



**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**

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***TECHNOLOGY DRIVEN. WARFIGHTER FOCUSED.*** <sup>1</sup>

- ▲ 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

Focus on the  
Warfighter  
Always!

For All the Armed Services  
Charter Updated and Approved  
by ASA (ALT) Hon Claude Bolton  
31 Aug 04

\$15-17 M  
Annual  
Budget



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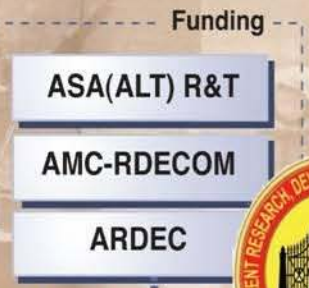




# JSSAST Mission and Structure

Chartered in 1978

Charter Updated 2004



**Joint Service Small Arms Synchronization Team (JSSAST)**

Chairman	COL M. Zybura (ARDEC-ESIC)
Army:	Mr. D. Libersat (USA MCOE)
Marines:	Mr. C. Clark III (MCDC)
Air Force:	Col J. Probst (HQ AFSFC)
Navy:	CDR W. Daly (OPNAV)
Coast Guard:	CAPT E. Giese (HQ USCG)
SOCOM:	COL J. Smith (PEO SOF Warrior)
<u>Associates:</u>	
Army PMSW:	COL S. Armstrong (PEO Soldier)
JNLWD:	Mr. K. Swenson (JNLWD)
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)

Meets Semiannually

JSSAP Office

Joint Service Small Arms Requirements Integration

National Small Arms Center including Services and National Labs

- ## Joint Service Small Arms Program (JSSAP) Mission
- 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



## **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

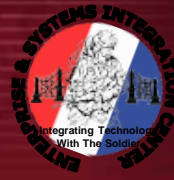
## **Current Research Thrusts**

- 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





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

## Lightweight Small Arms Technology



Plastic Case Telescoped LMG

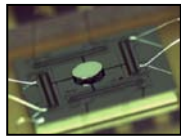


Plastic Case Telescoped Carbine

**TRL 5  
Achieved**

**TRL 4/5  
Achieved**

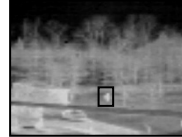
## Advanced Fire Control Technology



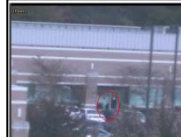
Beam-Steering Mirror



Laser Steering



Target Tracking



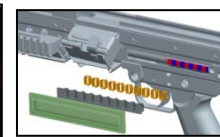
Near IR



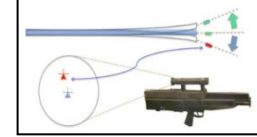
Thermal Tech



Microsight



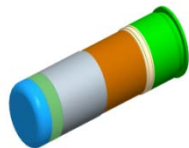
Energy Harvesting



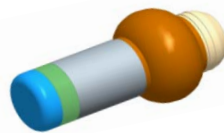
Barrel Deflection Measurement

**TRL 4/5  
Achieved**

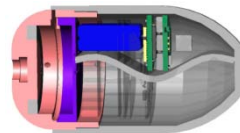
## Advanced Lethal Armament Technology



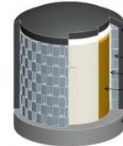
Dynamically Expanding Warhead



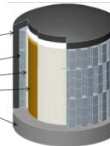
Course-Correcting Projectile



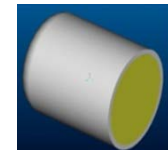
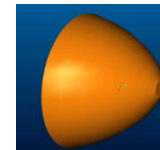
Small Frag Mode



Large Frag Mode



Selectable Fragment Sizes



Enhanced Warhead Configurations



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**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**

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- ▲ **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**



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- ▲ **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**



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