



SOPMOD PROGRAM OVERVIEW

19 May 2005

PRESENTED BY:
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SOPMOD PROGRAM MANAGER



SOPMOD Program Overview



Presented to NDIA Small Arms Symposium



Overview Agenda

- **Mission**
- **Structure of the Program**
- **SOPMOD Block 1 Overview**
- **Increment 2 Overview**
- **SOPMOD Future**
- **Questions and Comments**



Mission



The SOPMOD Program Management Office at NSWC Crane, IN, will provide standardized, versatile weapons accessories to meet needs across SOF mission scenarios. These accessories will increase operator survivability and lethality by enhanced weapon performance, target acquisition, ~~signature suppression~~, and fire control. SOPMOD PMO will provide these accessories when they are operationally suitable, affordable, sustainable, and funded.



Capabilities Required:

- **Standardized versatile weapons accessories**
- **Modular- meets needs across SOF mission scenarios**
- **Increased operator survivability and lethality by enhanced target acquisition, signature suppression, and fire control**

➤ **Evolutionary Acquisition Subprograms:**

- **Block I (Plus Platform Mods and Phased Replacements)**
- **Block II (New and Combined Capabilities)**
- **Block III (Emerging Capabilities)**





TASK ORGANIZATION



Fielding & Sustainment

ALGL PMO

SOF LCSM

SOPMOD PMO



RD&A & ISEA

SOF Small Arms Program Group

RD&A & ISEA



RD&A & ISEA

SOF Weapons PMO



SOPMOD Bosses





Quality

SOPMOD, as part of NSWC Crane, is ISO 9001 Certified

Our Quality System is a set of formally documented activities that are carried out to ensure that we satisfy our customers' requirements.

Our Quality System is based on, and officially certified to, the requirements of ISO 9001-1994, an international standard for quality assurance in design, development, production, installation and servicing.



External Clients



NSWC Crane Supports “Paying Customers” outside of USSOCOM

Block 1



SOPMOD M4



Accessory Kit

Special Operations Peculiar Modification to the M4 Carbine

Poster Version 3 February 2005

Logistics Support: sofsustainment@navy.mil
Website: <http://ssavie.socom.mil>



Reflex Sight
NSN: 1240-01-435-1916



ECOS-N
NSN: 1240-01-495-1385



4X Day Optical Scope
NSN: 1240-01-412-6608



AN/PEQ-5 Carbine Visible Laser
NSN: 5860-01-439-5409



AN/PVS-17A Mini Night Vision Sight
NSN: 5855-01-474-8904



AN/PEQ-2 Infrared Illuminator
NSN: 5855-01-422-5253



Backup Iron Sight
NSN: 1005-01-449-6306



M4A1 Carbine w/Carrying Handle
NSN: 1005-01-382-0953



Visible Bright Light II
NSN: 5855-01-501-3081



Universal Pocketscope Mount (PVS14)
NSN: 5855-01-482-6164
(PVS18) NSN: 5855-01-485-7749
(M68) NSN: 5855-01-485-7755



Forward Handgrip
NSN: 1005-01-416-1091



Sound Suppressor Kit
NSN: 1005-01-437-0324



Rail Interface System
NSN: 1005-01-416-1089



M203 9" Barrel Assembly
NSN: 1010-01-410-7422



Grenade Launcher Leaf Sight
NSN: 1010-01-418-4588



AN/PSQ-18A M203 Day/Night Sight
NSN: 1010-01-516-0953





SOPMOD Block 1 Modifications

PRIOR



**ACOG 4x ANTI-REFLECTIVE
DEVICE (ARD)**



**AN/PEQ 2 PATTERN
GENERATORS**



**MNVS AN/PVS 17
THROW-LEVER MOUNTS**



**IMPROVED QD SUPPRESSOR
ATTACHMENT**

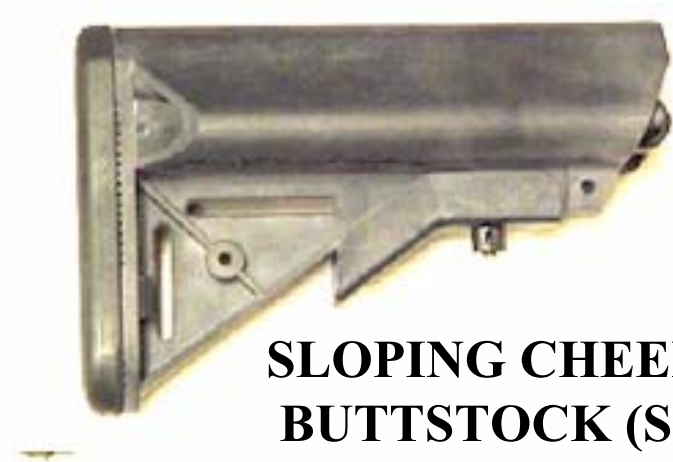


M4A1 Carbine Modifications

PRIOR



EXTRACTION PARTS SET #2



SLOPING CHEEKWELD BUTTSTOCK (SCB)



HIGH RELIABILITY MAGAZINES (HRM)

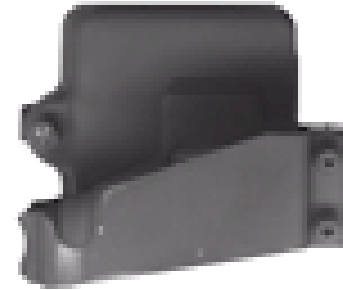


M4A1 Carbine Modifications

NEW



**EXTENDED
CHARGING HANDLE**



REDI-MAG



**AMBIDEXTROUS
SELECTOR**



**NAVSPECWARCOM
SLING**

SOPMOD Phased Replacements

PRIOR



**ENHANCED COMBAT
OPTICAL SIGHT - NAVY
(ECOS-N)**

*REPLACES or
SUPPLEMENTS*



**ACOG Reflex Sight
(In WARCOM ONLY)**



**VISIBLE BRIGHT
LIGHT II (VBL II)**

*REPLACES or
SUPPLEMENTS*



**VISIBLE LIGHT
ILLUMINATOR**



SOPMOD Block 1

New Modifications



**IMPROVED
M203 QD MOUNT**



**ACOG 4X MINIATURE
RED DOT (MRD) PIP**



AN/PVS-17A UPGRADE KIT

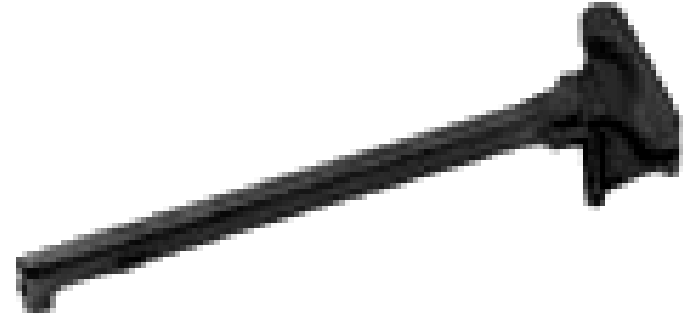


**SUREFIRE VBL II 6-VOLT
MINIATURIZATION KITS**

New User Assessments



RED DOT MAGNIFIERS



**GAS-DEFLECTING
CHARGING HANDLES**



SCOUT LIGHT

SOPMOD Block 1 New Fielding Adds



SOFT CASES



**ECOS-CQB
(Upgraded Holosight)**



PEO-SP / SOPMOD Accomplishments



- **Fielded \$90M in War Equipment Since 9-11, 107,000 End Items in the Field**
- **Fielding \$47M in New Equipment this Year, 58,000 End Items Inbound**

MDNS



Enhanced Combat Optical Sight - Carbine (ECOS-C)



Clip-on Night Vision Device - Thermal (CNVD-T)

Block 2



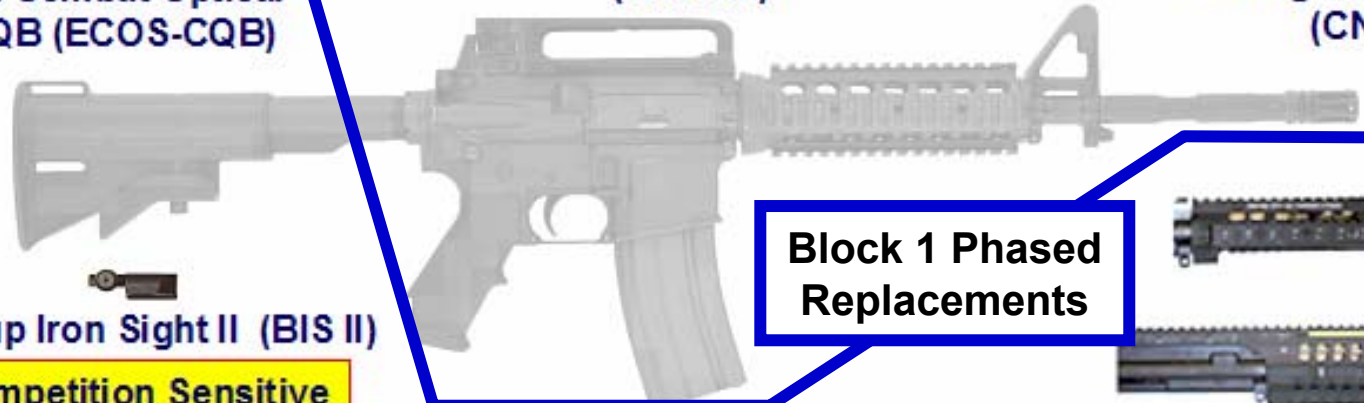
Advanced Target Pointer/Illuminator/Aiming Laser (ATPIAL)



Clip-on Night Vision Device - Image Intensification (CNVD-I²)



Enhanced Combat Optical Sight - CQB (ECOS-CQB)



Block 1 Phased Replacements



Backup Iron Sight II (BIS II)

Competition Sensitive



Visible Bright Light III (VBL III)

Competition Sensitive



Mini Night Vision Sight (PIP)



Rail Interface System II (RIS II)

MDNS Client Weapons



SOPMOD ORD 5 - Core Small Arms (Threshold) ...Design For Use On:

**M4A1 Carbine
M203 Grenade Launcher**



ORD Annexes - Additional Weapons (Objective)

....Harden For Use On, and possibly develop versions for:

- SCAR**
- CQBR (Mark 18)**
- MK46 LMG / M249 SAW Machineguns**
- MK48/ M240-N/M240/M240-B Machineguns**
- M14 and Mark 14 Enhanced Battle Rifle**
- AK-47/AK74 Series Assault Rifle**
- Mk-19 40mm Machinegun**
- M2-HB .50 Cal Machinegun**
- M72 LAAW**
- AT4-CS**
- MAAWS**
- MK11/SR 25 Sniper Rifle**
- MK12 Sniper Rifle**
- M-24 Sniper Rifle**
- 300 WINMAG Sniper Rifle**
- 50 SASR & M107 50 cal Sniper rifle**

MDNS Weapons of Interest



Limited Interest – Generally Covered by UNS (AN/PVS 22), MUNS, DUNS

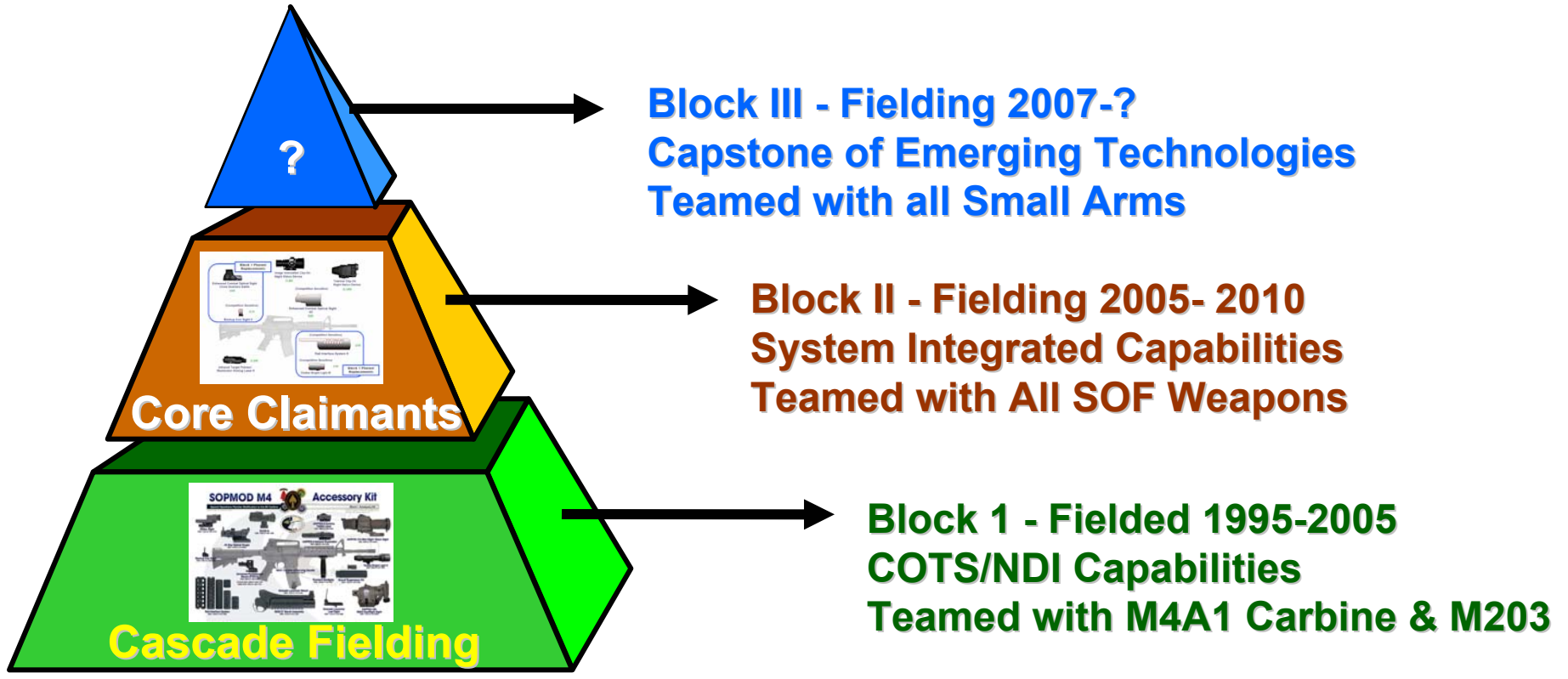


TOP MAP

SOPMOD Top Map Review



TOP MAP STRATEGY





TOP MAP OVERVIEW

- **Overview Top Map Shows Entire System at a Glance**
- **Five Detailed SOPMOD Accessories Top Maps Show Main Subsystem Categories**
 1. **Carbine Improvements**
 2. **Passive Day Aiming Systems**
 3. **Passive Night Aiming Systems**
 4. **Active Aiming Systems**
 5. **Weapons Shot Counters**





USSOCOM INTEGRATED WEAPONS TOPMAP

Existing Systems

Emerging Systems

Objective Systems

2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
------	------	------	------	------	------	------	------	------	------	------	------	------	------	------

SOPMOD ACCESSORY KIT OVERVIEW

SOPMOD Increment #1 (1994-2007+)



**SOPMOD 1
1994-2008+**



**SOPMOD 2:
MDNS & WSC
2004 -2012+**

**SOPMOD 3
2012-???**

SOPMOD 1 & 2 Compatible With both M4A1 Carbine and SCAR

SOPMOD 2 Compatible With All SOF Weapons

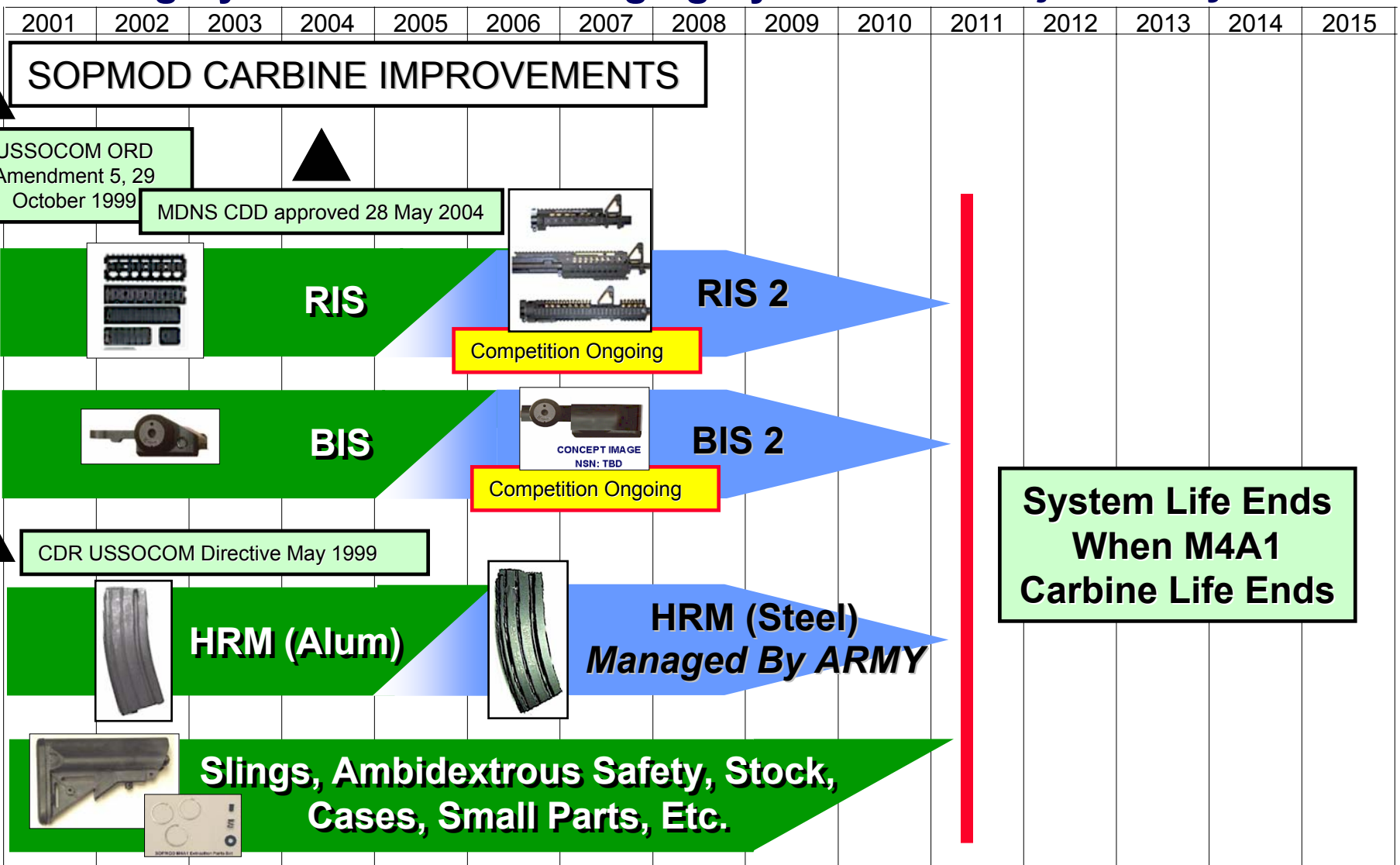


USSOCOM INTEGRATED WEAPONS TOPMAP

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SOPMOD PASSIVE DAY SUB-SYSTEMS

USSOCOM ORD Amendment 5, 29 October 1999

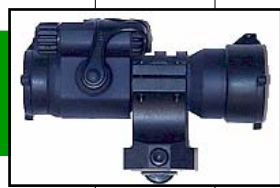
MDNS CDD approved 28 May 2004



ACOG Reflex



ECOS-CQB



ECOS - N



ACOG 4x PIP



ACOG 4x



ECOS-C

Competition Ongoing



USSOCOM INTEGRATED WEAPONS TOPMAP

Existing Systems

Emerging Systems

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------	------	------	------	------	------	------	------	------	------	------	------	------	------	------

PASSIVE NIGHT AIMING SUB-SYSTEMS



**Weapon-Specific MNVS
(e.g., Crew Served)**

USSOCOM ORD
Amendment 5, 29
October 1999

MDNS CDD approved 28 May 2004



**MNVS
AN/PVS-17A**



**AN/PVS-17A
PIP**



**Universal
Pocketscope
Mount**



Clip-on Night Vision Device - I2



**CNVD Sensor
Fusion**



Clip-on Night Vision Device - Thermal

CNVD-Sensor Fusion Opportunity



CONCEPT IMAGE



Initial Objectives:

1. Improved Target Acquisition
2. Less than 2 Pounds
3. Less than \$20K Per Copy



USSOCOM INTEGRATED WEAPONS TOPMAP

Existing Systems

Emerging Systems

Objective Systems

2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
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ACTIVE AIMING SUB-SYSTEMS

USSOCOM ORD Amendment 5, 29 October 1999

MDNS CDD approved 28 May 2004

Crew-Served Weapons Laser



ITPIAL Carbine AN/PEQ-2



CVL AN/PEQ-5



ATPIAL Spirals: Green Light Laser and Wireless Controls

VBL 2 PIP



VLI



VBL 2



CONCEPT IMAGE

VBL 3

Competition Ongoing


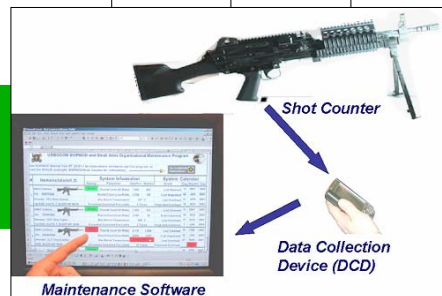



USSOCOM INTEGRATED WEAPONS TOPMAP

Existing Systems

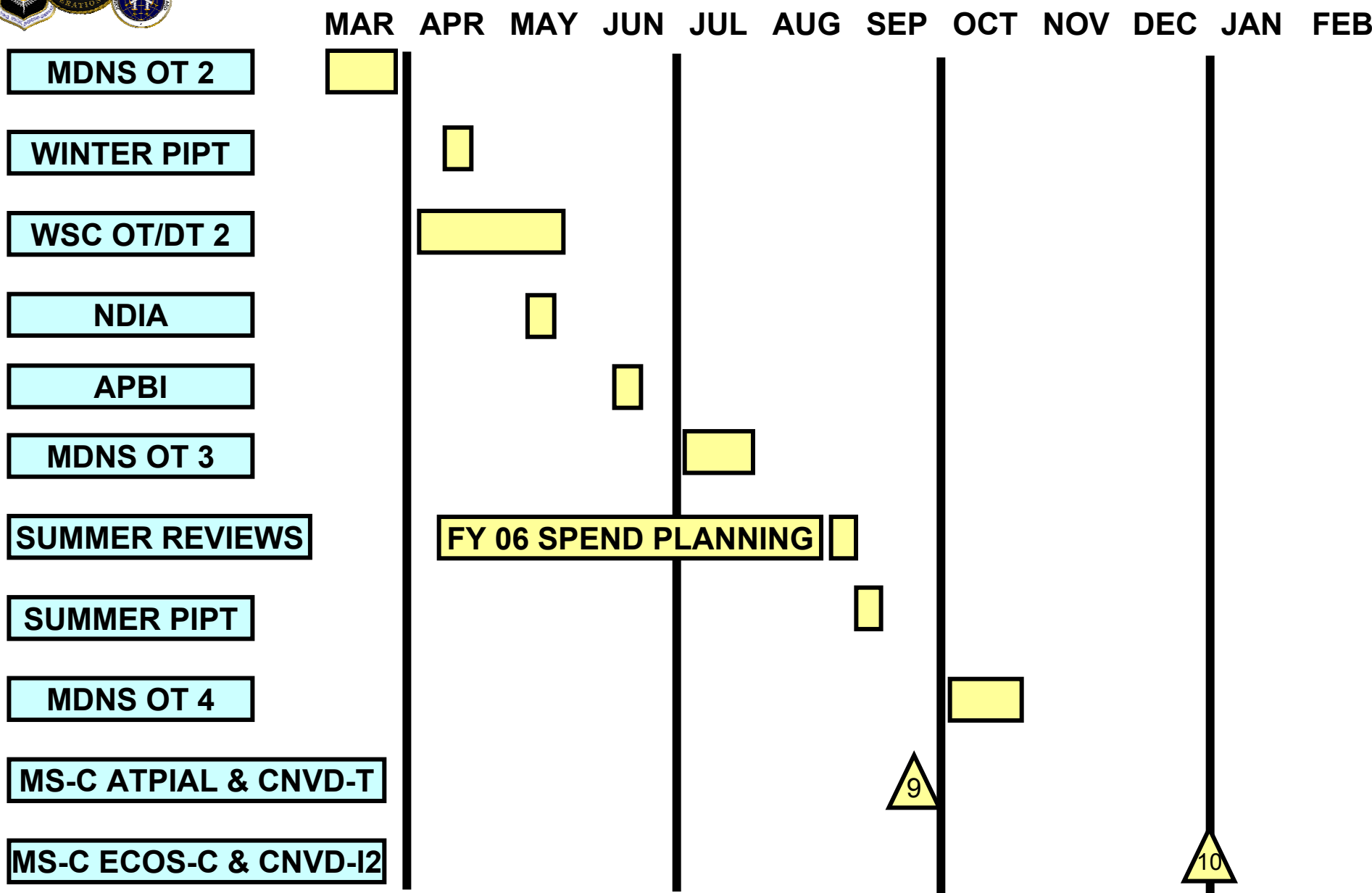
Emerging Systems

Objective Systems

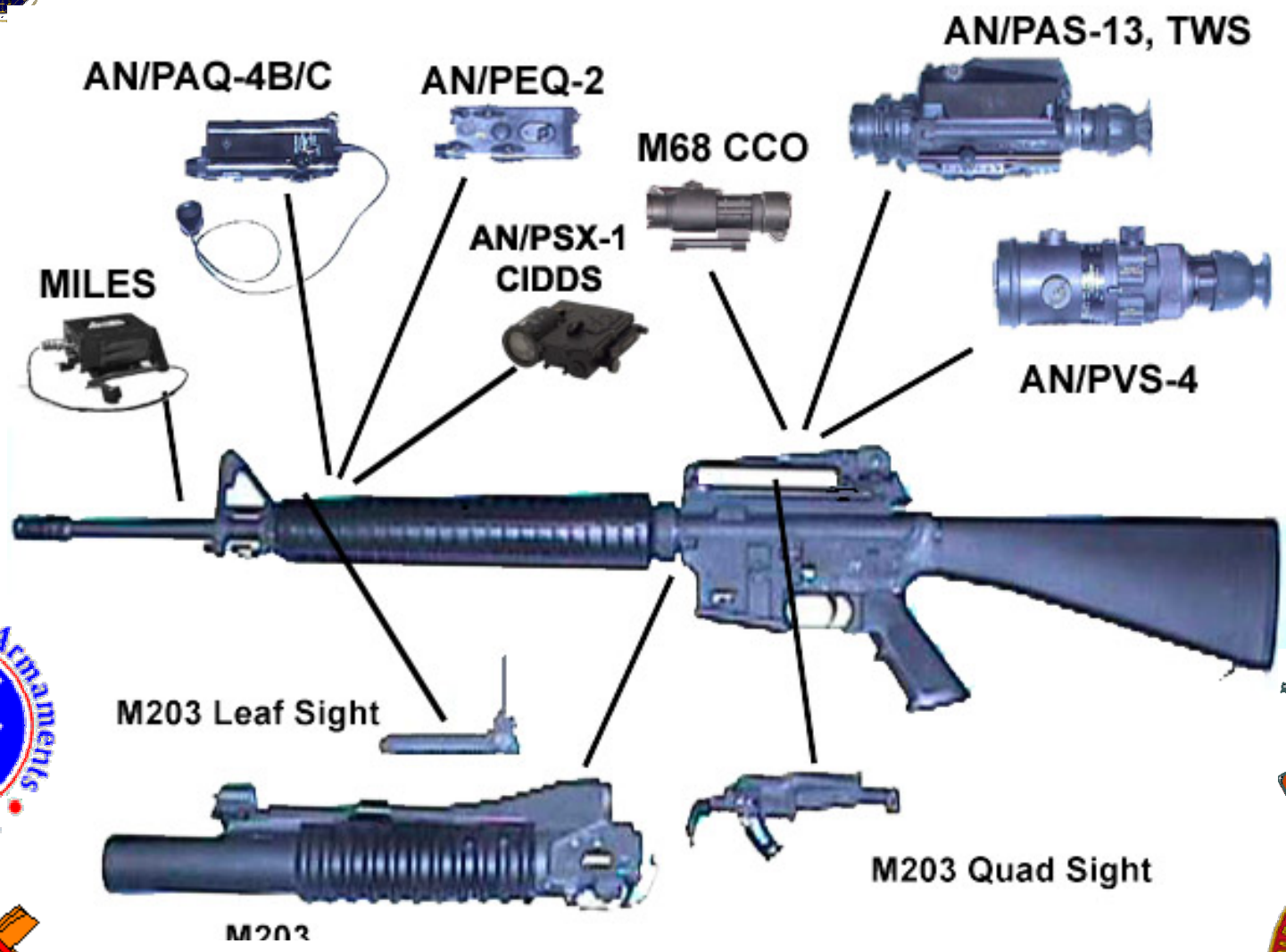
2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
WEAPON SHOT COUNTERS														
WSC CDD approved Dec 2004				▲				WSC - Carbine						
SOST Prototypes								WSC - Machinegun						
								WSC - Future Weapons						



SOPMOD 05-06 MACRO CALENDAR



Army Modular Weapon System (MWS)



Frequent Coordination





Comments / Questions ?



Surface Warfare Center Division





NSWC Crane

“Harnessing the Power of Technology for the Warfighter”

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