing
Installed Systems Testing
Open-Air Range Testing

There Is No Substitute For Open-Air Testing!
KEY CHALLENGES

• Range Constraints
• Encroachment
• Congestion
CURRENT SAFETY FOOTPRINTS

Size of Eglin Land Range In Context To Water Range
Urban Development Has Marched To The Gates Of Once Remote Military Training Installations
Special Use Airspace

Commercial Air Traffic

Airspace Competition From Both Within And Outside Of DoD
Ranges Are Environmental Hot Spots
LOSS OF SPECTRUM

TSPI & Telemetry Application

<table>
<thead>
<tr>
<th>Frequency Range</th>
<th>Before</th>
<th>Current</th>
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<tbody>
<tr>
<td>1350-1400 MHz</td>
<td>58 MHz</td>
<td>40 MHz</td>
</tr>
<tr>
<td>1350-1390 MHz</td>
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<tr>
<td>1435-1535 MHz</td>
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<td>90 MHz</td>
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<td>1435-1525 MHz</td>
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<td>1710-1850 MHz</td>
<td>140 MHz</td>
<td>95 MHz</td>
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<td>1755-1850 MHz</td>
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<td>2200-2300 MHz</td>
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<td>90 MHz</td>
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<td>2200-2290 MHz</td>
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</tr>
<tr>
<td>2310-2390 MHz</td>
<td>80 MHz</td>
<td>30 MHz</td>
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<tr>
<td>2360-2390 MHz</td>
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<tr>
<td>Total</td>
<td>478 MHz</td>
<td>345 MHz</td>
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Loss Of 133 Mhz Of Spectrum Since WRC 92
BRAC 2005
ADDITIONAL DEMANDS ON RANGE USE

7th Special Forces Group (Airborne)
- ~2200 Personnel - Arriving FY11
- ~$400M MILCON - Began FY09
- Location - West of Duke Field

F-35 Integrated Training Center (ITC)
- ~2000 Personnel - Arriving FY09-FY15
- ~$400M MILCON - Began FY09
- Location - 33 FW Area

BRAC 2005
New Missions For Eglin
- ~800M MILCON
- ~4200 Mil/Civ/Ctr
- ~6000 Dependents

2005 Base Realignment And Closure (BRAC)
Testing & Training

Testing Modernization For Tomorrow

Scheduling Throttles

Training Readiness For Today

Sustainment Mission

DOD Ranges

Balancing Testing And Training
TRAINING REQUIREMENTS
LAND SEGMENTATION

Note: Areas depicted are notional and subject to change.
Deconflicts Land Use By Trainers
MISSION SCHEDULING

Establishing New Joint Test & Training Operations Control Capability
STRATEGIC BUFFERING
EGLIN WATER RANGE

Deepwater Horizon

President’s Program

Balancing DoD Missions With National Energy Needs
Increasing Airspace Demands From Both DoD And Civilian Operators

Gulf Regional Airspace Is A National Asset
SUMMARY

Air-Land-Sea Ranges are critical for testing weapon systems for tomorrow and training readiness for today.