### WSMR Command & Mission Brief

1 August 2019



## **WSMR** Mission

Provide Army, Navy, Air Force, DoD, foreign allies, and other customers with high quality services for experimentation, test, research, assessment, development, and training in support of the defense of our Nation.

### Major Range and Test Facility Base (MRTFB)

- National Defense Authorization Act 2003 (NDAA 03) established MRTFB funding rules:
- Funding for indirect costs associated with test events is not chargeable to DoD test customers
- Only direct costs directly attributable to a specific test can be charged to DoD test customers
- Ranges/Capabilities are available to commercial and foreign military users on a fully reimbursable basis





As of NOV 2017





# **WSMR Critical Missions**





#### **Ongoing - Support to CFTs**

## Land, Air Space and Climate



## Off-Range Missile Launch & Flight Corridors





Mountains

Forest



# Environments













Rain, Cold, Heat, Lightning











# **Fully Instrumented Range**

#### **Instrumentation & Data Acquisition**

- Long range high altitude electro-optics
- High speed digital visible/IR
- Telemetry –fixed and mobile
- Laser, radio frequency & high power microwave
- Radar & global positioning system

#### **WSMR Safari Capability**

- Some Range Capabilities can be moved to support "in country" events
- Examples include:
  - Missile tests in the Pacific
  - Hypersonic tests in Australia
  - Other "in country" tests











Tri-Service technology sharing via Range Commanders Council

### Global Impact of WSMR Safari Testing



# **Strategic Changes**

#### • 2018 National Security Strategy Focus

- Peer Competitors
- Overmatching Capabilities
  - DE, Hypersonics, Swarming Autonomous Systems
- Nuclear weapons and survivability
- Space
- Greater focus on SOS, Experimentation, pre-POR rapid transitions, accelerated training
- Army Futures Command
  - Joint and Integrated System of Systems
  - Re-Focus on Peer competitors
  - WSMR location as a principal pilot for initial consideration
  - T&E must include Test, Experimentation, and Training
  - WSMR Funding 100%?
- TRMC Focus
  - AI, Autonomous Systems, Hypersonic and Counter Hypersonic, DE, others...
  - Include Experimentation and Training as part of T&E at MRTBF
- Congressional language NDAA 2019
  - \$500M cut to Army IFPX!: Army shall accelerate counter CM capabilities David's Sling/other by 2020
  - Establish J-DETC funds for FY19 ~\$15M, more expected in 2020.

# **WSMR Strategic Alignment**

#### **CSA** Priorities

A Long-Range Precision Fires that restores US Army dominance in range, munitions, and target acquisition

- Next Generation Combat Vehicle
- Future of Vertical Lift Platforms
- Army Network with Hardware, Software, and Infrastructure



Air and Missile Defense Capabilities

• Soldier Lethality that Spans all Fundamentals (Shooting, Moving, Communicating, Protecting and Sustaining)



#### Strategic Plan & Campaign Plan has contributed to a number of big successes

- New Communication Building
- Direct Hire Authority
- Jump start on Hypersonics/Long Range Precision Fire test corridors
- Jump start on DE test bed Joint Directed Energy Test Bed

# WSMR Strategic Capability Thrusts (SCTs) & IAMD Foundation

#### **Directed Energy** Hypersonics/Long Swarming (DE) Range Systems Autonomous Systems (SWAS) Long Range Corridor Includes both HEL to Test Long Range and HPM Includes (>300kM) Kinetic multiple/swarming Weapons to Open Air Testing of systems Hypersonics Vehicles **Directed Energy Environments:** Weapon Systems **Includes Multiple** Space/Air/Land/Sea Ranges to Initiate **Open Air** /Water/Other **Origin Launch Environmental Testing Outdoor Testbed EIS** Required Joint Directed Energy Test Center Indoor Testbed Testing for US **Systems** Base/Port DE Testing of Prototype **US/Allied Testing US counter Systems** Hypersonics/Long Test US systems Range Strike weapons against enemy DE

Testing of US counter-SWAS

Integrated Air and Missile Defense (System of Systems, Joint, Includes all three SCTs and current weapon systems, training support and CONEMP/TTP/CONOP/JT&E Development

as well as Counter-

Enemy

threats

# **2nd Core Mission Strategic Focus**

- Space Test Support and Satellite Environmental Testing
  - WSMR situated for supporting new Space Force
  - Requires modernization need for complete satellite and/or major subsystem environmental testing
  - Requires need to integrate with future LEO Satellite telemetry and communications for IAMD testing
- Nuclear Weapons Effects Testing
  - WSMR identified as critical location for nuclear weapons effects testing
  - Need for time-sequenced prompt transient nuclear radiation effects testing
  - Focus on space and counter ICBM weapon systems

2<sup>nd</sup> Core Mission Strategic Focus will be Included Within the Modernization and Execution Plan

### WSMR Modernization & Execution Plan (MEP)



WSMR's unique capabilities:

- Vast Land Area
- Vast connected / Army-controlled airspace
- Complete Spectrum Management
- Space Heritage
- Army, Navy, Air Force T&E
- Existing Off-range corridor
- Fully instrumented

- Strategic Drivers:

National Security Priorities CoCom IPLs Capability Gaps DoD FY18-28 Strat Plan for T&E Resources Programs of Record Prototypes / Dev. Programs / Demos Army Cross Functional Team (CFT)

#### Strategic Focus: Overmatch Systems

Directed Energy Hypersonics/Long Range Precision Fires Swarming Autonomous Systems Integrated Air & Missile Defense

#### 2<sup>nd</sup> Core Mission:

Space Systems Nuclear Weapon Effects

#### **Key MEP Attributes**

- Annually updated
- Provides WSMR MEP SOP
- Process improvements identified with execution plans
- Multiple funding and acquisition strategies
- Support planning for current customer base
- Aligns current capabilities with future needs

#### **Key MEP Objectives**

- Synchronize modernization efforts with National Need / Strategy / Priorities and WSMR Campaign Plan
- Integrate / Align existing capabilities with SCTs
- **Modernize** infrastructure to meet current & future needs
- Prioritize / Focus all investments to align with strategic plan
- Assess progress periodically and Adjust to need
- Identify and Execute multiple funding and acquisition strategies

### Summary

- WSMR is a national T&E asset
- Our unique capabilities include
  - -Largest Land Based Test Range in the US
  - -Complete Spectrum Management
  - -Full Control of Air Space
  - -Multiple Environments
  - -Joint / Integrated Air and Missile Defense
- Strategic Vision to Meet Future Warfighter Needs
  - J-DETC example of Joint efforts to meet those needs
  - WSMR postured to support Joint Training and Experimentation
  - Joint Integrated/Synchronized System of Systems Testing
  - WSMR focused on rapid transition of capabilities to theater
- Campaign Plan to Synchronize and Prioritize Efforts
  - -Improves processes while decreasing costs