

# Joint Attack Muniton Systems Project Office Modernization & Readiness Strategy



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*Any Warfighter - Anywhere - All The Time*



# JAMS Family of Products



## HELLFIRE Missiles

FA - K - N - R Variants



Semi-Active Laser (SAL) HELLFIRE



Longbow HELLFIRE Millimeter Wave



## Joint Air-to-Ground Missile



## Launchers and Test Sets



AN/AWM-101A TSGMS



M260/M261 Rocket Launchers



Launcher Test Station



M299 Launcher

## Rockets



Advanced Precision Kill Weapon System (APKWS)

## Small Guided Munitions

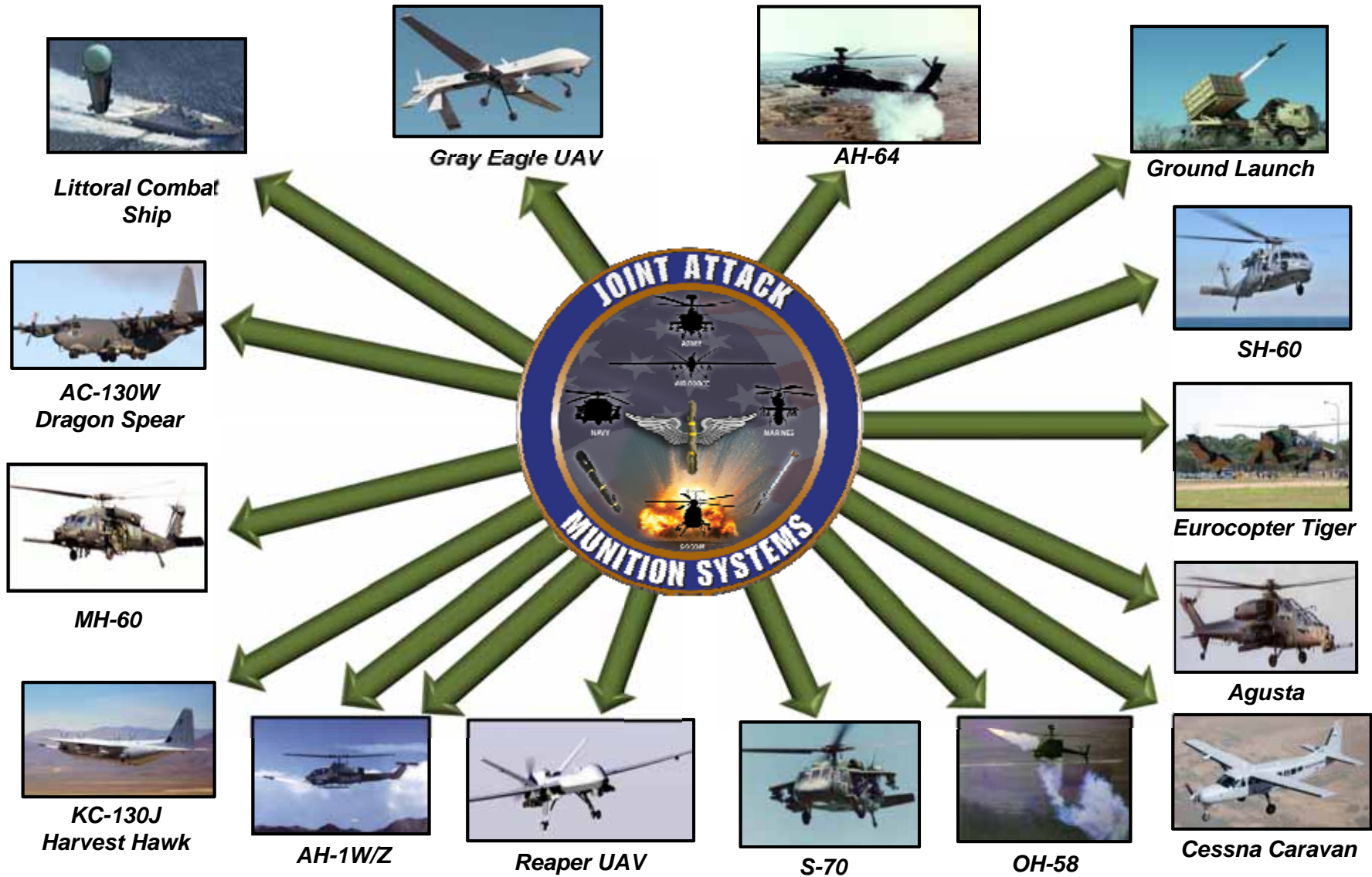


2.75" Hydra Rocket System

Any Warfighter - Anywhere - All The Time



# JAMS Customers/Platforms

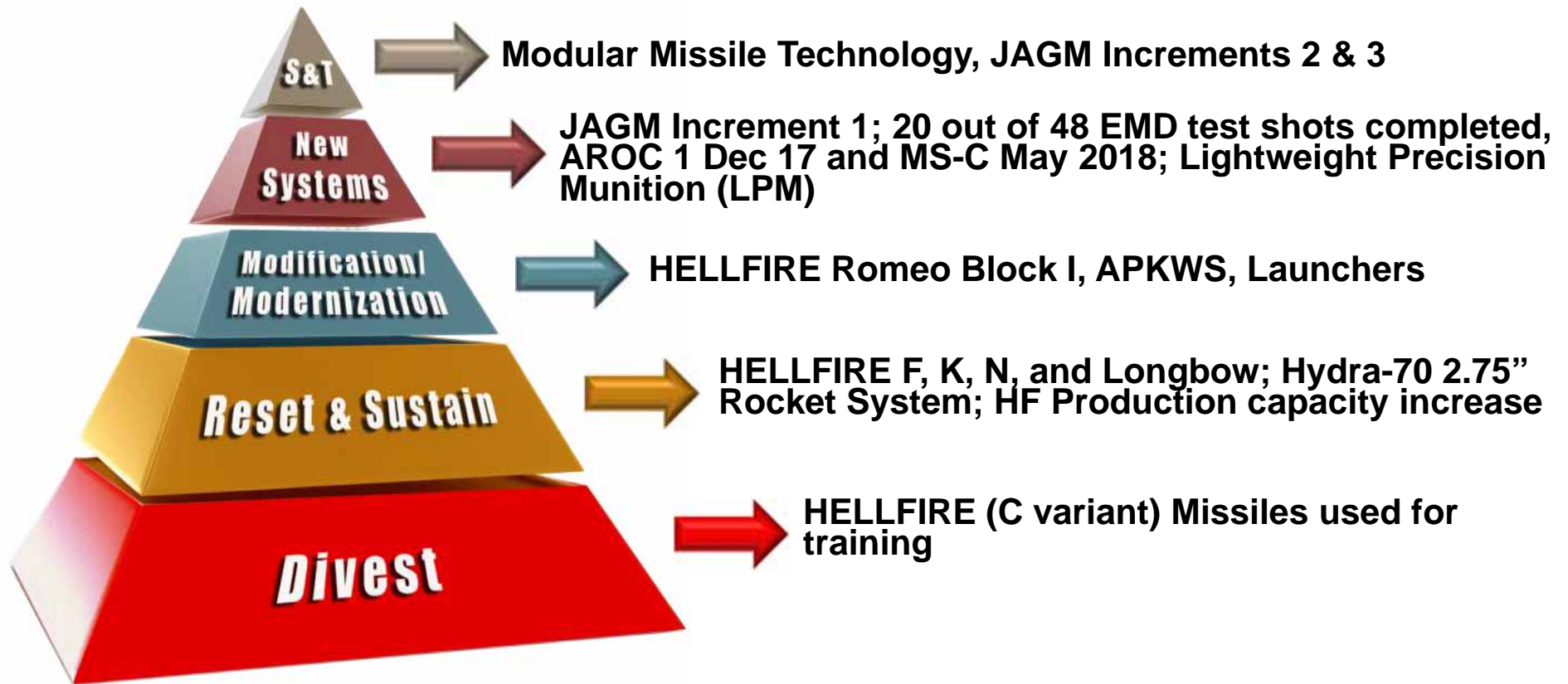


Any Warfighter - Anywhere - All The Time





# Modernization While Sustaining Readiness





# HELLFIRE R-2



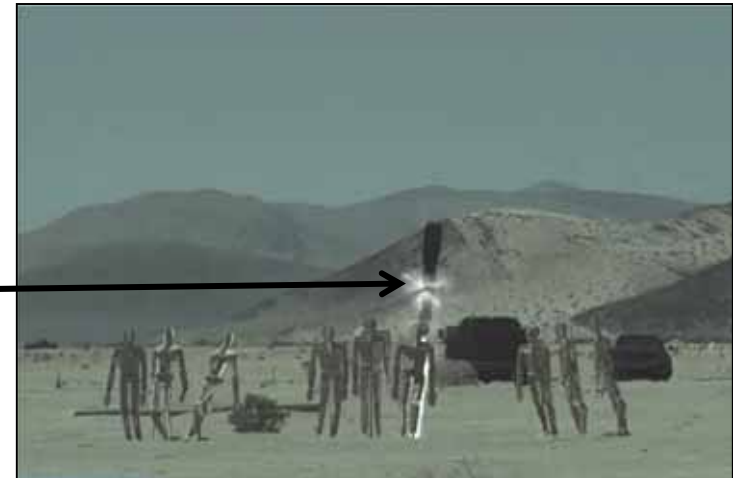
## AGM-114R-2



Weight = 108 lbs Length = 64"



HOB Fuze Function



### Scope

- Same as R, plus the Height of Burst (HOB) Sensor

### Milestones - Accomplishments

- AFSOC early fielding of R2 - Jun 2013
- Air Force qualification of R2 Complete - FY14
- Army Gray Eagle UMRs

### Upcoming Events/Activities

- Army FY15/16 Procurement of R2/R (60/40 ratio)
- Army FY17 Procurement of R2/R (70/30 ratio)
- Army FMR in work; Complete in FY18
- Army Apache Integration in FY18 (tentative)



Improved Fragmentation over Point Detonation



# JAGM Missile



- Longbow (Radar)**
- Shelf life expiration
  - Out of Production

**HELLFIRE (Laser)**

- Improved Fire & Forget
- Moving Targets
- Adverse Weather
- Improved Operational Flexibility



JAGM Backward Compatible  
to HELLFIRE II Platforms

- Fire + forget with options
- Multi-mode seeker (MMW/SAL)
- AH-64/AH-1Z - Initially

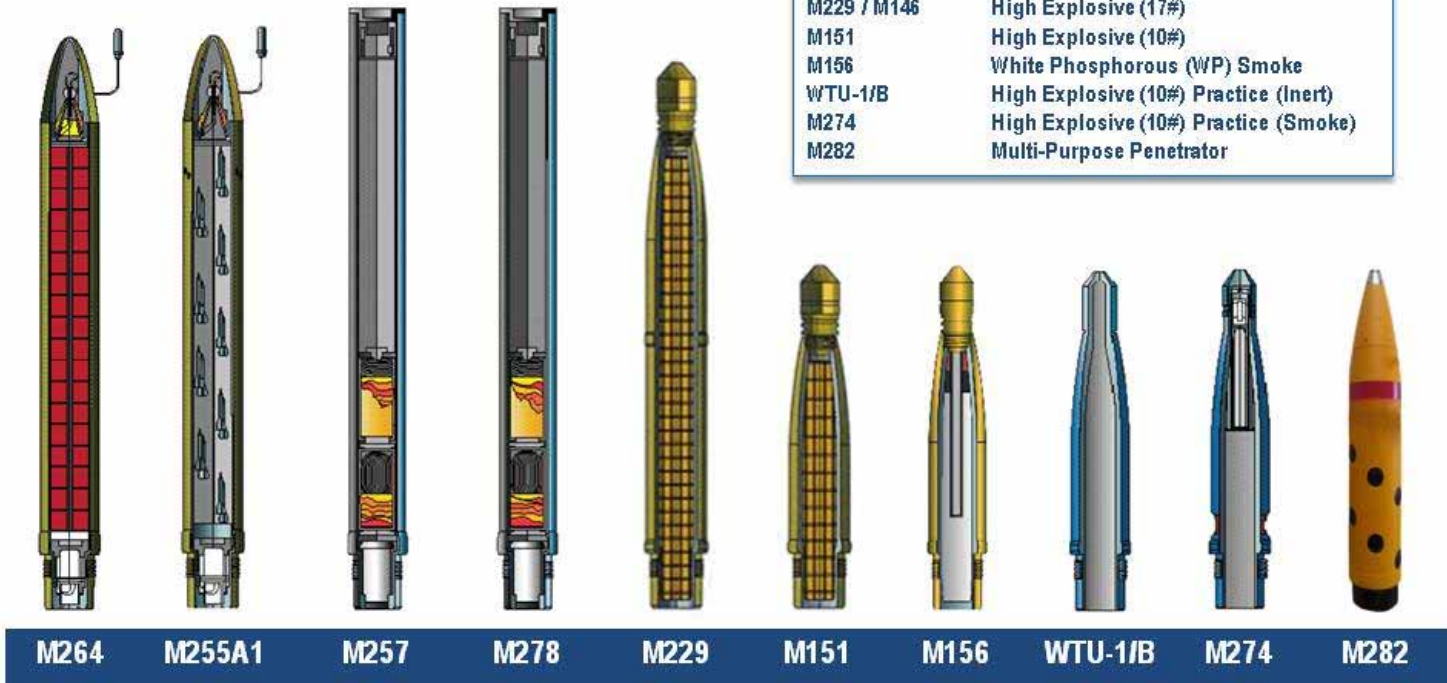


# Hydra-70 2.75 Inch Rocket Variants



Advanced Precision Kill  
Weapon System (APKWS) II  
Guidance Section

M264	Red Phosphorus (RP) Smoke
M255A1 / M149	Flechette
M257	Visible Illumination Flare
M278	Infrared Illumination Flare
M229 / M146	High Explosive (17#)
M151	High Explosive (10#)
M156	White Phosphorous (WP) Smoke
WTU-1/B	High Explosive (10#) Practice (Inert)
M274	High Explosive (10#) Practice (Smoke)
M282	Multi-Purpose Penetrator





# APKWS Integration Path Forward for U.S. Army Aircraft

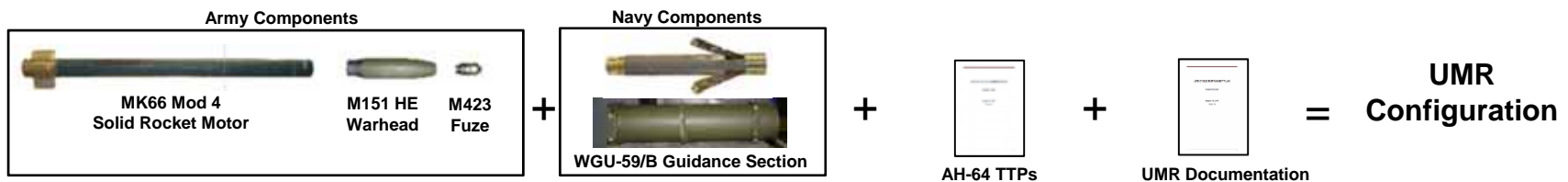


**Background:** APKWS is an ACAT III Navy Program of Record

- March 2016 U.S. Army Aviation Center of Excellence Equipment Modernization Strategy Annex B – Munitions / Lethality Strategy states:
  - “(APKWS)...is an interim solution for Army Aviation until such a time as a Small Guided Munition Program of Record is established/approved to deliver a forward firing munition, a drop/glide munition, or combination of both...”

## Integration Approach:

- APKWS Urgent Materiel Release renewed for deployment and fielding to AH-64D/E Apache May 2017



- APKWS Full Materiel Release 1QFY19







# JAMS FY17 Accomplishments



## Air to Ground Missile Systems

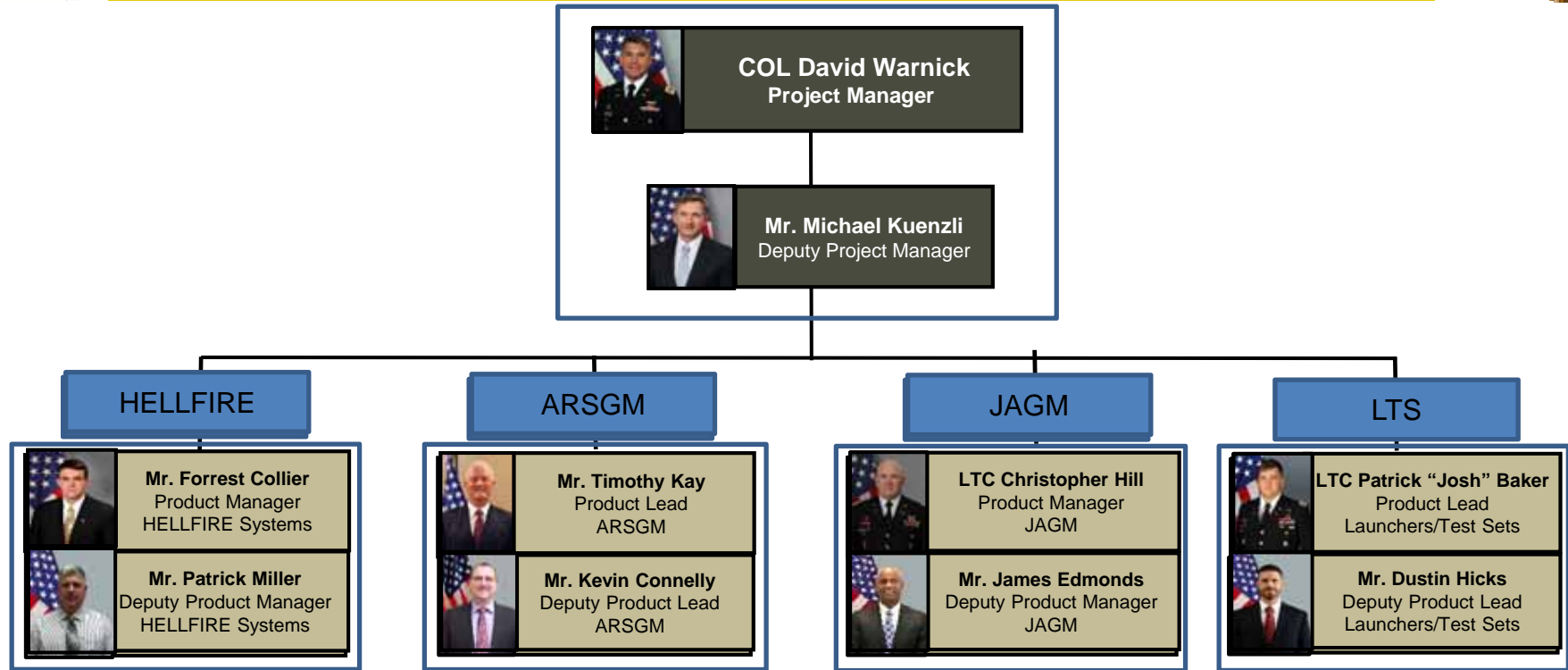
- **Production**
  - Delivered 6,840 HELLFIRE missiles and 361 launchers to the Army, Navy, Air Force, and Foreign Military Customers
  - Planning to deliver 8,500 HELLFIRE missiles FY18 and increasing production
- **Development**
  - JAGM completed 20/48 EMD tests, on track for successful AROC Dec 2017 & MS-C May 2018
  - HELLFIRE Longbow L7A ONS fielded April FY17
  - Gray Eagle integration fully resourced for JAGM

## Aviation Rockets and Small Guided Munitions

- **Production**
  - Hydra experienced a break in production (continued to build Warheads/Motors)
    - Resume product delivery Nov 2017
  - Delivered 39,087 AURs and 40,686 Rocket Motors to the Army and Navy combined.
  - APKWS production ramp being executed by Navy (Army will receive 2,000 FY18, 4,000 FY19 and beyond)
- **Development**
  - APKWS Full Materiel Release 1QFY19
  - Executing MPP ONS (Multi-purpose Penetrating Warhead)
  - Lightweight Precision Munition (LPM) ONS for Gray Eagle
  - Army Aviation Weapons, Sub-Systems, and Munitions ICD in staffing



# Joint Attack Mmunition Systems (JAMS) Project Office



# GD-OTS Hydra 70

## 2017 Cribbins Aviation Symposium



**Dave Whitehouse**  
**Sr. Director, Rocket Programs**  
**Williston, VT**

**TACTICAL AIR MUNITIONS**

- 60+ year old Program
  - Area suppression
  - Illumination, obscuration, marking
- Introduction of Guided capabilities expands applications
  - Reduced collateral damage
  - Point targets
    - Buildings
    - Vehicles
- Needs/ Industry focus
  - Warhead Improvements
    - Shaped Charges, Penetrators
    - Dual Safe/Programmable Fuzing







**QUESTIONS?**