

# MILITARY OPERATIONS AWARD

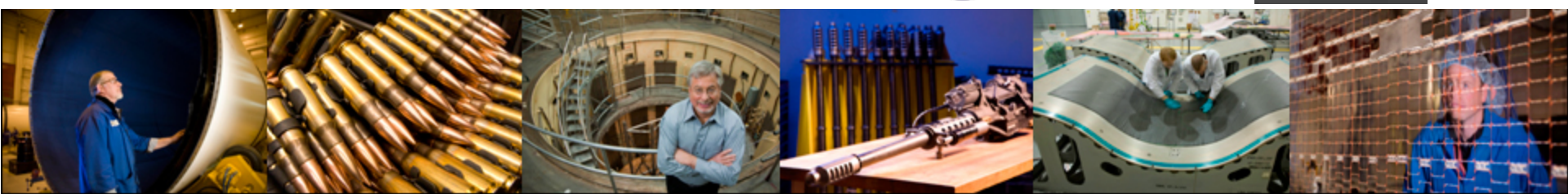
## Lieutenant Colonel Kelly Laughlin, USA

### APDM, Guided Precision Munitions and Mortar Systems

Kelly Hanink  
15 May 2012



Promoting National Security Since 1919



To recognize an individual, crew or unit who has made significant contributions in operational employment, tactics or combat applications of guns and ammunition and/or rockets and missiles which have impacted the readiness, capabilities or results of U.S. military activity.

A significant contribution is considered to be superior performance in an operational environment, development of tactics, training or leadership.

- **21 years in the United States Army**
  - Targeting Officer, III Corps Artillery, Ammunition Platoon Leader, Firing Battery Platoon Leader and Fire Direction Officer, 3-17<sup>th</sup> Field Artillery Battalion, Fort Sill, Oklahoma
  - Battery Commander, Headquarters and Headquarters Battery, 4-42<sup>d</sup> Field Artillery Battalion, Battery Commander, Service Battery, 4-42<sup>d</sup> Field Artillery Battery, and Assistant Fire Support Coordinator, 4<sup>th</sup> Infantry Division, Fort Hood, Texas
  - Aide De Camp, Commanding General, Tank and Automotive Command
  - Military Deputy to Advanced Engineering Technology Directorate (AETD), United States Army Armament Research, Development and Engineering Center (ARDEC)
  - Director of Plans, Joint Contracting Command-Iraq/Afghanistan (JCC-I/A), Baghdad, Iraq
  - Assistant Product Manager, Guided Precision Munitions and Mortar Systems, May 2008 - June 2012
- **PhD in Mechanical Engineering from University of Oklahoma with specialization in ballistics analysis**

- **Flawlessly executed the APMI Phase 2 Development and Qualification Program as Assistant Product Manager, Guided Precision Munitions & Mortar Systems (Jan 2010 to Feb 2011)**
- **Skillfully led a completion of the very first NET training and a tactical end-to-end demonstration at Fort Drum, NY and with the 3<sup>rd</sup> Brigade, 10<sup>th</sup> Mountain Division (17-28 Jan 2011)**
- **Successfully completed the authentication of TM 9-1230-785-10: Operator's Manual for the XM701 PLUMSS and XM395 Cartridge by U.S. Logistics Support Agency (LOGSA) (20 Jan 2011)**
- **Provided essential support to the highly successful 1<sup>st</sup> XM395 Cartridge Production Lot Acceptance Test (LAT), witnessed by the VCSA, General Peter Chiarelli (9 Feb 2011)**
- **Deployed and masterfully led the 4 NET teams to train the initial 4 BCTs individually throughout Afghanistan in support of OEF. LTC Laughlin was responsible for leader briefings to BCT and battalion commanders and for direct coordination with BCT, battalion, and company fire support personnel to ensure the proper execution of APMI fielding and NET training; subsequently, upon redeployment, continued close coordination of all APMI NET planning and execution, both in CONUS and in OEF (Mar to Dec 2011 – Deployed Mar to Jul 2011)**
- **Critical key to the success of the 1<sup>st</sup> NET training and live fire in theater with the 1<sup>st</sup> Battalion, 506<sup>th</sup> Infantry Regiment, 4<sup>th</sup> Brigade Combat Team, 101<sup>st</sup> Airborne Division (26 Mar 2011)**
- **Singularly responsible for the development and implementation of a modified CONUS-based APMI NET Program of Instruction (POI) with Integrated Precision Targeting instruction and Training Live Fire; subsequently, he directed the first successful modified CONUS NET training with live fire with the 4<sup>th</sup> Brigade, 82<sup>nd</sup> Airborne Division at Fort Bragg (15-18 Nov 2011)**



**1<sup>st</sup> XM395 Cartridge Shot in OEF (Training)  
1<sup>st</sup> Battalion, 506<sup>th</sup> Infantry Regiment, 4<sup>th</sup>  
Brigade Combat Team, 101<sup>st</sup> Airborne Division  
26 March 2011**



**1<sup>st</sup> XM395 Lot Acceptance Test, witnessed by VCSA General Chiarelli at YPG**



**LTC Laughlin with 1<sup>st</sup> XM395 Cartridges in theater**

- **Colonel J. Scott Turner, Jr., USA**

- Project Manager, Combat Ammunition Systems – Indirect Fire



- **Mr. David L. Hancock**

- Deputy (Retired), Firepower Branch, Soldier Requirements Division, Maneuver Center of Excellence



## 2012 NDIA Armaments Division Award Nomination – Military Operations Award

### Nominee: LTC Kelly Laughlin

#### Executive Summary

Lieutenant Colonel Kelly Laughlin is nominated for the NDIA Armaments Division Military Operations Award for his extraordinary contributions to the U.S. Army's Accelerated Precision Mortar Initiative (APMI). Due directly to LTC Laughlin's superior leadership and matchless technical acumen, within 2 years of validating the urgent ONS, this initiative completed Urgent Material Release (UMR) and fielded the XM395 120mm precision mortar cartridge, the XM701 Precision Lightweight Universal Mortar Setter System (PLUMSS), and 2 new software releases for existing hardware, M150/M151 MFCS Software, Version 6.1 and M32 LHMBC Software, Version 4.0. In line with the 2012 conference theme, "21<sup>st</sup> Century Weapon Systems – Providing the Right Response," LTC Laughlin's exceptional efforts and leadership have been critical to the success of fielding this first-of-its-kind, organic precision mortar munition capability to the maneuver battalion commanders, now successfully employed in military operations since June 2011. With four concurrent UMR projects in process for approval, LTC Laughlin's rare combination of both technical and tactical expertise was critical in leading the successful integration and UMR approval of this 'System of Systems' within a very compressed 10-month qualification timeline after contractor down-select. Accordingly, LTC Laughlin provided vital leadership, guidance, and input essential to the development of the necessary Tactics, Techniques, and Procedures (TTPs), New Equipment Training (NET) plans and materials, and logistics supportability aspects of fielding this new capability quickly, efficiently, and reliably. Subsequently, leading from the front and by example, LTC Laughlin deployed ahead of initial NET equipment and APMI cartridge delivery and remained in theater for four months leading fielding to the first four BCTs to ensure initial fielding success in OEF. By the criteria for this award, LTC Laughlin is exceedingly deserving of this honor.

#### Mission

The Combined Joint Task Force 101 ONS called for a highly transportable, all-weather, rapidly responsive, precision indirect-fire 120mm mortar capability to support widely dispersed combat outposts and operations at the lowest tactical echelons. LTC Laughlin flawlessly led the APMI government-industry IPT in developing and qualifying the XM395, a GPS-guided 120mm mortar cartridge that ultimately achieved less than 6-meter CEP accuracy at ranges out to approximately four miles resulting in highly responsive target defeat with low collateral damage. Studies show that XM395 reduces the risk of collateral damage by increasing accuracy over the conventional M934A1 HE cartridge by approximately seven times at maximum range. After qualification, LTC Laughlin arrived first in advance of the APMI system's initial shipment to ensure efficient receipt of the first lot; direct coordination with USFOR-A and RC-E and RC-S; and successful development, dissemination, and execution of an integrated training and fielding plan. As a direct result of his tireless efforts, APMI NET and fielding was completed to the first mortar squad in March 2011, only 12 months after the competitive selection of the cartridge design from three companies' entries. Additionally, the APMI qualification team, expertly led by LTC Laughlin, has made every effort to ensure that the system creates the smallest possible logistical burden and is easy to use for the mortarmen who are firing it. With the fielding of APMI, maneuver battalions within USFOR-A infantry brigade combat teams (IBCTs) now have, for the first time, a precision, organic indirect-fire capability providing lethal, first-round effects on target to support combat operations in OEF. Accordingly, since initial fielding, APMI has been employed successfully in fire missions supporting U.S. forces, providing the ability to attack and destroy targets that could not previously be engaged responsively or effectively with battalion indirect fires. Finally, work is also underway to qualify and field the XM395 APMI cartridge for use in Stryker BCTs.

## Accomplishments

- Flawlessly executed the APMI Phase 2 Development and Qualification Program as Assistant Product Manager, Guided Precision Munitions & Mortar Systems – January 2010 to February 2011
- Meticulously coordinated the User Excursion with 5<sup>th</sup> BCT, 1<sup>st</sup> Armored Division at Fort Bliss, TX – 25-28 October 2010
- Skillfully led a completion of the very first NET training and a tactical end-to-end demonstration at Fort Drum, NY and with the 3<sup>rd</sup> Brigade, 10<sup>th</sup> Mountain Division – 17-28 January 2011
- Successfully completed the authentication of TM 9-1230-785-10: Operator's Manual for the XM701 PLUMSS and XM395 Cartridge by U.S. Logistics Support Agency (LOGSA) – 20 January 2011
- Provided essential support to the highly successful 1<sup>st</sup> XM395 Cartridge Production Lot Acceptance Test (LAT), witnessed by the VCSA, General Peter Chiarelli – 9 February 2011
- Expertly led the effort to complete UMR approval of the XM395, XM701 PLUMSS, M150/M151 MFCS-D SW Version 6.1, and M32 LHMBC SW Version 4.0 – 3-4 March 2011
- Deployed and masterfully led the 4 NET teams to train the initial 4 BCTs individually throughout Afghanistan in support of OEF. LTC Laughlin was responsible for leader briefings to BCT and battalion commanders and for direct coordination with BCT, battalion, and company fire support personnel to ensure the proper execution of APMI fielding and NET training; subsequently, upon redeployment, continued close coordination of all APMI NET planning and execution, both in CONUS and in OEF – March to December 2011
- Critical key to the success of the 1<sup>st</sup> NET training and live fire in theater with the 1<sup>st</sup> Battalion, 506<sup>th</sup> Infantry Regiment, 4<sup>th</sup> Brigade Combat Team, 101<sup>st</sup> Airborne Division – 26 March 2011
- Singularly responsible for the development and implementation of a modified CONUS-based APMI NET Program of Instruction (POI) with Integrated Precision Targeting instruction and Training Live Fire; subsequently, he directed the first successful modified CONUS NET training with live fire with the 4<sup>th</sup> Brigade, 82<sup>nd</sup> Airborne Division at Fort Bragg – 15-18 November 2011

## Acronyms

APMI – Accelerated Precision Mortar Initiative  
BCT – Brigade Combat Team  
CAS – Close Air Support  
CEP – Circular Error Probability  
CONUS – Continental United States  
GPS – Global Positioning System  
HE – High Explosive  
IBCT – Infantry Brigade Combat Team  
IPT – Integrated Product Team  
LAT – Lot Acceptance Test  
LHMBC – Lightweight Handheld Mortar Ballistic Computer  
LOGSA – Logistics Support Agency  
MFCS – Mortar Fire Control System  
NDIA – National Defense Industrial Association  
NET – New Equipment Training  
OEF – Operation Enduring Freedom  
ONS – Operational Needs Statement  
POI – Program of Instruction  
RC-E – Regional Command-East  
RC-S – Regional Command-South  
TTP – Tactics, Techniques and Procedures  
UMR – Urgent Material Release  
USFOR-A – United States Forces-Afghanistan  
VCSA – Vice Chief of Staff of the Army





REPLY TO  
ATTENTION OF:

DEPARTMENT OF THE ARMY  
OFFICE OF THE PROJECT MANAGER  
COMBAT AMMUNITION SYSTEMS  
PICATINNY ARSENAL, NJ 07806-5000

December 2, 2011

NDIA Award Committee: Armaments Division Military Operations Award

Subject: 2012 NDIA Armaments Division Award

To Whom It May Concern,

As the Project Manager, Combat Ammunition Systems-Indirect Fire (PM, CAS-IF), this letter serves as my unequivocal support for the nomination of Lieutenant Colonel Kelly Laughlin for the 2012 NDIA Armaments Division Military Operations Award.

As one of my two assistant product managers (APdM) within PM CAS-IF, Kelly Laughlin has constantly exhibited the highest level of leadership and technical acquisition acumen while serving as APdM, Guided Precision Munitions and Mortar Systems (GPM2S) for the past two years. In my current capacity, I observed, first-hand, Kelly's flawless direction and execution of the XM395 Accelerated Precision Mortar Initiative Urgent Material Release (UMR) qualification effort over a highly aggressive, 10-month timeframe, which resulted in successful qualification in March 2011. Subsequently, I deployed to Operation Enduring Freedom (OEF) and again personally witnessed Lieutenant Colonel Laughlin's matchless leadership in conducting initial APMI fielding and operational new equipment training (OPNET) planning and execution through United States Forces-Afghanistan, Regional Command-East, and Regional Command-South for the first four brigade combat teams (BCT) in OEF, March through June 2011.

Accordingly, as a result of Lieutenant Colonel Kelly Laughlin's tireless efforts and selfless sacrifice, maneuver battalions across all eight BCTs in OEF, including a Ranger battalion, now have an organic, precision strike capability that has proven its exceptional value in combat – providing the ability to attack and destroy targets that could not previously be engaged responsively or effectively with organic maneuver battalion indirect fires.

Again, I emphatically endorse Lieutenant Colonel Kelly Laughlin for this prestigious and well-deserved award. He is the highest caliber of officer, a leader of rare talent, and clearly a rising star within the Army Acquisition Corps.

A handwritten signature in black ink, appearing to read "J. Scott Turner, Jr.", written over a circular stamp or seal.

J. SCOTT TURNER, JR.  
Colonel, Field Artillery  
Project Manager,  
Combat Ammunition Systems-Indirect Fire

## 2012 NDIA Armaments Division Award Nomination – Military Operations Award

Nominee: LTC (P) Kelly Laughlin

### Executive Summary

The Maneuver Center of Excellence (MCoE), Soldier Requirements Division (SRD) supports the nomination of Lieutenant Colonel (P) Kelly Laughlin for the NDIA Armaments Division Military Operations Award for his significant contributions to the U.S. Army Soldier in support of the Accelerated Precision Mortar Initiative (APMI). For twenty-seven years a precision capability gap in the Infantry Brigade Combat Team (IBCT) had gone unmet and seemed to have lost traction with the demise of the Precision Guided Mortar Munition (PGMM) program. Under the leadership of LTC Laughlin, a gap that went unmet for almost three decades was accomplished in 2 years after the validation of an Operational Need Statement (ONS) on 8 January 2009. This initiative completed UMR and fielded the XM395 120mm precision mortar cartridge, the XM701 Precision Lightweight Universal Mortar Setter System (PLUMSS), and 2 new software releases for existing hardware – MFCS Software, Version 6.1 and LHMB Software, Version 4.0. LTC Laughlin's efforts and leadership were critical to the success of fielding this new organic capability of precision fires to the battalion commander that has been successfully employed in military operations since June 2011. He provided superior input to the development of the necessary TTPs, NET plans and materials, and logistics aspects of fielding this new capability quickly, efficiently, and reliably. LTC Laughlin worked tirelessly with this office to insure that the requirements were met to the end Users satisfaction. He coordinated support from the 2-29<sup>th</sup> Infantry Regiment to provide seven Soldiers for the OCONUS NET in Afghanistan. He deployed ahead of the equipment and stayed in theater for four months to ensure the fielding success. When he returned from theater, LTC Laughlin's leadership and direction he provided to the Operational Assessment Team helped to ensure the team's success. He again coordinated with 2-29<sup>th</sup> Infantry Regiment and the Doctrine, Tactics & Training Division (DTTD) at Fort Sill, to add one mortarman and one forward observer subject matter expert respectively to the Operational Assessment Team. I find LTC Kelly Laughlin highly deserving of the Military Operations Award.

### Mission

The Combined Joint Task Force 101 ONS called for a highly transportable, all-weather, rapidly responsive, and precise indirect-fire 120mm mortar capability to support widely dispersed combat outposts and operations at the lowest tactical echelons. The system requirement associated with this ONS described a GPS-guided mortar solution capable of 10-meter accuracy, at least a 6,500-meter range, and compatibility with the currently fielded 120mm mortar system. LTC Laughlin led the APMI government-contractor IPT in developing and qualifying the XM395, a GPS-guided 120mm mortar cartridge that boasts a 10-meter circular error probability (CEP) at ranges beyond four miles. That equates to quick defeat with low collateral damage. Studies show that XM395 reduces the risk of collateral damage by increasing accuracy over the conventional M934A1 HE cartridge by approximately seven times at maximum range. With LTC Laughlin arriving ahead to receive it, the first lot of the APMI rounds were shipped to theater. Training was completed to the first mortar squad in March 2011. The team, led by LTC Laughlin, has made every effort to ensure that APMI creates the smallest possible logistical burden and is easy to use for the mortar men who are firing it. With the fielding of APMI, maneuver battalions within U.S. Forces-Afghanistan IBCTs have the first ever US precision mortar capability, providing lethal first-round effects on target to support combat operations in *OEI*. Since fielding, APMI has been employed to great effect in combat fire missions supporting U.S. forces.