

### DEPARTMENT OF THE ARMY PROGRAM EXECUTIVE OFFICE AMMUNITION PICATINNY ARSENAL, NJ 07806-5000

REPLY TO ATTENTION OF:

SFAE-AMO

JUL 2 6 2017

MEMORANDUM FOR Mr. Craig Spisak, Director, U.S. Army Acquisition Support Center (USAASC), Attn: Vicky DeGuzman, 9900 Belvoir Road, Building 201, Suite 101, Ft. Belvoir, VA 22060-5567

SUBJECT: Nomination of Mr. Thomas Coradeschi for the 2017 Army Acquisition Executive's (AAE) Excellence in Leadership Awards, Category - Science and Technology Professional of the Year Award

1. I am proud to nominate Mr. Thomas Coradeschi, Chief of the Systems Engineering and Technology Integration Division for the Office of the Project Manager Maneuver Ammunition Systems (PM MAS) as my candidate for the 2017 Army Acquisition Executive's (AAE) Excellence in Leadership Awards, Science and Technology Professional of the Year Award. This nomination recognizes his outstanding contributions for the entire PM MAS portfolio of direct fire ammunition, which is comprised of over 300 different munition programs.

2. Mr. Coradeschi has shown much success between Aug 16 and Jul 17. He has successfully coordinated a System Requirements Review (SRR) and Delta Preliminary Design Review (PDR) for the 7.62mm XM1158 Advanced Armor Piercing program, and PDRs for the 40mm High Velocity M918E1 and 40mm Low Velocity M781E1 Target Practice Day/Night/Thermal cartridges, and the System Functional Review and PDR for the XM1147 120mm Advanced Multi-purpose cartridge. These programs will provide significant benefits to the Warfighters in all services. He has demonstrated superior leadership skills, such as heading the US delegation to the Joint Configuration Management Board (JCB) where he handled negotiations for an agreement between the JCB's seven member nations regarding the 120mm tank cartridge MOU and the US proposal for the Ammo Data Link for 120mm smoothbore tanks, leading to attaining weapon system and ammunition interoperability between M1 Abrams, German Leopard 2 Main Battle Tanks, which are in use by multiple countries.

3. Mr. Coradeschi is current with the Defense Acquisition Workforce Improvement Act (DAWIA) acquisition career field certification and has obtained 82 continuous learning points (CLPs) during the time period of 1 Oct 14 to 30 Sep 16.

4. My point of contact for this action is Willie G. Trammell, SFAE-AMO, 973.724.6546 or DSN: 880-6546, willie.g.trammell,civ@mail.mil.

JAMES SHIELDS Program Executive Officer

2 Enclosures

1. Nomination Form

2. Photo

Assistant Secretary of the Army for Acquisition, Logistics, and Technology

2017 Army Acquisition Executive's (AAE) Excellence in Leadership Award

# SCIENCE AND TECHNOLOGY PROFESSIONAL OF THE YEAR

## **Administrative Information**

This does not count toward the two-page limit. Ensure that the nominee's name is complete, spelled correctly and written as the nominee would like his or her name to appear on a certificate, award or event program.

#### Nominating Organization

Organization's Name: Project Manager Maneuver Ammunition Systems (PM MAS) Mailing Address: Building 354, Picatinny Arsenal NJ 07806 Address (continued): City: Picatinny Arsenal State: NJ Zip: 07806-5000

#### **Primary Point of Contact**

This is the person who should be contacted if there are any questions about the submission. Name: Maria Vignali Title: Operations Officer Telephone: 973-724-4457 E-mail: maria.e.vignali.ctr@mail.mil

#### Name, Grade, and Position Title of Nominee

Name: Thomas J. Coradeschi Grade: NH-801-4 Title: Chief Engineer, Systems Engineering & Technology Integration (SETI) E-mail: <u>thomas.j.coradeschi.civ@mail.mil</u>

#### Proposed Nominee: Thomas Coradeschi, SETI Division Chief, PM MAS Award Category: 2017 Science and Technology Professional of the Year Award

As the Chief Engineer and Scientist for the Office of the Project Manager Maneuver Ammunition Systems (PM MAS), Mr. Coradeschi provided the technical oversight and strategic guidance across the entire PM MAS portfolio of direct fire ammunition, over 300 different munition programs.

#### **Specific achievements:**

Mr. Coradeschi is the PM MAS architect for applying the disciplined Systems Engineering process across its entire ammo portfolio. From Aug 16 through Jul 17, Mr. Coradeschi orchestrated a successful System Requirements Review (SRR) and Delta Preliminary Design Review (PDR) for the 7.62mm XM1158 Advanced Armor Piercing program, and PDRs for the 40mm High Velocity M918E1 and 40mm Low Velocity M781E1 Target Practice Day/Night/Thermal cartridges, and the System Functional Review and PDR for the XM1147 120mm Advanced Multi-purpose cartridge. All these were crucial gates for proceeding to the current test programs for these transformative munitions that will benefit Warfighters in every service. The high levels of quality and thoroughness achieved during these reviews are attributed to the positive impact from the internal policies and guidance that Mr. Coradeschi created.

As head of the US delegation to the Joint Configuration Management Board (JCB), he brokered and negotiated a lasting agreement between the JCB's seven member nations on the 120mm tank cartridge MOU, the US proposal for the Ammo Data Link for 120mm smoothbore tanks, thereby attaining weapon system and ammunition interoperability between M1 Abrams, German Leopard 2 Main Battle Tanks, which are in use by multiple countries.

# Value of the nominee's contributions during the award period to the mission of one's organization in supporting one or more of the ASA(ALT)'s priorities:

Mr. Coradeschi had a tremendous impact on coordinating activities to bring in new sources of funding to augment technology development by successfully competing for and executing initiatives funded by the Soldier Enhancement Program, Army ManTech program, SBIRs and Foreign Military Sales. One key ManTech program for the 7.62mm XM1158 Advanced Armor Piercing round is currently projected to cost avoid over \$150M and potentially upwards of \$5B if implemented on other munitions.

Tom worked with DA G2 to establish a new policy allowing ammunition Designation of Disclosure Authority Letters (DDLs) to be processed by ammunition family, saving an enormous amount of time in preparation and staffing. During the year, his team prepared and obtained approval for 10 family DDLs and one classified DDL.

#### **Demonstration of leadership:**

During the summer of 2016, he led a technical and acquisition team to mitigate issues with training ammo at the 8th Army's Rodriguez Live Fire Complex in South Korea, providing rapid, on-site PM reaction and response, facilitating solutions and decision-making. Resolution is

underway and can be credited to his leadership, knowledge and best practices for teams achieving success.

Tom is the Configuration Manager for PM MAS' production programs. His office has staffed and he approved over 185 Engineering Change and Deviation Actions, assuring quality products, production control and cost savings. A number of these actions are directly the result of work he has initiated to modernize the US Army's technical data for the ammunition we produce. He led the effort by collaborating with all the other services to identify, correct and update drawings, specifications and references, all of which serve to enable our Industrial Base to be successful in producing quality ammunition on time, and at an affordable price for our Warfighters as well as our allies.

In conjunction with his Configuration Manager role, Mr. Coradeschi is the Process Owner for Technical Data Package (TDP) scrubs, which results in the review and validation of characteristics identified within the TDPs. He provides the mentorship and leadership responsible for instituting the rigorous process and has the authority and the ability to implement the team's recommendations. Properly identified Characteristics have led to positive safety, performance, cost and schedule impacts on PM MAS programs. Mr. Coradeschi has recently spearheaded the scrub on the 20mm Primer TDP, which is used in multiple programs across the services.

#### **<u>S&T Specific Criteria:</u>**

Mr. Coradeschi initiated and led a major S&T effort to develop the Kraft Nitrocellulose (NC) program, designed to demonstrate that Kraft (sulfate) wood pulp is a viable substitute for sulfite wood pulp currently used in the manufacturing of NC and propellants. The success of this program solves the single point failure of sulfite wood pulp (sole sourced by Canada), and is allowing US suppliers to compete and provide Kraft wood pulp. As transition to Kraft is underway, this brings work back into the US Industrial Base, mitigates potential supply shortages, and will result in higher quality NC at significant cost savings.

Mr. Coradeschi was the overall technical lead for developing a cost effective qualification strategy for nitrocellulose and propellants produced from the new NC plant, a \$500M facility. PM MAS uses over half of the plants 17M lbs production, on hundreds of DoD munitions. He led the Army and other services in establishing plans to qualify the new production of nitrocellulose and gain DoD acceptance. The new NC facility is scheduled to begin commissioning in FY18, and Tom's efforts have laid the groundwork to reduce the risks of accepting poor quality propellants and munitions, across all services.

Tom serves as the PM MAS Engineering representative and Scientist that works closely with the US Army's Armament Research and Development Center (ARDEC) on the early research and development of key technologies for new and improved direct fire munitions. He serves as the PM's lead Army's Strategic Portfolio Analysis and Review (SPAR) process and coordinates closely with multiple weapon platforms (Aviation, Maneuver and Soldier) to ensure an integrated approach is taken across the SPAR.

#### **Citation:**

Mr. Thomas Coradeschi serves as the Systems Engineering & Technical Integration Division Chief for PM MAS. Mr. Coradeschi proved successful in carrying out the System Requirement Review (SRR) for the 7.62mm XM1158 Advanced Armor Piercing program, the Preliminary Design Review (PDRs) for the 40mm High Velocity (HV) M918E1 and 40mm Low Velocity (LV) M781E1 Target Practice (TP) – Day/Night/Thermal (DNT) Cartridges, and the System Functional Review and PDRs for the XM1147 120mm Advanced Multi-purpose contractors. Mr. Coradeschi also plays a crucial role in coordinating activities, which bring in new sources of funding, to augment technology development by successfully competing for and executing initiatives funded by the Soldier Enhancement Program, Army MANTECH program, SBIRs, and Foreign Military Sales (FMS). Mr. Coradeschi leads many efforts for PM MAS, such as serving as the head of the US delegation to the JCB, taking on the role of Configuration Manager for PM MAS' production programs, and by serving as the technical lead and engineering representative and scientist working closely with ARDEC. He serves as the lead for the effort to identify, correct, and update drawings, specifications, and references; all of these make it possible for our Industrial Base to be successful.