Integrating Technology With The Soldier

Joint Service Small Arms Synchronization Team (JSSAST) for NDIA Joint Armaments Conference

15 May 2012

TECHNOLOGY DRIVEN. WARFIGHTER FOCUSED.

Presented by

Mr. Joel M. Goldman
Chief, JSSAP Office

DISTRIBUTION STATEMENT A: Approved for public release; distribution is unlimited
Agenda

- What is JSSAP?
- JSSAST Mission and Structure
- JSSAST Focus Areas
- Recently Completed Programs
- FY12-15 Program Description
- What’s Next?
What is JSSAP?

A Chartered Joint-Centric Activity
Providing Small Arms Technology &
Requirements Harmonization
For All the Armed Services

Focus on the Warfighter Always!

Charter Updated and Approved by ASA (ALT) Hon Claude Bolton 31 Aug 04

$15-17 M Annual Budget

DISTRIBUTION STATEMENT A: Approved for public release; distribution is unlimited
Integrating Technology With The Soldier

Why a Technology Plan

- Intensive management of the DoD small arms tech base
- Harmonization of requirements and testing
- Transition to Program Manager’s for System Development and Demonstration
- Long range plans and strategies
- Influence of International Small Arms Activities

Joint Service Small Arms Program (JSSAP) Mission

Joint Service Small Arms Synchronization Team (JSSAST)

Chairman: COL M. Zybura (ARDEC-ESIC)
Army: Mr. D. Libersat (USA MCOE)
Marines: Mr. C. Clark III (MDCDC)
Air Force: Col J. Probst (AFSFC)
Navy: CDR W. Daly (OPNAV)
Coast Guard: CAPT E. Giese (USCG)
SOCOM: COL J. Smith (PEO SOF Warrior)

Associates:
Army PMSW: COL S. Armstrong (PEO Soldier)
JLWLD: Mr. K. Swenson (JLWLD)
Army PM MAS: Mr. T. Coradeschi (PEO Ammunition)
Army PM SSL: Mr. Wayde Thomka (PEO Soldier)
ONR: Mr. D. Simons (Firepower)
ARL: Mr. M. Zoltoski (Army Research Lab)
NVESD: Mr. D. Randall (Associate Director)
Navy PMSA: Mr. B. Reese (NAVSEA)

JSSAST Office

Joint Service Small Arms
Requirements Integration

National Small Arms Center
including Services and National Labs
JSSAST Focus Areas

Capabilities Documentation Development/Harmonization
- Service Requirements
- Joint Small Arms Modernization ICD Staffing
- Joint Capabilities Roadmap/Master Plan

Current Demonstration Activities
- Small Arms Weapon and Fire Control
- Small Arms Grenade Munition

Current Research Thrusts
- Advanced Small Unit Small Arms Technology
- Materials and Process Technology

Lightweight Small Arms Technologies (LSAT)
- Military Utility Assessment II – Special Forces
- Forward/CONUS Operational Assessment
- Assessment of Potential for Requirement Development or Transition of Technologies

DISTRIBUTION STATEMENT A: Approved for public release; distribution is unlimited
Recently Completed Programs

**Lightweight Small Arms Technology**

- **TRL 7** Achieved
- **MUA Complete**

![Plastic Case Telescoped LMG](image1)

![Plastic Case Telescoped Carbine](image2)

**Advanced Fire Control Technology**

- **TRL 4/5** Achieved

- Beam-Steering Mirror
- Laser Steering
- Target Tracking
- Near IR
- Thermal Tech
- Microsight
- Energy Harvesting
- Barrel Deflection Measurement

**Advanced Lethal Armament Technology**

- **TRL 4/5** Achieved

- Dynamically Expanding Warhead
- Course-Correcting Projectile
- Selectable Fragment Sizes
- Enhanced Warhead Configurations

**Recently Completed Programs**

- **Advanced Fire Control Technology**
  - Beam-Steering Mirror
  - Laser Steering
  - Target Tracking
  - Near IR
  - Thermal Tech
  - Microsight
  - Energy Harvesting
  - Barrel Deflection Measurement

- **Advanced Lethal Armament Technology**
  - Dynamically Expanding Warhead
  - Course-Correcting Projectile
  - Selectable Fragment Sizes
  - Enhanced Warhead Configurations

**DISTRIBUTION STATEMENT A**: Approved for public release; distribution is unlimited

**TECHNOLOGY DRIVEN. WARFIGHTER FOCUSED.**
Advanced Small Unit Small Arms Technology (ASUSAT)
  -Improve range overmatch capability against like-sized threat elements.

Small Arms Material Process Technology (SAM&PT) Research Program
  -Enhance the operability and maintainability of small arms weapons.

Small Arms Grenade Munitions (SAGM) Integration and Evaluation Demonstration Program
  -Improve effectiveness of 40mm Low Velocity Grenade.

Small Arms Weapons and Fire Control Integration (SAW&FC) Demonstration Program
  -Improve capability to determine range, track moving targets, and increase probability of hit.

Lightweight Small Arms Technologies (LSAT) Program
  -Provide critical weight reduction elements for the warfighter, maintaining current lethality and improving maintenance and training

DISTRIBUTION STATEMENT A: Approved for public release; distribution is unlimited
What’s Next?

- NSAC Meeting June 2012
- Conduct Military Utility Assessment II
- Complete Staffing of Joint Small Arms ICD
- Next JSSAST Meeting - 7-8 November 2012
- Incoming JSSAST Chairman: COL Tom Cook, USA, ARDEC

DISTRIBUTION STATEMENT A: Approved for public release; distribution is unlimited
JSSAST Panel Members

- USA: MAJ Aron Hauquitz
- USN: Mr. Charles (Chuck) Zeller
- USAF: Msgt Patrick Flores
- USMC: Mr. Sal Fanelli
- USCG: LCDR Kenneth (Ty) Nagie
- US SOCOM: Maj Frances (Skip) Barth
- JNLWD: Mr. Jacob (Jake) Johnson

DISTRIBUTION STATEMENT A: Approved for public release; distribution is unlimited