

## Letter of Request (LOR) Checklist for PEO MS - JAMS

### 1 Partner Information

- 1.1 Identify intended/anticipated recipient unit for any defense articles and/or services purchased
- 1.2 Technical POC
  - 1.2.1 Name
  - 1.2.2 Address of Originator
  - 1.2.3 Partner Nation military service (Army, Navy, Air Force)
- 1.3 Identify any "third party" involvement so MILDEP and Implementing Agencies (IA) may initiate appropriate reviews and approvals.
- 1.4 LOR Reference Number
- 1.5 Source of Funding (FMS, FMF or Other)
- 1.6 Does the LOR include a requested payment schedule?
- 1.7 Request for LOA, Case amendment, or P&A?
- 1.8 Does LOR request a Waiver for Non-Recurring Cost (NC) Charges?
  - 1.8.1 Justification must be provided to support this request
- 1.9 Is LOR requesting Sole Source Procurement
  - 1.9.1 Specify manufacturer
  - 1.9.2 Specify applicable part number(s)
  - 1.9.3 Enclose sole source request (sent to U.S. Army Security Assistance Command)
  - 1.9.4 Is the item an Excess Defense Article (EDA)?
- 1.10 Additional comments
  - 1.10.1 Special terms/requests
  - 1.10.2 Legal requirements/issues
- 1.11 Requested delivery date
- 1.12 Projected LOA signature timeframe

### 2 Hardware Requirements

- 2.1 **Identify your concept of operations**
  - 2.1.1 Threats
  - 2.1.2 Environment/Climate
  - 2.1.3 Operational tempo
- 2.2 **Identify what system(s) you are procuring:**
  - 2.2.1 **Joint Attack Munition Systems (JAMS)**
    - 2.2.1.1 Hydra-70 (2.75" Rocket)
      - 2.2.1.1.1 System Description: Hydra-70 rockets perform a number of roles, including anti-material, anti-personnel, and air-to-ground suppression missions.
      - 2.2.1.1.2 MK 149 Flechette – Antipersonnel Warhead Dispensing Unit (WDU)4 A/A Fuze
        - 2.2.1.1.2.1 System Description: This warhead is used for anti-personnel targets, utilizing flechettes dispersed at the time of explosion.
      - 2.2.1.1.3 M151 High Explosive Point Detonation (HEPD)

- 2.2.1.1.3.1 System Description: The M151 HEPD is an anti-personnel and anti-material warhead.
- 2.2.1.1.4 M156 Smoke White Phosphorous
  - 2.2.1.1.4.1 System Description: The M156 White Phosphorous warhead is used for target marking and incendiary purposes in open and jungle terrain.
  - 2.2.1.1.4.2 M423/M427 Fuze variant
- 2.2.1.1.5 M229 HE (High Explosive)
  - 2.2.1.1.5.1 System Description: The M229 HE warhead is currently in inventory with SOF. An elongated version of the M151, it is commonly referred to as the 17-Pounder. The M229 has a burst radius of 14+ meters with a lethality radius of approximately 75 meters. Not qualified on U.S. platforms. Customer is responsible all costs related to integration/validation/qualification.
- 2.2.1.1.6 M255A1 Flechette
  - 2.2.1.1.6.1 System Description: The M255A1 flechette warhead is used primarily against antipersonnel targets. Utilizing a fuze timer, the warhead detonates at a point before the target where expulsion charge is initiated, separating flechettes from the mass.
- 2.2.1.1.7 M255A2 Flechette
  - 2.2.1.1.7.1 System Description: The M255A2 is flechette warhead is used primarily against antipersonnel targets. Utilizing a fuze timer, the warhead detonates at a point before the target where expulsion charge is initiated, separating flechettes from the mass. The A2 version adds a Night Reliability Indicated that enables flechette deployment detection when using night vision goggles.
- 2.2.1.1.8 M264 RP Smoke Red Phosphorous
  - 2.2.1.1.8.1 System Description: The M264 warhead is used for smoke obscuration in visible light spectrum. Smoke pellets are easily modified to obscure Infrared (IR).
- 2.2.1.1.9 M274 Smoke signature (Training)
  - 2.2.1.1.9.1 System Description: The M274 training warhead provides a ballistic match to the M151 HE warhead for use in gunnery training.
- 2.2.1.1.10 M257 Illuminating Flare and M278 Infrared (IR)Flare
  - 2.2.1.1.10.1 System Description: These warheads are designed for battlefield target illumination; the M278 variant

provides infrared illumination that must be used in conjunction with IR goggles.

2.2.1.1.11 M282 High Explosive Incendiary (HEI)

2.2.1.1.11.1 System Description: The M282 High Explosive Incendiary (HEI) warhead is considered a 'bunker buster' and used for engaging light armored vehicles, bunkers, and reinforced MOUT targets. The fuze has a delay feature and detonates with blast and fragmentation effects.

2.2.1.1.11.2 M423 Fuze variant

2.2.1.2 Advanced Precision Kill Weapon System (APKWS) II Guidance Section

2.2.1.2.1 System Description: The WGU-59/APKWS II Guidance Section (GS) is an optional assembly placed on the Hydra-70 rocket with a M151 warhead. It adds a precision point target capability. Guidance sections, M151 warheads, and motors are procured separately and must be assembled in the field. APKWS is a Navy Program of Record and coordination with the Navy is required.

2.2.1.2.2 Note: special tooling and training for both the air crew and ground crew is required. The Navy will provide the tooling and ground crew training. Air crew training will be provided by the platform.

2.2.1.2.3 If intended for use on an Army platform, the Army will manage the case/lines and task the relevant portion to Navy.

2.2.1.2.4 If intended for use on a non-Army platform, the Navy will manage the case/lines and task the relevant portion to the Army (rocket motors, warheads, Hydra tools, etc).

2.2.1.3 Hellfire

2.2.1.3.1 Hellfire AGM-114R and AGM-114R2 (HELLFIRE II)  
System Description: The AGM-114R is used against heavy and light armored targets, thin-skinned vehicles, urban structures, bunkers, caves and personnel. The AGM-114R provides variable delay fuzing, improved safety, and enhanced reliability. The AGM-114R2 adds a Height of Burst (HOB) capability to the AGM-114R that allows for warhead detonation at a pre-determined height. The missile comes in a reusable aluminum container designed to protect the missile from shock, vibration, and other environmental conditions encountered during shipment, handling, and storage. Hellfire II is the primary armament for the AH-64 Apache and MQ-9 Reaper.

#### 2.2.1.3.2 Hellfire AGM-114L (Longbow)

System Description: The Longbow HELLFIRE missile is a fire-and-forget missile that uses radar-aided inertial guidance against armored targets. The missile comes in a reusable aluminum container designed to protect the missile from shock, vibration, and other environmental conditions encountered during shipment, handling, and storage. The missiles are provided from only from USG inventory, once approved by Department of the Army, and include updated Ammo Data Cards. AGM-114L is used on the AH-63 Apache.

#### 2.2.1.3.3 M36E Captive Air Training Missile (CATM)

System Description: The CATM is a flight-training missile that consists of a functional guidance section coupled to an inert missile bus. The M36E CATM does not have a functional rocket motor or warhead, and cannot be launched. The missile has an operational semi-active laser seeker that can search for and lock-on to laser-designated targets. It functions like a tactical missile (without launch capability) during captive carry on the aircraft, making it suitable for training the aircrew in simulated HELLFIRE missile target acquisition and lock. The missile comes in a reusable aluminum container designed to protect the missile from shock, vibration, and other environmental conditions encountered during shipment, handling, and storage.

#### 2.2.1.3.4 M34 HELLFIRE Dummy Missile

System Description: The M34 missile is a completely inert, non-operational replica of the tactical HELLFIRE missile. It is used to train maintenance personnel in missile uploading/downloading, storage, and handling procedures. It can also be used to train aircrew since the missile has the same shape, weight (99 lbs.), attach points, and center of gravity as the HELLFIRE tactical missile (no specific variant). The missile comes in a reusable aluminum container designed to protect the missile from shock, vibration, and other environmental conditions encountered during shipment, handling, and storage.

#### 2.2.1.3.5 HELLFIRE Missile Maintenance

Organizational Maintenance (O-Level): Consists of visual inspection and cleaning of the missile.

Depot Maintenance (D-Level): Defects identified at the O-Level can be repaired at the HELLFIRE Missile Depot (HMD) under FMS case repair and return.

#### 2.2.1.4 Launchers

##### 2.2.1.4.1 M260 Rocket Launcher (7-shot)

2.2.1.4.1.1 System Description: The U.S. Army Light Weight Rocket Launcher (LWL) are the M260 (7-tube) and M261 (19-tube) used as the firing point for point-detonated and cockpit settable fuzed 2.75" folding rockets.

##### 2.2.1.4.2 M261 Rocket Launcher (19-shot)

2.2.1.4.2.1 System Description: The U.S. Army Light Weight Rocket Launcher (LWL) are the M260 (7-tube) and M261 (19-tube) used as the firing point for point-detonated and cockpit settable fuzed 2.75" folding rockets.

##### 2.2.1.4.3 Hellfire Launcher M299

2.2.1.4.3.1 System Description: The M299 Longbow HELLFIRE Launcher (LBHL), a 4-Rail launcher designed to carry the complete family of AGM-114 HELLFIRE missiles. The launcher has a MIL-STD-1760 compatible mission store tailored for carriage and launch of up to four missiles. The LBHL has a digital 1553 data bus compatible design and provides electronic functions required by the launcher and missiles to interface with platforms via multiplex bus commands. The LBHL also provides AC to DC power conversion for supplying missile power. Launcher diagnostic and fault detection is conducted by the AWM-101B test set and the Launcher Test Station. Supportability of the M299 HELLFIRE Launcher is planned through 2030.

#### 2.2.1.5 Test Sets

##### 2.2.1.5.1 AN/AWM-101B Test Set

2.2.1.5.1.1 System Description: The AN/AWM-101B Test Set is used to test and troubleshoot the HELLFIRE Modular Missile System (HMMS) on the aircraft or with the Launcher Test Station. The test set is used in conjunction with the Maintenance Support

Device (MSD) and interfaces aircraft systems using the HELLFIRE missile/launcher interface. The AN/AWM-101B test set interfaces with a Maintenance Support Device (MSD) loaded with the Test Set Guided Missile System (TSGMS) software.

#### 2.2.1.5.2 Launcher Test Station (LTS)

2.2.1.5.2.1 System Description: The LTS which provides shop-level capability for M299 launcher testing. The LTS is used in conjunction with the AN/AWM-101B Test Set and the MSD. The LTS provides off-aircraft test capability and fault isolation to Circuit Card Assemblies (CCAs) and Line Replaceable Units (LRUs) for the M299 Launcher, M279 Launcher, M272 Launcher, Launcher Electronics Assembly (LEA), and M36 training missile.

#### 2.2.1.5.3 Maintenance Support Device (MSD)

2.2.1.5.3.1 System Description: The MSD, loaded with the Test Set Guided Missile System (TSGMS) software, is a computer workstation (laptop) that functions as the user interface for the AN/AWM-101B test set.

#### 2.2.1.5.4 Test Set Guided Missile System (TSGMS) Software

2.2.1.5.4.1 System Description: The Test Set Guided Missile System software installed on the Maintenance Support Device (MSD) for HELLFIRE test applications using the Launcher Test Station and AN/AWM-101A/B Test Set Guided Missile System. Each TSGMS application includes a Maintenance Operational Check (MOC) to verify proper operation of a unit under test (UUT) and Fault Isolation Procedures (FIPs) to diagnose faults identified by the MOC. TSGMS includes the Self-Test application for the AN/AWM-101A/B and other authorized UUTs. The software is provided on a compact disk and can be used on multiple MSDs.

### 3 Procurement Requirements

- 3.1 What quantity of hardware are you requesting?
- 3.2 Are there any unique integration requirements?
- 3.3 Are there any Communications Security (COMSEC) requirements?
  - 3.3.1 Encryption or interoperability requirements?
- 3.4 Do you need ground support equipment for the hardware? Specify quantity
- 3.5 Do you require special tools to support the hardware?

- 3.6 Do you require test and diagnostic equipment?
- 3.7 Do you have facilities to securely store the hardware and ammunition when not in use?
- 3.8 Will you require a spares package?
  - 3.8.1 Specify duration (years) of spares
  - 3.8.2 Specify operational tempo for hardware

#### **4 Logistics Support Requirements**

- 4.1 Do you require a contractor field service representative?
  - 4.1.1 Specify duration
- 4.2 Is a site survey required?
- 4.3 Do you require basic hand tools?
- 4.4 Is there a requirement for any non-standard equipment?
- 4.5 Is a CONUS based repair and return system required for the hardware?
- 4.6 Do you require contractor maintenance on the hardware?
- 4.7 Identify how many sets of Technical Manuals are required
  - 4.7.1 Hard copy
  - 4.7.2 Compact Disc (CD)

#### **5 Training Requirements**

- 5.1 Does the LOR contain training requirements? Specify what training is desired associated with the FMS effort.
  - 5.1.1 M36 Captive Air Training Missile (CATM) and M34 Dummy Missile (O)-Level Maintenance Training
    - 5.1.1.1 Training Description: CATM and Dummy Missile O-Level maintenance training (in the U.S. or in country). The training course is designed to train users on the organizational level operation and maintenance of the CATM and Dummy missiles. Qualified instructors sourced from U.S. Government or contractors will conduct training
  - 5.1.2 M299 Launcher Organizational (O)-Level Maintenance Training
    - 5.1.2.1 Training Description: M299 HELLFIRE Launcher O-Level maintenance training (in the U.S. or in country). The training course is designed to train users on the organizational level operation and maintenance of the launcher. Qualified instructors sourced from U.S. Government or contractors will conduct training.
  - 5.1.3 M299 Launcher Intermediate (I)-Level Maintenance Training
    - 5.1.3.1 Training Description: M299 HELLFIRE Launcher I-Level maintenance training (in the U.S. or in country). The training course is designed to train users on the intermediate level operation and maintenance of the launcher. Qualified instructors sourced from U.S. Government or contractors will conduct training.
  - 5.1.4 AN/AWM-101B Test Set Training
    - 5.1.4.1 Training Description: AN/AWM-101B Test Set training on aircraft (in the U.S. or in country). The training course is designed to train users on the

operation and maintenance of the AN/AWM-101B Test Set as a standalone test set. Qualified instructors sourced from U.S. Government or contractors will conduct training. Note: The instruction for the LTS/101B is contained in the Longbow Apache Avionics, Armament, and Electrical Systems repairer MOS 15Y transition course (appx 10 weeks in length) and the MOS 15Y Initial Entry Training (appx 28 weeks in length). These courses cover everything required to maintain the Avionics, Armament, and Electrical Systems on the Longbow Apache. The actual training for the LTS/101B portion is within Weapons Part II - POI 552-15Y10011. If additional training is required and/or it is a non-Apache user, the training will be contracted from Lockheed Martin or another designated contractor.

5.1.5 HELLFIRE Launcher Test Set Training (AWM-101B and LTS)

5.1.5.1 Training Description: Combined AWM-101B and Launcher Test Station (LTS) training in a classroom environment (in the U.S. or in country). The training course is designed to train the user on the operation and maintenance of the AWM-101B and the LTS. Duration of the course is 40 hours and topics include test set operation and maintenance, self-test, and troubleshooting. Qualified instructors sourced from U.S. Government or contractors will conduct training. Note: The instruction for the LTS/101B is contained in the Longbow Apache Avionics, Armament, and Electrical Systems repairer MOS 15Y transition course (appx 10 weeks in length) and the MOS 15Y Initial Entry Training (appx 28 weeks in length). These courses cover everything required to maintain the Avionics, Armament, and Electrical Systems on the Longbow Apache. The actual training for the LTS/101B portion is within Weapons Part II - POI 552-15Y10011. If additional training is required and/or it is a non-Apache user, the training will be contracted from Lockheed Martin or another designated contractor.

5.2 Will you have an in-country training requirement (MTT)? How many locations?

5.2.1 Is there a training facility or classroom space available to accommodate students?

5.3 How many students will require training? Please specify skill level of students

5.4 Will there be a recurring training/certification requirement?

5.5 Will you have any unique training requirements that require development of courseware?

5.6 Will you require training aides/devices/simulators to assist with training?

5.7 Is English language training required?

**6 Transportation Requirements**

6.1 Does the LOR specify any special transportation instructions?

6.1.1 Location

6.1.2 Point of Contact at location (Ship to/Mark for)

6.1.3 Mode of transport (air, sea, land) instructions



- 6.2 Do you have a freight forwarder that will be responsible for the transportation of all goods and services?
- 6.3 Does your Freight Forwarder have all required Import/Export licenses?
- 6.4 Is your Freight Forwarder registered with the US Department of State?
- 6.5 Does the LOR specify source direction for transportation?