Our Mission:
Develop and field world class aircraft survivability systems that maximize the survivability of Army aircraft against a continually evolving threat without degrading combat mission effectiveness.
Acquisition Partners

PEOAVN: Aircraft Platforms for ASE Systems
PEO AMMO: Aircraft Expendables (Flares & Chaff)
PEO STRI: Training Devices

Industry: Product OEMs
USG Labs (I2WD, ARL, NRL, AFRL): S&T Advancements

USAACE: User Representative & Requirements

Design-Develop-Deliver

PEO
AAE
DAE
PM

ASE PMs:
PM ASE (Army)
PMA-272 (Navy)
PM LAIRCM (USAF)
TAPO (SOCOM)

Intelligence community

AMC
AMCOM
AMRDEC
CERDEC
CECOM/ARAT
ACC

Product Support

OSD ATL: MDA
DOT&E: OT Test Oversight

Test & Evaluation Command: DT Test Oversight

HQDA
G-3/5/7: Requirements & Fielding Plans
G-4: Logistics
G-8 FDV: Resourcing
ASA(ALT): AAE, Resourcing, Logistics, FMS, and S&T
ASE-Threat Evolution

1980s
- IRCCM (flare rejection)
- Laser range-finder
- Analog processing
- Analog processors
- Lamp-based jamming
- Limited bands

1990s
- Reprogrammable processors
  - Laser beam riders
  - Digital processing
  - Gyro-stabilization
- Bus capability
  - Improved modulations
  - Upgraded antennas

2000s
- Advance IRCCM
  - Compact beam riders
  - Low probability of intercept (LPI)
- Improved IR protection
  - Laser-based jamming
  - Broader laser spectrum coverage

Today
- Pseudo-imaging
- Hyper-velocity missiles
- Active phased array radar
- Upgraded processors and software
  - Reduced false alarm rate
  - HF warning

Future
- IR imaging seeker
- LiDAR (laser radar)
- Digital Reprogramming
  - Smart bullets
  - Ultra Violet
- Integrated ASE
- Advanced Radar Warning
  - Expanded HF library
  - Improved SWaP
  - RF jammer
  - S&T efforts
  - Expendables

Advanced Expendables
AAR-57
AAR-57 (HF)
AVR-2B
AVR-2B
APR-39 D(V)2
APR-39C
ATDS
CIRCM
OT-225
OT-225
Missile Warning Systems

Common Missile Warning System (CMWS)

A passive integrated Infrared (IR) sensor and countermeasure suite utilizing five ultraviolet (UV) sensors to detect and display accurate threat location and dispense decoys and countermeasures.

Advanced Threat Detection System (ATDS)

New program of record to replace current missile warning system fleet wide. System is next generation sensor system to detect threat launch, display threats and direct countermeasures.
Infrared Countermeasures

Advanced Threat Infrared Countermeasures (ATIRCM)

- MBL (Multi-band Lasers)
- JHCU (Jam Head Control Units)
- OT-225
- IRJH (Infrared Jam Heads)

ATIRCM


Common Infrared Countermeasure (CIRCM)

- Laser Pointer/Tracker
- Processor
- Laser

CIRCM

Is the future light-weight laser based infrared countermeasure system for Department of Defense, protecting rotary-wing, tilt-rotor, and small fixed wing aircraft from advanced MANPADS.
Detects, categorizes, and prioritizes pulse Radio Frequency emitters and provides visual and aural warning to the aircrew to improve situational awareness.

**APR-39A(V)1/4**
- Fielded 1980’s-90’s

**APR-39C(V)1**
- Fielded FY2010
- Processor sustainment upgrade with limited increase to memory and reprogrammability.

**APR-39D(V)2**
- FUE 2018
- Multi-Service APR-39D(V)2 ECP modernizes 20-year-old RWR
- Increased system sensitivity enabled by digital technology increases RWR detect/standoff range
- Provides growth path to integrated jamming

**Laser Detecting Set (LDS)**

A passive laser warning system that detects, processes and displays threat information resulting from aircraft illumination by laser designators, rangefinders and beam rider missile guidance systems.

**AVR-2B(V)1 system shown (5 LRUs)**
Today 2017

2018
- Develop IASE interface application in support of IADS UONS - A

2019
- Integrate IASE interface application into MCP-401 host hardware

2020
- Qualify IASE interface application with the MCP-401

2021
- Platform develop OFPs that use IASE interface application (UH-60M lead)

2022
- Next generation ASE interfaces to platforms via IASE interface application within the MCP-401
- IASE application expanded to include ASE status (off-boarding), control, display management, and common threat

Tomorrow 2023

Roadmap to IASE
PMO ASE Foreign Military Sales (FMS) is currently supporting 17 countries with a total of 34 active cases valued at $671M.

- There are currently 22 cases in development ($600-$800M potentially).
- Bilateral Cooperative Test and Evaluation (CTE) agreement with UK and Australia.
- Multilateral CTE agreement with UK, Australia and Canada.
- Bilateral Science and Technology (S&T) project agreement (CPA) with UK.
- NATO System Concept and Integration (SCI) 260.
COL Jong H. Lee
Project Manager Aircraft Survivability Equipment
6726 Odyssey Drive
Huntsville, AL 35806-3302
Office Phone: 256-955-0599
jong.h.lee4.mil@mail.mil