



NDIA  
Automatic Test Committee  
Navy/Marine Corps (Air)  
Liaison Reports

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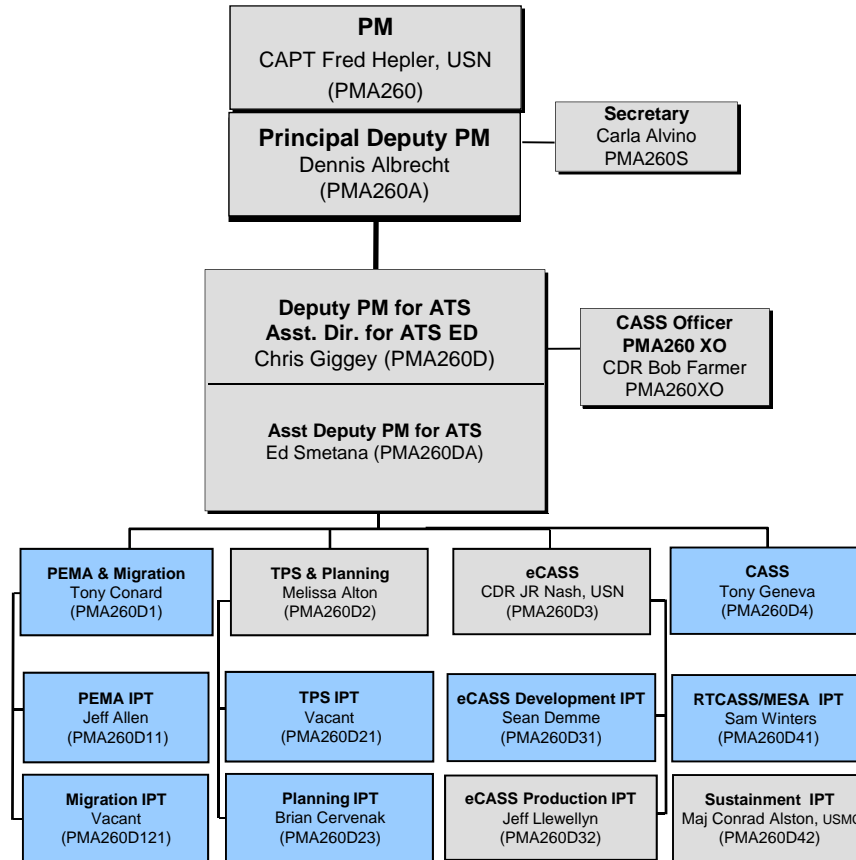
# Agenda

- PMA-260 Organization
- CASS Overview
- CASS Initiatives
- Legacy ATE TPS Offload Status
- Emerging Platform CASS TPS Efforts
- Navy Items of Interest
- Questions

# PMA260 Organization

- Captain Fred Hepler relieved Captain Belcher on 9 June
- The two vacant GS-14 positions in PMA260 have been filled
  - ATE Team Lead (Chris Giggey's position) – Ed Smetana
  - TPS & OPS Team Lead (Pat Weaver's position) – Melissa Alton
- CDR JR Nash arrived in October and is assigned to eCASS
  - Sean Demme has assumed responsibility for eCASS Development IPT
  - Jeff Llewellyn has assumed responsibility for eCASS Production IPT
- Major Conrad Alston arrived in September as the RTCASS Team Lead
- CDR Bob Farmer will arrive from COMNAVAIRLANT in December to be Chris Giggey's Deputy PM for CASS/PMA260 XO

# New PMA260D Organization Chart



## LEGEND

- = EOB
- = NWCF

# CASS Overview

- **RTCASS**

- IOC is complete for V-22, AV-8B, F/A-18, H-1 and EA-6B
- A new production contract was awarded in September 2010
  - Base quantity of 12 stations
  - Option 1 for 12 stations was awarded in December 2010
  - Option 2 for 6-11 stations will be awarded in FY12/FY13
- 133 Production stations delivered
- Integration of mainframe CASS High Power rack with RTCASS is complete
  - Began fielding in April 2010, estimated completion is June 2011
  - IOC declared on 2 June 2010 at MALS-14 Cherry Point
  - 20 Stations delivered
- TPS Transport Status
  - 500 UUTs are currently supported in the field by RTCASS
  - Scheduled completion December 2011 (227 additional UUTs)
    - 44 UUTs (2011-2014 CASS completion) not included

# CASS Overview

- **RTCASS**

- Latest Releases

- RTCASS Software version RT-1.005 in test.
- Candidate TPSs for inclusion in RTCASS Test Program Software update RT-TPS-1.006 in regression test. (109 of the 227 additional UUTs )

- **RTCASS Contractor Logistics Support (CLS)**

- Solicitation Number: N68335-11-RFI-0224

- Notice Type: Sources Sought

- Due Date: September 19, 2011

- Description: Potential acquisition for Contractor Logistics Support (CLS) services to include maintenance and support services necessary to ensure component availability for consumable items and a 30 day Repair Turn-Around-Time (RTAT) for repairable components. These systems and components are located in the Fleet as well as land based sites in CONUS (Continental US) and OCONUS (Outside Continental US) locations. The Navy intends to procure these support services on a CPFF basis. The period of performance shall be 1 year, with two one-year option periods.

# RTCASS TPS Transport Status

As of RT-1.004 software release and RT-TPS-1.005L2 TPS update

CURRENTLY TRANSPORTED (FIELD) OTPSs		
PROGRAM	PLATFORM	OTPS QTY
AN/ALE-47	Multi	1
EA-6B ALQ-99 UEU SRA	EA-6B	1
EA-6B ALQ-99 UEU WRA	EA-6B	1
OFFLOAD APM-446 RSTS LOT 1/2/3	Multi	4
OFFLOAD ASM-614 ESTS EA-6B	EA-6B	1
OFFLOAD AV-8B EETS/HTS	AV-8B/Multi	12
CASS-CID-002	AV-8B	1
OFFLOAD AN/ARM-146	Multi	1
OFFLOAD AN/USM-467 EA-6B	EA-6B	2
OFFLOAD AN/USM-484 EA-6B	EA-6B	1
OFFLOAD AN/USM-686 IATS	F-18 PECULIAR	8
V22	V-22	12
OFFLOAD HPDT OJ-615	EA-6B	1
AH-1Z/UH-1Y AWIRT/CWIRT	H1	1
AN/APG-73 SRAs	F-18 PECULIAR	2
AN/APG-73 WRAs (PS, RDP, RR)	F-18 PECULIAR	3
OFFLOAD AN/USM-429 EA-6B	EA-6B	5
OFFLOAD AN/USM-429/484 EA-6B ORGANIC	EA-6B	1
OFFLOAD OJ-510	EA-6B	1
<b>Subtotal</b>		<b>59</b>
<i>Currently Support 500 UUTs</i>		
OTPS TRANSPORT IN-WORK		
PROGRAM	PLATFORM	OTPS QTY
OFFLOAD GACT GRAD PLUS LOT 1/2	EA-6B	2
OFFLOAD AN/ASM-608	Multi	1
OFFLOAD AN/USM-467 EA-6B	EA-6B	4 1
OFFLOAD OJ-510	EA-6B	1 1
OFFLOAD AN/USM-484 F/A-18	F-18 PECULIAR	1 5
V22	V-22	1
F/A-18 MIDS	Multi	1
OFFLOAD AN/USM-470(V)1(LOT 1/2)	F-18 PECULIAR	1 2
OFFLOAD ASM-614 ESTS EA-6B	EA-6B	1
AN/ALQ-126B RF SRAs	Multi	1
OFFLOAD AN/USM-458 NEWTS	Multi	1
<b>Subtotal</b>		<b>24 (14)(10)</b>
<i>227 UUTs In Work by above OTPSs</i>		

Legend	Planned Support Date
	September 2011
	December 2011

# CASS Overview

- **NxOMS**

- An extensible general purpose communications framework which encapsulates the task of securely sending, routing and receiving data, exposing the functionality through an Application Programming Interface (API)
  - Open Architecture, Multi-Service, Multi-ATE
- Phase 2 (Army, Ground Marine Corp, Navy)
  - Software Releases
    - Version 1.3.1.0 released on May 12, 2011
      - » Additional Windows OS support, Data Chunking, 64 bit support
    - Version 1.4.0.0 to be released on June 29, 2011
      - » Ground Marine Corps Support, Message Throttling, Enhanced User Interface
    - Version 1.5.0.0 release on August 31, 2011
      - » Army Support, Enhanced Marine Corps VIPER/T support, Windows Vista support, , Streamlined installation program, Software Update Service Client, Software Update Service Server (beta)
    - Version 2.0.0.0 to be released in September 2011
      - » Software Update Service Server Application
  - Phase 2 completion in September 2011

# CASS Overview

- **eCASS**

- System Requirements Review (SRR) / System Functional Review (SFR) was held August 31 and September 1, 2010
- Logistic Guidance Conference, CMRS Guidance Conference and TDP Guidance Conference complete
- Schedule Risk Assessment (SRA) completed October 29, 2010
- Integrated Baseline Review (IBR) completed December 2, 2010
- Systems Engineering Readiness Review (SERR) for PDR held January 10 - 12, 2011
- Preliminary Design Review (PDR) held May 24 – 26, 2011
- System Engineering Readiness Review (SERR) for CDR held October 24 - 27, 2011
- Critical Design Review scheduled for mid-January 2012

# CASS Initiative

- Budget
  - Intense pressure on NAVAIR budgets anticipated for the foreseeable future
  - CASS programs are strongly supported by our OPNAV resource sponsor
- Maintenance Enterprise System for ATE (MESA)
  - An initiative to develop a comprehensive IT architecture to support Automatic Test Systems
  - Includes TPS and SW development environment, source code and electronic data repository, OMS and NxOMS, directed test tools sets, reasoners, next generation TPS development language/environment, etc.
- Next Generation Development Language
  - An initiative to define the development language/environment to be used to replace ATLAS
  - Includes an update to policy, style guides, and constructs to ensure long term TPS sustainability
- AGCS
  - Acquisition of a replacement for CASS AGCS for FMS customers
  - Effort will rehost eCASS solution in an externally mounted enclosure

# CASS Initiative

- SRA/Depot Automatic Test System (SDATS)
  - Navy policy states that CASS is the preferred ATE solution for the Navy from factory to field.
  - This initiative will study the CASS Family architecture and capabilities to determine the applicability to Depot, Factory, and SRA testing
- Offload to eCASS
  - This initiative will select a sample set of CASS TPSs for traditional offload to eCASS instead of migration/translation process
  - The effort will involve the next generation TPS development language and eCASS full performance mode
  - A study of migrated and offload versions of the same TPS will be made to assess benefits
- CASS EO Improvements
  - Effort to replace the EO laser in the IPA to improve reliability
  - Effort to develop calibration verification TPS to reduce need for offsite calibrations

# Legacy ATE TPS Offload Status

PHASE I			
ATE		AIRCRAFT	
APM-469	RSTS	S-3	Removed from I-Level
AN/USM-247	VAST	S-3, F-14 E-2	Removed from I-Level
AAM-60 (v)6	EOSTS	S-3	Removed from I-Level; P-3 using (v)2 version
AN/USM-614	ESTS	EA-6B, SH-60, S-3	Removed from I-Level; 2 left at NADEP
AN/USM-403	HATS	S-3	Removed from I-Level
APM-457	TTS HPOC	S-3	Removed from I-Level
AN/USM-604	EETS	AV-8B	Removed from I-Level; 1 left at CNATTU; 2 left at NADEP
AN/APM-446	RSTS	F/A-18, AV-8B	9 Remain at I-Level
AN/USM-629	EOTS	F/A-18	8 Remain at I-Level
OJ-615/ALM	TTS	EA-6B	7 Remain at I-Level
AN/USM-470(V)1	ATS	F/A-18	Removed from I-Level
AN/AWM-23	RFTS	F-14	Removed from I-Level
AN/AWM-23	LFTS	F-14	Removed from I-Level
AN/AWM-23	C&DTS	F-14	Removed from I-Level
AN/AWM-23	CTS	F-14	Removed from I-Level

PHASE II			
ATE		AIRCRAFT	
AN/USM-484	HTS	EA-6B	F/A-18 SH-60
AN/USM-467	RADCOM	EA-6B E-2C	SH-60
AN/USM-429	CATIID	EA-6B	E-2C
AN/USM-470(V)2	TMV	SH-60	
AN/USM-458	NEWTS	AV-8B, F/A-18	
OJ-510/ALM	DTB	EA-6B	
PHASE III			
ATE		AIRCRAFT	
AN/ASM-686 Lot 1	IATS	F/A-18	
AN/ASM-686 Lot 2	IATS	F/A-18	
AN/ASM-608	IMUTS	Various	
A/E24T-205	GACTION/GRAD Actuators	E-2C, EA-6B, C-2	
AN/ARM-146A	AN/ARA-63	Various	
AN/ASM-167 & TS-2454A	AS/APC	EA-6B	
CAT IIID/HTS Orphans	OTPS-22	EA-6B	
ARM-200 (Marine only)	IATS	Various	

TPS development in-process

CASS TPSs being delivered

TPS effort completed

# Emerging Platform CASS TPS Efforts (Direct to CASS)

Platform	Lot	OTPS	I Level/Depot	IOC
V-22	1	9 OTPSs	I	Fielding
	2	8 OTPSs	I	5 Fielding 3 In DEV
	3	4 OTPSs	I	In DEV
	4	4 OTPSs	Depot	Jun 2012
Platform	OTPS		I Level/Depot	IOC
AA-1Z/UH-1Y	AWIRT/CWIRT		I	Fielding
	MC/HIADC		I	Dec 2013
	FCC		I	Fielding
MH-60R	ALFS		I	Sep 2013
	MMR		I	Jul 2013
	Acoustic Processor		I	Sep 2013
	TCDL		I	May 2014
MH-60R/S	ESM		I	Fielding
	MTS		I	Dec 2012
	MTS(TV)		I	Sep 2012

# Navy Items of Interest

## **AN/USM-708 Common RF Avionics Flightline Tester (CRAFT):**

- New O-level test set being developed to replace multiple legacy testers required to Link-4A data link, Automated Carrier Landing System (ACLS), TACAN, O-Level Sonobuoy RF data link, and VOR/ILS/GS/MB/LOC. *Provides a new Mode 5 IFF support capability for both aviation and surface Navy*
- IFF-only variant (AN/USM-719) developed & fielded to support surface Navy & USCG Mode 5 IFF applications.
- USM-708 & -719 have both received AIMS Certification.
- Contractor testing successfully completed December 2010
- Full Rate Production Decision Review successfully completed on 15 July 2011 and 732 Units released for production 28 July 2011.
- Fleet deliveries will commence March 2012 at a rate of 60 per month.



# Navy Items of Interest

## AN/USM-715 Rocket Launcher Tester:

- O and I-level test set used with the 2.75" and 5.0" Airborne Rocket Launchers. Used to check for the presence of a safety ground on the launcher firing lines as well as checking the intervalometer fire pulse amplitude and pulse width, i.e., perform verification/confidence check of the pod
- Designed & developed by NAWCAD AIR-4.8.6 Indianapolis Detachment via a MOA with PMA260
- All testing successfully completed and production decision made 15 April 2010
- IOC was in February 2011 and all deliveries to Fleet activities completed in October 2011.



## Program Loader Set:

- Replaces Navy's current Common Memory Loader Verifier Set (MLVS) with unit capable of uploading/verifying OFPs and User Data Files via single point or direct loading at O- and I- levels. Will support emerging enhanced bus capabilities
- Hill Air Force Base currently developing a Navy variant of USAF CAPRE to be hosted on hardware that meets USN operational and environmental requirements for use on a flight deck (more ruggedized/EMI/EMV).
- USAF is lead for all hardware & software development efforts with NAWCWD China Lake providing support for on-aircraft integration efforts.
- FRPDR planned for December 2012 with a June 2013 IOC.
- Will be capable of supporting new/emerging aircraft requirements as follows: E-2D, H-53K, H-60R, H-60S, P-8A



# Navy Items of Interest

## Automatic Wiring Test Set (AWTS)

- The AWTS employs advanced hardware, software, and automatic switching functions to execute test scripts for testing aircraft wiring harnesses. Provides automatic test capabilities to detect wire faults and determine the distance to the faults at Navy I- and D-Levels and Air Force O- and D-Levels of maintenance.
- Capable of running all legacy Navy Wire Test Set TPSs
- All 106 USAF and 56 Navy assets delivered to date.
- Additional assets order by P-3 Taiwan, F/A-18 Australia & E-2D program for use at Northrop-Grumman (1 each).



## Handheld Aircraft Wire Tester (HAWT):

- The HAWT is a hand-held Time Domain Reflectometer for testing aircraft cable harnesses at the O-Level.
- HAWT to be environmentally and electromagnetically suitable for use at Navy O-Level tester to detect faults, such as opens and shorts, and for determining the distance to those faults.
- Competitive Firm Fixed Price RFP closed on 01 August 2011. Contract awarded on 30 November 2011.

QUESTION?