

Ordnance

13. Introduction to the Ordnance Branch (OD)

a. Purpose. The Ordnance Corps provides superior combat power to the U.S. Army by supporting the development, production, acquisition and sustainment of equipment including weapons systems and munitions, and provides explosive ordnance disposal (EOD) during peace and war.

b. Mission. The Ordnance Corps mission is to provide munitions, maintenance, and EOD support to generate and maintain combat power and provide protection to Army, joint, intergovernmental, interagency and multinational forces. This support spans the entirety of operations, from inception to completion. The Ordnance Corps is the third largest branch in the Army with two officer AOCs, nine warrant officer MOSs, and 30 enlisted MOSs. There are Ordnance Soldiers assigned to every unit in the Army.

c. Proponent information. The Chief of Ordnance is the branch proponent for the Ordnance branch. The Ordnance Personnel Development Office is responsible for the eight personnel development system life-cycle management functions for all Ordnance officers, warrant officers, Soldiers, and related civilian occupational series, including structure, acquisition, distribution, development, deployment, compensation, sustainment, and transition. Contact the Ordnance Personnel Development Office at the U.S. Army Ordnance School, 2221 Adams Ave, Bldg. 5020, Fort Lee, VA, 23801, Commercial telephone (804) 765-7387 / 7277. DSN prefix is 539. The official Ordnance Website is: www.goordnance.army.mil.

d. Functions. The four functions of the Ordnance corps are maintenance, munitions, EOD, and explosive safety. Each function has a critical role in ensuring operational commanders and forces have the required combat power for mission accomplishment. These functions provide for equipment serviceability, munitions availability, readiness, and protection that directly support the execution of Multi-Domain Operations (MDO).

e. History and background. The Ordnance Corps has a proud tradition dating back to colonial America. In 1629, Samuel Sharpe was appointed as the first Master Gunner of Ordnance for the Massachusetts Bay Colony. The American Revolution established the general outlines of the future Ordnance Department. During the war, Colonel Benjamin Flower and Ezekiel Cheever, a civilian, provided ordnance support in the manufacturing of arms and equipment and supplied support to the army in the field. During the War of 1812, the Secretary of War recognized the need for a distinct branch to manage the procurement, research, and maintenance of ordnance materiel. On May 14, 1812, Congress officially established the Ordnance Department and appointed Colonel Decius Wadsworth as the first Chief of Ordnance.

14. Ordnance Officer Characteristics Required

a. Unique knowledge and skills of all Ordnance officers. All Ordnance officers must be support-focused, skilled at building relationships, and able to connect with others in a direct way. They are subject matter experts who advise commanders and units on sustainment operations in complex operating environments. Most importantly, all Ordnance officers must be mission-focused, because sustainment sets the reach and duration of Army operations. Ordnance officers are directly responsible for building and maintaining the Army's combat power. They enable readiness through dynamic and articulate leadership to Soldiers in 30 Ordnance enlisted MOSs and nine Ordnance warrant officer MOSs. All Ordnance officers must be fit, able leaders and managers who can develop tasks, establish priorities, and utilize processes for desired outcomes. Leadership in materiel maintenance and ammunition management processes requires officers to use logic and analytical skills to solve problems and then precisely communicate solutions. The Ordnance branch values officers with a wide variety of academic backgrounds. However, domain specific disciplines provide additional expertise and align with the military's system of logistics management. Ordnance/Logistics officers are offered opportunities to compete for Training with Industry and advanced civil schooling in business management, logistics, and supply chain management. The OD Storyboard below depicts the Knowledge, Skills, and Behaviors (KSBs) of all OD officers, and the Talent Priorities for two distinct officer AOCs:

Ordnance Figure 1. Ordnance Officer Storyboard

INTELLIGENCES: Interpersonal, Logical-Mathematical (Maintenance and Munitions Management) Bodily-Kinesthetic, Spatial (Explosive Ordnance Disposal-EOD)			
SKILLS (Maintenance and Munitions Management): Maintenance and Munitions Management Officers are adaptive, agile, logical, and detail oriented leaders that are directly responsible for building and maintaining the combat power of the Army. They enable readiness through dynamic and articulate leadership with the ability to establish priorities of work to accomplish the mission. Leadership in materiel maintenance and ammunition management processes requires officers who use logic and analytical skills to solve problems and communicate solutions precisely. These officers must be support-focused, skilled at building relationships, and able to connect with others in a direct way so they can advise commanders and customers on sustainment operations in complex operating environments.			
SKILLS (Explosive Ordnance Disposal- EOD): Explosive ordnance disposal officers are the culmination of the best tactical and technical training the Department of Defense can provide. As the Army's preeminent tactical and technical explosives specialists, EOD officers need to operate confidently with detailed and disciplined accuracy under stressful conditions, be mentally tough, work calmly under pressure, and be prudent risk takers. They provide dynamic leadership to formations of expertly trained EOD Soldiers. Explosive ordnance disposal officers must be effective communicators with an extreme aptitude for planning and organizing in support of Army units worldwide, civil authorities in CONUS, and across all operational environments. EOD officers are "hands-on" Soldiers with technical and mechanical inclination, acute sensitivity to visual details, and the ability to orient to three dimensions.			
KNOWLEDGE: The Ordnance branch values officers with academic backgrounds from a wide variety of disciplines and majors. However, the domain-specific disciplines listed below provide officers with the expertise closely aligned with executing the military's system of logistics management. > RELEVANT EDUCATION: Business Administration; Acquisition / Contract Management; Applied Sciences & Engineering; Automotive Engineering; Business Management; Chemistry; Computer Systems & Technology; Disaster Management; Distribution Management; Hazardous Materials Management; Industrial Engineering; Logistics Management; Mathematical Sciences; Mechanical Engineering; Operations Research; Supply Chain Management; Forensic Sciences (not all inclusive). > RELEVANT TRAINING / EXPERIENCE: Athletics (varsity), Cadet Troop Leading Time / Leader Development Time (CTLT / CLDT) with Army Ordnance unit; Academic Enrichment Program / Internship with major industries or academic institutions. > RELEVANT CERTIFICATIONS / ACCREDITATION: Lean Six Sigma Certifications; Certified Professional in Supply Management; Certified Professional Logistician; Supply Chain Management Certificate; International Society of Logistics			
BEHAVIORS: (In addition to Army foundational)	> EXPERT	> PERCEPTIVE	> QUICK
> COLLABORATIVE	> CRITICALLY THINKING	> FLEXIBLE	> PRECISE
> COMMITTED	> CUSTOMER FOCUSED	> HARD WORKING	> PROACTIVE
> COOPERATIVE	> DETAILED FOCUSED	> INITIATIVE	> PROBLEM SOLVING
			> RESPONSIBLE
			> STRESS TOLERANT
			> THOUGHTFUL
TALENT PRIORITIES (Maintenance and Munitions Management):			
1. COMMUNICATOR: Precise, efficient, and compelling in both written and spoken word.			
2. PROBLEM SOLVER: Able to choose between best practices and unorthodox approaches to reach a solution. Accomplishes the task.			
3. DETAIL FOCUSED: Thorough, perceptive, and precise in all matters. Possesses a keen eye – notices everything.			
4. INTERPERSONAL: Skilled in developing appropriate relationships. Able to connect with others to effect positive results.			
5. LOGICAL / ANALYTICAL: Uses reason and thinks in terms of cause and effect. Able to decompose and solve complex problems.			
TALENT PRIORITIES (Explosive Ordnance Disposal):			
1. DETAIL FOCUSED: Thorough, perceptive, and precise in all matters. Possesses a keen eye – notices everything.			
2. MENTALLY TOUGH: Stress tolerant and emotionally mature. Performs well even under extreme psychological stress.			
3. PRUDENT RISK TAKER: Recognizes and mitigates unacceptable risks, enabling mission accomplishment without unnecessarily compromising safety.			
4. BODILY / KINESTHETIC: Coordinated, dexterous, hands-on person. Acute sensory awareness.			
5. PROCESS DISCIPLINED: Diligently abides by procedures designed to ensure accuracy, effectiveness, and safety.			

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Ordnance Figure 1. Ordnance Officer Storyboard

b. Materiel Maintenance and Munitions Management Officer (AOC 91A). These officers are adaptive, agile, logical, and detail oriented leaders who are directly responsible for building and maintaining the Army's combat power. Officers working in this AOC enable Army readiness in support of Multi Domain Operations. They are responsible for the Army maintenance and ammunition process. They ensure weapon systems are operational, ready, and available. Officers are responsible for integrated maintenance support of Army conventional weapon systems, small arms, artillery, fire control equipment, missile systems and their associated ground support equipment; electronics; track and wheel vehicles; and engineer and power generation equipment. Maintenance functions include metalworking, fabrication, welding, inspection, test, service, calibration, repair, overhaul, and reclamation. Officers must develop a comprehensive knowledge of maintenance management techniques and integrated logistics support. Officers must be technically competent in production control and quality assurance techniques. Army weapons systems are technically sophisticated and critical to success in combat. They are costly to procure, produce, field and maintain. Ensuring constant readiness while preventing the waste of resources requires officers with excellent management and leadership skills. Officers must become proficient with automated logistics information systems. These officers also manage the Army's munitions inventory. They lead, manage, plan, and direct ammunition supply, storage, transportation, maintenance, surveillance, inspection, stock control, safety, and security, including maintenance of associated test and handling equipment. Army munitions planners must also consider support to joint and multi-national partners as dictated by operational requirements.

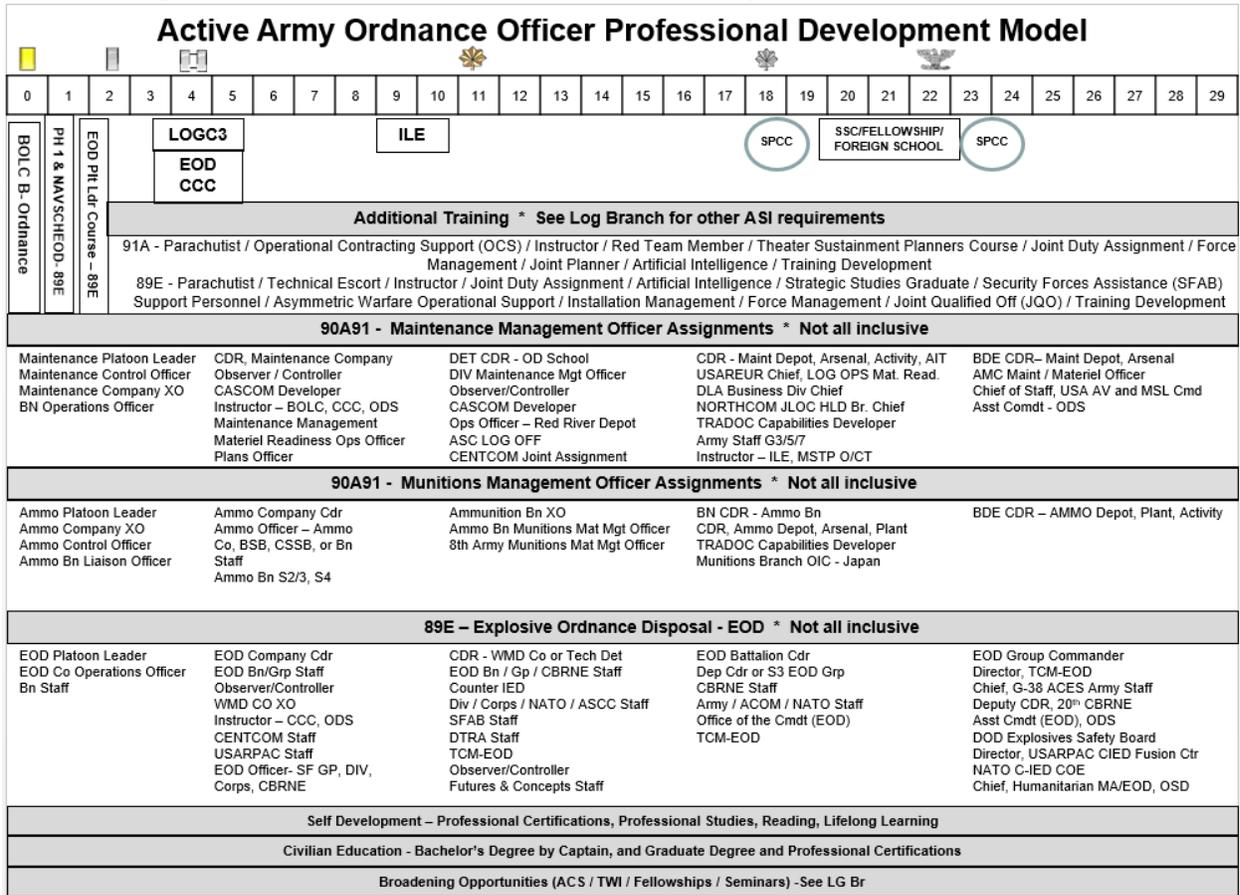
c. EOD Officer (AOC 89E). As the Army's preeminent tactical and technical explosives specialists, EOD officers need to operate confidently with detailed and disciplined accuracy under stressful conditions, be mentally tough, work calmly under pressure, and be prudent risk takers. EOD officers are "hands-on" people with technical and mechanical aptitude, acute sensitivity to visual details, and the ability to orient to three dimensions. They provide dynamic leadership to formations of expertly trained EOD Soldiers. EOD officers must be effective communicators with a high aptitude for planning and

organizing in support of Army units worldwide, civil authorities, and across all operational environments. Officers are selected for EOD training based on EOD talent demands and specific qualifications in accordance with DA PAM 611-21. Eligible EOD candidates must be interviewed and accepted by an EOD senior NCO or officer. Following completion of BOLC, they attend tactical and technical training provided by Army, joint, interagency, multinational, and civilian academia, including Naval School EOD (NAVSCOLEOD), and several others. Officers who graduate from the Naval School and maintain EOD qualifications in accordance with applicable regulations, are assigned to a military unit with a Service-defined EOD mission. EOD officers provide a unique and critical service to the Army, unified action partners, and defense support of civil authorities. EOD officers have received specialized training to address explosive ordnance hazards during both peacetime and wartime. EOD officers are trained and equipped to perform EOD specific procedures on all explosive ordnance, to include Improvised Explosive Devices (IED) and Weapons of Mass Destruction (WMD). EOD officers facilitate the development of weapons technical intelligence on captured and recovered explosive ordnance in support of tactics, techniques, and procedure development and targeting. EOD officers plan, develop, and integrate EOD operations in all domains, across the range of military operations in support of conventional and special operations forces. Additionally, EOD officers provide support to the U.S. Secret Service and Department of State in protection of the President, Vice President and other dignitaries as directed. Upon completion of the EOD CCC or Logistics CCC, EOD officers become fully qualified Logistics officers capable of serving in Logistics officer (90A) command and staff positions throughout their careers in addition to OD and EOD positions. Due to their expertise in ammunition, they are uniquely qualified to serve in ammunition positions. In order to be highly competitive for multifunctional logistics commands, as well as EOD commands, it is important for EOD officers to serve in both areas of expertise.

15. Ordnance Officer Development.

The Ordnance PDM shows a career model where the officer is developed through PME, additional training, and Ordnance functional assignments to develop competencies in Maintenance, Ammunition, and EOD supporting Multi Domain Operations. The National Defense Authorization Act (NDAA) granted many authorities to allow flexible timelines in support of talent management initiatives. The Ordnance branch is embracing the changes and will continue to incorporate them into the PDM as the Army approves new policy. Officers should discuss career goals, timelines, and assignment opportunities with their career coaches at HRC, their senior leadership, and mentors. *(Note. See the Logistics PDM for those assignments common to all Logistics officers. Logistics officers may compete for Ordnance centric positions which may qualify them for additional Ordnance assignments.)*

Ordnance Figure 2. Ordnance Officer Professional Development Model



a. Ordnance Lieutenants.

(1) OD LT Development (91A and 89E). Ordnance lieutenants are typically assigned at the company level to lead Soldiers executing maintenance, ammunition management, or EOD operations in the following positions: platoon leader, maintenance control officer, company executive officer, ammunition control officer, or company EOD operations officer. Lieutenants should learn field and sustainment maintenance operations, workload management, utilization of Standard Information Systems (SIS) and Logistics Information Systems (LIS) reports, and ammunition supply and management. EOD (89E) lieutenants will be assigned to EOD companies to lead Soldiers and conduct disposal and render safe operations. Lieutenants should expect to serve in progressive positions to develop their leadership and technical skills, and may complement this with staff experience at the battalion or brigade level. Officers wishing to prepare for company command should pursue a platoon leader and company executive officer assignment.

(2) OD LT Education. Lieutenants will attend BOLC at the Army Logistics University (ALU) at Fort Lee, Virginia. If an Ordnance lieutenant has been accepted for EOD, the officer will attend follow-on EOD Phase I training at Fort Lee, and EOD Phase II and the EOD Platoon Leader's Course at Naval School EOD (NAVSCOLEOD), Eglin Air Force Base, Florida. EOD qualification normally takes about 18 months from the start of BOLC.

(3) OD LT Additional Training. There are 89E and 91A positions requiring the Skill Identifier (SI) 5P-Parachutist. EOD LTs should become Team Leader certified prior to promotion to CPT.

(4) OD LT Desired Experience and KSBs. Lieutenants must focus on acquiring and refining troop-leading skills, Ordnance competencies, as well as communication, management, technical, and tactical skills. The primary concern of all officers should be their manner of performance. Lieutenants should exude enthusiasm and initiative, seek to develop their core competencies and professional attributes, and demonstrate potential for increased responsibility and advancement. Lieutenants should strive to become

technical and tactical leaders of Ordnance operations by training with the warrant officers and senior enlisted Soldiers in their units. Lieutenants must learn the intricacies of how to best lead and care for Soldiers while accomplishing the mission. Before promotion to captain, officers should possess a detailed knowledge of the Ordnance core competencies and have a basic knowledge of logistics.

(5) *OD LT Assignments.*

- (a) Maintenance Platoon Leader.
- (b) Maintenance Control Officer.
- (c) Maintenance Company Executive Officer.
- (d) Ammunition Platoon Leader.
- (e) Ammunition Control Officer.
- (f) Ammunition Liaison Officer.
- (g) Ammunition Company Executive Officer.
- (h) EOD Platoon Leader.
- (i) EOD Company Operations Officer.
- (j) AIT BN S2/3 Operations Officer.
- (k) Training Company Executive Officer.

b. Ordnance Captains.

(1) OD CPT Development (90A91 and 89E). The Ordnance PDM develops experience in Ordnance core competencies. Officers should consider the knowledge, skills, behaviors, and experiences they must gain through successive assignments to prepare and qualify for positions of increasing responsibility and expertise. Officers may seek positions in Ordnance core competencies, as well as other logistics functions. EOD officers seeking logistics assignments are encouraged to seek ammunition positions to capitalize on their expertise in munitions. The officer is responsible for determining their own career path as they compete within the marketplace. The officer should be mindful that their manner of performance and successive experience determines their eligibility for higher level command and staff positions. For a complete description of current programs, see the Broadening Opportunity Programs (BOP) web page on the HRC Web site, and discuss your goals with your career coach. Ordnance specific broadening opportunities include Training with Industry (TWI). EOD officers may also seek broadening assignments within the Intelligence Community, protection or emergency services division, or special purpose teams within SOCOM, DIA, UN, and geographic combatant commands. (See Logistics branch for additional multifunctional assignments.)

(2) OD CPT Education. Completion of CCC may be a condition for some captain level assignments. 91A officers should attend the Logistics CCC. 89E officers should attend the EOD CCC which provides a focused EOD curriculum along with a logistics block of instruction fully qualifying EOD officers to serve in EOD command and staff positions as well as Logistics positions upon graduation. After completion of the Logistics CCC, or the EOD CCC, they will become Logistics branch officers capable of serving in multifunctional logistics positions, as well as ordnance-centric positions throughout the remainder of their careers. Captains should come to the CCC prepared to take the Graduate Record Exam (GRE) which may determine their eligibility to compete for Advanced Civilian Schooling opportunities. (See Logistics Branch).

(3) OD CPT 90A91 Additional Training. There are 90A91 captain positions requiring the following Skill Identifiers (SI):

- (a) 3C - Operational Contracting Support (OCS).
- (b) 5K - Instructor.
- (c) 5P - Parachutist.
- (d) 7J - Red Team Member.
- (e) P1 - Theater Sustainment Planners Course (TSPC).

(4) *EOD CPT 89E Additional Training.* There are 89E captain positions requiring the following Skill Identifiers (SI):

- (a) 5K - Instructor.
- (b) 5P - Parachutist.
- (c) 7Q - Training Development.
- (d) L3 - Technical Escort.

(5) OD CPT Desired experience and KSBs. Captains should focus their efforts on mastering the core competencies of the Ordnance Branch, while beginning to develop more multifunctional experience. Officers should be mindful of their career goals and choose the successive assignments that build the

knowledge, skills, behaviors and experience towards those goals. While not a requirement for every officer, those officers who have demonstrated the potential and desire to command Soldiers should compete for command positions. Successful company command is one qualification for officers who desire to compete for battalion level command opportunities. Functional experience will better qualify officers who desire to command functional commands and serve in key billets. OD basic branch captains can command functional OD companies, LG companies, and branch immaterial companies. EOD officers can command EOD, OD, LG, or any branch immaterial company. Command opportunities for captains are found in traditional TOE line units or TDA units in training, garrison, and headquarters organizations. Captains may apply for competitive broadening assignments, such as fellowships, ACS or TWI and may continue to serve in developmental assignments in the operational or institutional Army, either in functional or branch immaterial assignments.

- (6) OD CPT 90A91 Ammunition Assignments.
 - (a) Ammunition Company Commander.
 - (b) OD AIT Company Commander.
 - (c) Ammunition Battalion S2/3 or S4.
 - (d) Ammunition Battalion Ammunition Officer.
 - (e) Ammunition Officer in an ammunition company, BSB, CSSB, or battalion staff.
- (7) OD CPT 90A91 Maintenance or Materiel Production/Management Assignments.
 - (a) Company Commander- Field Maintenance Company (FMC), Support Maintenance Company (SMC), ADA battalion maintenance company/detachment, JFKSWCS HHC, OD AIT Company.
 - (b) BSB Maintenance Company OC/T.
 - (c) BSB SPO Maintenance Officer OC/T.
 - (d) Concept Development Staff Officer - Futures Command.
 - (e) Maintenance Management Officer - S4, G4, CASCOM.
 - (f) Maintenance Officer - ASG, CAC.
 - (g) Chief, OD Training Department - Armor School.
 - (h) Instructor - Maneuver Center.
 - (i) Log Advisor - USA Security Assistance Support Activity, Saudi Arabia.
 - (j) Log Operations Officer - AMC/ASC/TACOM.
 - (k) Materiel Readiness Operations Officer – ASCC.
 - (l) Operations Officer - 8th Army, ARCENT, USARPAC, USAREUR, ASC.
 - (m) Branch Staff officer - CAC.
 - (n) S3 - AFSBN.
 - (o) AIT Staff Officer- Ft Sill.
 - (p) XO, AIT Detachment - Ft Sill.
- (8) *OD CPT Other 90A91 Assignments include:*
 - (a) Proponency Officer - ODS.
 - (b) OD BOLC instructor - ALU.
 - (c) Captains Career Course Instructor/ SGL - ALU.
 - (d) S2/3 - AIT Brigade.
 - (e) CSSB Sr OC/T.
 - (f) Plans Officer - SBDE, TSC, MCTP.
 - (g) Operations Officer - ASC.
 - (h) Sustainment O/C - USA Joint Modernization Command.
- (9) *EOD CPT 89E Assignments include:*
 - (a) EOD Company Commander.
 - (b) EOD Company senior OC/T - JRTC.
 - (c) EOD Team Training OC - NTC.
 - (d) EOD Officer - EOD battalion S3 / Group S3.
 - (e) Operations Officer - EOD battalion S3 / Group S3.
 - (f) XO - WMD Company - Kirkland AFB.
 - (g) EOD Officer - Eighth Army, Korea.
 - (h) EOD Officer - SF Group.
 - (i) Chief, EOD Plans - USARPAC Fusion Center.
 - (j) Vulnerability Assessment EOD Officer - CENTCOM.
 - (k) EOD Officer - Nuclear Disablement Team - CBRNE.

- (l) EOD Officer - Main Command Post - CBRNE.
 - (m) Division Chief - NAVSCHEOD.
 - (n) OIC, EOD Training Team - NAVSCHEOD.
 - (o) Instructor - NAVSCHEOD .
 - (p) Battalion S2/3, AIT Battalion, Eglin AFB .
 - (q) Training Developer - TCM-EOD - CASCOM.
 - (r) Instructor - EOD Training Division, ODS.
 - (s) Instructor - EOD CCC, ALU.
 - (t) OIC, EOD Training Team - Ft Leonard Wood .
- d. *Ordnance Majors.*

(1) *Development (90A91 and 89E).* Majors mainly serve in staff positions to prepare them to serve at the next level of command and staff positions. The majority of major positions are designated multifunctional logistics, 90A. All 90A91 and 89E91 majors may be assigned to functional and multifunctional command and staff positions. (See Logistics Branch).

(2) OD MAJ Education. (See Logistics branch.) Additionally, EOD officers may apply for the Air CSC and earn a minor in Advanced Nuclear Deterrence Studies.

(3) 90A91 MAJ Additional Training. There are 90A91 MAJ positions requiring the following Skill Identifiers (SI):

- (a) 3A - Joint Duty Assignment Qualified.
- (b) 4K - Artificial Intelligence.
- (c) 5P - Parachutist.
- (d) 7Q - Training Development.
- (e) P1 - Theater Sustainment Planners Course.

(4) 89E MAJ Additional training. There are 89E MAJ positions requiring the following Skill Identifiers (SI):

- (a) 3A - Joint Duty Assignment Qualified.
- (b) 5P - Parachutist.
- (c) 6Z - Strategic Studies Graduate.
- (d) 7Q - Training Development.
- (e) L3 - Technical Escort.
- (f) S8 - Security Forces Assistance (SFA) Support Personnel.
- (g) U8 - Asymmetric Warfare Operational Support.

(5) OD MAJ Desired Experience and KSBs. Majors should be mindful of their career goals and choose assignments that continues to build the knowledge, skills, behaviors and experience towards those goals. The officer is responsible for determining their own career path as they compete within the marketplace. The officer should be mindful that their manner of performance and successive experience determines their eligibility for higher-level command and staff positions. Officers interested in competing for LTC level command positions should gain experience serving on battalion level staff. Successful Battalion staff experience coupled with successful company command best qualifies officers who desire to compete for battalion and higher-level command opportunities. Functional experience will better qualify officers who desire to command functional commands and key billets. Majors may apply for competitive broadening assignments, such as fellowships, and ACS. Field grade officers should prepare to serve at the strategic and enterprise levels as well as in the institutional Army, either in functional or branch immaterial assignments. Highly qualified field grade officers, having completed JPME I during CGSC, may pursue a joint duty assignment (SI 3A) resulting in the designation of Joint Qualified Officer, SI-3L. Additionally, EOD officers must also strive to become experts and conversant in weapons technical intelligence, exploitation operations, protection disciplines, and support to unified action partners. EOD officers seeking logistics assignments are encouraged to seek ammunition positions to capitalize on their expertise in munitions. Assignments that are preparatory for functional battalion command include:

(a) Ammunition battalion - Ammunition BN XO and or Ammunition BN Munitions Materiel Management Officer or any Logistics staff position considered KD.

(b) EOD battalion - EOD BN S3, EOD BN XO, or Commander, 21st EOD Company or Picatinny Detachment (Major authorized). (See Logistics branch for additional multifunctional assignments.)

(6) MAJ 90A91 Ammunition assignments.

(a) XO, Ammunition BN.

(b) Munitions Materiel Management Officer - Ammo BN, and 8th Army.

(7) MAJ 90A91 Maintenance or Materiel Production/Management assignments:

- (a) Commander, AIT Detachment - ODS, Fort Sill.
- (b) Force Design Branch Chief - CASCOM.
- (c) Army FMS Officer - CENTCOM.
- (d) Army SAO-DSCA Rep - CENTCOM.
- (e) Chief, Land Forces Branch - CENTCOM .
- (f) Brigade S4 - USA Task Force Sinai.
- (g) Concepts/ Capabilities Development Staff Officer - Futures Command.
- (h) Chief, MCP/SUS/LOG/MINT EL - Corps.
- (i) Deputy, SUS2/DMS/MMB - ESC.
- (j) DWA Advisor, USA Ofc of PM Saudi Arabian NG Modernization Program.
- (k) Logistics Advisor - USA Security Asst Spt Activity.
- (l) Log Officer - ASC.
- (m) Maintenance Management Officer - Division.
- (n) Maintenance OC/T.
- (o) Operations Officer - Red River Army Depot.
- (p) Operations Officer - 8th Army Materiel Readiness.
- (q) Sr Maint Adv - USA Ofc of PM Saudi Arabian NG Modernization Program

(8) Other OD MAJ 90A91 Assignments include:

- (a) XO - Office of the Chief of Ordnance- Nominative.
- (b) S4 - Artillery Brigade.
- (c) ACSLOG, 7th ATC.
- (d) Ordnance OC/T - MCTP.
- (e) SPT OPS O/C - JMRC.
- (f) Training Developer - CASCOM.
- (9) EOD MAJ Assignments include:
 - (a) Commander, 21st WMD CO .
 - (b) Commander, EOD TEC DET Division.
 - (c) Chief, EOD Integration Office - Futures Command.
 - (d) Counter Terrorism Operations Officer - NORTHCOM.
 - (e) Deputy Branch Chief - DTRA.
 - (f) EOD CO/T - MSTP.
 - (g) EOD Proponency Officer - ODS.
 - (h) EOD Officer Assignments - HRC - Nominative.
 - (i) EOD Officer - Corps, Division, SFAB. (*Brevet Promotion opportunity select SFABs.*)
 - (j) XO - EOD Battalion.
 - (k) S3 - EOD Battalion.
 - (l) Group EOD Officer - USA Asymmetric Warfare Group.
 - (m) Nuclear EOD Exercise - DTRA.
 - (n) Doctrine and Capabilities Integration Manager- TCM-EOD.
 - (o) Operations Officer - EOD Group, CBRNE.
 - (p) Section Chief - C-IED - Madrid - NATO.
 - (q) SO (C-IED) - JFC - Brunssum.
 - (r) Support Operations Officer - CBRNE.

e. *Ordnance Lieutenant Colonels.*

(1) OD LTC Development (90A91 and 89E). Those selected for promotion to lieutenant colonel now begin the senior field grade years, where they make the maximum contribution to the Army as commanders and senior staff officers. Attaining the grade of lieutenant colonel is most often considered to be the hallmark of a successful career, although each officer defines success differently. Officers in the grade of lieutenant colonel serve as senior leaders and managers throughout the Army providing wisdom, experience, vision and mentorship mastered over many years in uniform.

(2) OD LTC Education. (See Logistics branch.)

(3) 90A91 LTC Additional Training. There are 90A91 LTC positions requiring the following Skill Identifiers (SI):

- (a) 3A - Joint Duty Assignment Qualified.
- (b) 6Y - Installation Management.

(c) 3R - Force Management.

(d) 3H - Joint Planner.

(4) 89E LTC Additional Training. There is an 89E LTC position requiring the L3 Technical Escort following Skill Identifiers (SI).

(5) OD LTC Desired Experience and KSBs. Lieutenant colonels should strive to become an expert in all aspects of logistics and the application of Ordnance competencies to include application within the context of JIIM operations. Joint officer qualification is desired at this level. EOD officers must be experts and conversant in weapons technical intelligence, exploitation operations, protection disciplines, and support to Federal, State, and local authorities. All lieutenant colonels should actively mentor subordinates and participate in talent management.

(6) OD LTC Ammunition assignments.

(a) Commander, 6th Ordnance BN - Ammunition.

(b) Commander, Blue Grass Army Depot.

(c) Commander, Iowa Army Ammunition Plant.

(d) Commander, Lake City Army Ammunition Plant.

(e) Commander, Crane Army Ammunition Activity.

(f) Commander, Letterkenny Munitions Center.

(g) Commander, Anniston Munitions Center.

(h) Commander, Hawthorne Army Depot.

(i) OIC, Munitions Branch, 10th ASG.

(k) Chief, LOG OPS Munitions Element - USAREUR.

(7) LTC Maintenance or Materiel Production/Management assignments.

(a) Commander, Sierra Army Depot.

(b) Chief, Staff Officer (Maint) - CASCOM.

(c) Branch Chief, ARM & Maint DIV Force Structure - CASCOM.

(8) Other 90A91 assignments include:

(a) EPMD, OD Branch Chief - HRC.

(b) Concepts Development Staff Officer - Futures Command.

(c) Commander, OD AIT Battalion.

(d) Chief, OD Proponency Office.

(e) Chief, CST LOG SPT DIV.

(f) Chief, LOGS OPS Materiel Readiness Element - USAREUR.

(g) Division Chief, DLA - Americas.

(h) HR Management Officer - HRC.

(i) ILE Instructor.

(j) JLOC Homeland Defense Branch Chief - NORTHCOM.

(k) Staff Officer - USA G-3/5/7.

(l) Sustainment WFF OC/T - MCTP.

(9) EOD LTC assignments:

(a) Commander, EOD Battalion (3rd, 79th, 184th, 192nd, 242nd, 303rd).

(b) Commander, AIT Battalion - 73rd OD Bn.

(c) S3, EOD Group (52nd, 71st) (*Brevet Promotion opportunity.*)

(d) Deputy Commander, EOD Group (52nd, 71st).

(e) Deputy Director, NATO.

(f) Operations Officer - FORSCOM (*Brevet Promotion opportunity.*)

(g) EOD Officer - USARNORTH.

(h) Deputy Asst Commandant (EOD) (i) G38/ACES OPS Officer - Pentagon (*Brevet Promotion opportunity.*)

(j) EOD Officer - 8th Army (*Brevet Promotion opportunity.*)

(k) WMD Coordination Team Chief - CBRNE.

(l) Deputy G3, MCP, CBRNE.

(m) Assistant G3 Plans - CBRNE.

(n) Deputy Director - TCM EOD -CASCOM.

(o) SO (IED Analyst) - JFC Brunssum.

f. *Ordnance Colonels.*

(1) OD COL Development (90A91 and 89E). Those officers selected for promotion to colonel continue

their senior field grade phase that concludes with their separation or retirement from active duty or selection for promotion to brigadier general. Attaining the grade of colonel is realized by a select few and truly constitutes the elite of the officer corps. As colonels, their maximum contribution to the Army is made as commanders and senior staff officers.

(2) OD COL Education (See Logistics branch.)

(3) 90A91 COL Additional Training. There are 90A91 COL positions requiring the following Skill Identifiers (SI):

(a) 3A - Joint Duty Assignment Qualified.

(b) 6Y - Installation Management.

(4) 89E COL Additional Training. There are 89E COL positions requiring the following Skill Identifiers (SI):

(a) 3L - Joint Qualified Officer (JQO) .

(b) 6Z - Strategic Studies Graduate.

(5) OD COL Desired experience and KSBs. Colonels serve for potentially the longest period of time in grade and therefore can provide the greatest impact on the defense enterprise. Senior leader development at this level prepares leaders to assume strategic leadership responsibilities in military or national security organizations. Colonels are key mentors and advisors on talent management. Officers should consider the knowledge, skills, behaviors, and experiences they must gain through successive assignments to prepare and qualify for positions of increasing responsibility and expertise. The officer is responsible for determining their own career path as they compete within the marketplace. Officers interested in competing for Centralized Selection List (CSL) brigade level command and key billets should have had successful experience serving as a battalion level commander. Officers interested in competing for functional Ordnance brigade level CSL command and key billets such as EOD Groups, ammunition depots, plants and arsenals, maintenance depots and arsenals, ODS training brigade, or TCM-EOD should have had successive experience in those functional areas. Many colonels can expect to receive assignments to multifunctional, functional, and branch immaterial positions at the brigade, division, corps, and echelons above corps in the TOE environment. The majority of officers in a cohort year group do not command; they make their contribution to the Army in other important senior staff assignments. TDA organizations throughout the Army especially need the expertise of senior field grade officers. Almost 70 percent of the colonel authorizations are in the TDA structure. Former brigade level commanders are qualified to serve in positions designated by the CSA which require the KSBs and experience of former commanders. These post-command assignments may be to branch, branch/FA generalist assignments or Joint coded positions. Emphasis is placed on Joint duty assignments for those officers without a Joint qualifying tour. Officers should discuss opportunities with their Career Coaches in the Colonels Management Office (COMO). (See Logistics branch for multifunctional assignments.)

(6) COL Ammunition Assignments include:

(a) Commander, Blue Grass Army Depot.

(b) Commander, USA OSC McAlester Army Ammo Plant.

(c) Commander, Crane Army Ammunition Activity.

(7) COL Maintenance or Materiel Production/Management Assignments include:

(a) Commander, US Army Depot Red River.

(b) Commander, US Army Depot Anniston.

(c) Commander, US Army Depot Letterkenny.

(d) Commander, US Army Depot Tobyhanna.

(e) Commander, US Army Watervliet Arsenal.

(f) Commander, USA Rock Island Arsenal Joint Manufacturing & Technology Center.

(g) Commander, Materiel Support Command - Korea .

(h) AMC Maintenance / Materiel Officer.

(8) Other COL 90A91 assignments include:

(a) Commander, 59th Ordnance Brigade (Training) .

(b) Assistant Commandant, US Army Ordnance School.

(c) Chief of Staff, USA Aviation & Missile Command.

(9) EOD COL assignments include:

(a) Commander, 52nd or 71st EOD Group.

(b) Director, TCM-EOD.

(c) Deputy Commander, 20th CBRNE (*Brevet Promotion opportunity.*)

- (d) Chief, US Army G-38 ACES (*Brevet Promotion opportunity.*)
- (e) Assistant Commandant (EOD), ODS.
- (f) Army Staff Representative, DOD Explosives Safety Board.
- (g) Director, USARPAC CIED Fusion Center.
- (h) Deputy Director, NATO C-IED COE.
- (i) Chief, Humanitarian MA/EOD, OSD.

16. Ordnance Warrant Officer Development

a. Unique knowledge and skills of an Ordnance Warrant Officer. Ordnance Warrant Officers are the Army's premier land-force maintenance and logistics systems experts, leaders, trainers, mentors, and advisors. They administer, manage, maintain, operate, and integrate Army maintenance and logistics systems, and equipment across the full range of Army operations. Ordnance Warrant Officers are confident warrior-leaders, mission-focused subject matter experts, innovative integrators of emerging system technologies, and expert technical advisors. As highly specialized maintainers, they support a multitude of Army missions throughout their career. Ordnance Warrant Officers must have a combination of professional development and developmental assignments to evolve as a well-rounded senior Warrant Officer within their specialty. This process ensures the Warrant Officer acquires the skills, knowledge, attributes, and requisite technical depth to serve at all levels within the Army. The officer education system requires specific training designed to prepare Warrant Officers to serve in positions of greater responsibility. The Warrant Officer professional developmental model at figure Ordnance Figure 3, displays key operational, developmental, institutional, and broadening assignments as well as PME and civilian education goals. As a general rule, Ordnance Warrant Officers can consider TOE positions as developmental and TDA positions as broadening with some exceptions. Complete listings of available Ordnance Warrant Officer Positions can be found on the FMSWeb and Army Career Tracker websites.

(1) MOS 890A, Ammunition Warrant Officer. Manage, supervise, and coordinate the receipt, storage, issue, surveillance testing, maintenance, modification, destruction, and demilitarization of conventional ammunition, to include missile, missile explosive components, and non-nuclear explosive items. They investigate and analyze conventional ammunition accidents, failures, and malfunctions.

(2) MOS 913A, Armament Systems Maintenance Warrant Officer. Manage, supervise, and coordinate the maintenance and repair of small arms, mortars, field artillery pieces, and armor weapon systems to include tank turret, electronic, electrical, hydraulic, fire control, and instrument systems repair. Beginning FY21, this MOS merges into 915E at the rank of CW5.

(3) MOS 914A, Allied Trades Warrant Officer. Directs the setup, operation, and maintenance of machine tools and welding equipment used to fabricate or repair parts, mechanisms, tools, and machinery; manages automotive body, frame, and hull repair, painting, glass, radiator, shop operations; supervises and conducts recovery operations and maintenance of tracked and wheeled recovery equipment. Beginning FY21, this MOS merges into 915E at the rank of CW5.

(4) MOS 915A, Automotive Maintenance Warrant Officer. Manage, supervise, and coordinate the maintenance of power generation, material handling, armament, communications and electronic equipment, and wheeled and tracked vehicles to include towed and self-propelled artillery systems. This MOS merges into 915E at the rank of CW4.

(5) MOS 919A, Engineer Equipment Maintenance Warrant Officer. Manage, supervise, repair, and coordinate the maintenance activities for power generation, construction engineer equipment, water purification, water distribution, refrigeration, air conditioning, bridging, and petroleum transfer pump equipment. This MOS merges into 915E at the rank of CW4.

(6) MOS 915E, Senior Automotive Maintenance Warrant Officer/Senior Ordnance Logistics Warrant Officer. Manage, supervise, and coordinate the maintenance and repair of all ground equipment to include combat equipment, weapon systems, subsystems, and ancillary equipment. The 915E analyzes trends, integrates systems, and resolves logistic requirements at all levels.

(7) MOS 948B, Electronic Systems Maintenance Warrant Officer. Manage, supervise, and coordinate the installation, operation, repair, maintenance, modification, and calibration of radio, radar, computer, electronic data processing, navigation, avionics, air traffic control systems, communications, test measurement and diagnostic equipment, instruments, gauges, cryptographic equipment, night vision devices, chemical agent detectors and monitors. This MOS merges into 948E at the rank of CW5.

(8) MOS 948D, Electronic Missile Systems Maintenance Warrant Officer. Manage, supervise, and

coordinate maintenance activities associated with the various anti-armor, Short Range Air Defense (SHORAD), Terminal High Altitude Area Defense (THAAD), and High to Medium Air Defense (HIMAD) rocket and missile systems, associated radar equipment and targeting systems. This MOS merges into 948E at the rank of CW5.

(9) MOS 948E, Senior Electronics Maintenance Warrant Officer. Manage, supervise, and coordinate the maintenance and repair of weapons systems and subsystems. The 948E analyzes trends, integrates systems, and resolves logistic requirements at all levels. The Warrant Officers with this MOS are merged at the grade of CW5 from MOS 948B and MOS 948D.

b. Ordnance Warrant Officer Professional Development Model. The Ordnance Warrant Officer PDM is focused on the quality and range of experience, as well as specific gates required to achieve the necessary depth of expertise to build and sustain readiness. If done correctly, proper development will foster an Ordnance Warrant Officer that sustains expertise in their functional fields, and are also diverse in experience, education, and exposure.

(1) Warrant Officer One Development. Junior Warrant Officers gain branch expert technical and tactical skills to develop a Warrior Ethos and gain important leadership experience in company grade assignments.

(a) Education. After completing the WOCS, WO1s attend their MOS specific WOBC. Appointment to WO1 is contingent upon successfully completing the WOBC for the officer's respective MOS. Although not a requirement for promotion all WO1s and CW2s should strive to complete an associate's degree.

(b) Developmental assignment. Company-level tactical and technical experts serve at the TOE platoon, company, and battalion level, with some brigade and higher-level support positions.

(c) Self-development. Warrant Officers should devote time to self-development, which should include professional certifications, correspondence courses, institutional training, and civilian education. Junior warrant officers should utilize a professional reading program to broaden both their warfighting perspective and technical comprehension.

(d) Desired experience. The junior Warrant Officer should focus on acquiring and refining tactical and administrative skills as well as MOS-unique technical skills during their developmental assignments.

(2) *Chief Warrant Officer Two.* Throughout a Warrant Officer's career, the model highlights the need to gain technical and tactical competency through developmental assignments. Warrant Officers at this rank should continue their self-development through training, education, experience, professional reading and pursuit of civilian education goals. CW2s primary focus should be on mastering their craft through a series of developmental assignments as very few will have opportunities for broadening experience in operational or institutional assignments.

(a) Education. Upon promotion to CW2, the Warrant Officer is eligible after 2 years' time in grade and should attend their MOS WOAC no later than 1 year after promotion to CW3. Although not a requirement for promotion, all officers in the grade of WO1 and CW2 should strive to complete an associate's degree.

(b) Developmental assignments. Typically, CW2s will continue in developmental tactical assignments, however in some cases CW2s can expect assignments to CW3 positions upon completion of WOAC.

(c) Self-development. The CW2s should continue to acquire and refine their advanced MOS-unique technical skills and continue pursuing professional certifications, correspondence courses, institutional training, and civilian education. CW2s should refine their communication and critical thinking skills as they prepare for operational and broadening assignments.

(d) Desired experience. Exemplary performance *at* every duty assignment is important and determines promotion potential.

(3) Chief Warrant Officer Three. At this point in a Warrant Officer's career, the model highlights the need to be self-aware and adaptive integrators and managers of Army systems as exposure opportunities exist at higher levels of command. Increased responsibilities require Warrant Officers to exercise leadership, mandate an ability to operate and integrate staff functions at the tactical to operational level. CW3 must continue their developmental growth while recognizing the increased opportunities within the generating force, broadening assignments, functional training, and self-development requirements that capitalize on their technical skills. Warrant Officers at this rank should author professional articles in support of sustainment publications highlighting their master technical competence. Warrant Officers at this rank should continue their role as a coach, mentor, and advisor to officers, warrant officers, and NCOs.

(a) Education. Upon promotion to CW3, the Warrant Officer is eligible and should attend the WOILE and WOILE-FO no later than 1 year after promotion to CW4. Although not a requirement for promotion, all

officers in the grade of CW3 should strive to complete a baccalaureate degree.

(b) Developmental and broadening assignments. All officers in the grade of CW3 are tactical and technical experts who normally serve as the senior Warrant Officer in TOE positions at the brigade level and below. The Ordnance Regimental Chief Warrant Officer in conjunction with HRC will identify CW3s with the unique skills required to serve in broadening assignments/opportunities. CW3s can compete for Training with Industry assignments.

(c) Self-development. In preparation for selection to CW4, CW3s should continue to acquire and refine their master MOS-unique technical skills. CW3s should perfect their communication and critical thinking skills in preparation for operational and strategic assignments.

(d) Desired experience. CW3s should provide leader development, mentorship, advice, and counsel to NCOs, Warrant Officers, and officers. CW3s should provide advice and counsel to commanders on technical and Warrant Officer issues. In addition, CW3s may serve in TDA units in supervisory, advisory, and training positions.

(4) Chief Warrant Officer Four: At this point in their career warrant officers are senior level technical and tactical experts that should exude character, competence, and commitment while thriving in complex and uncertain environments. The model highlights the Army's need for premier land force technical experts and systems integrators operating in ambiguity and skilled at solving ill-structured problems. CW4s are highly adept and adaptive leaders, trainers, and advisors who operate by design in specialized roles across a range of Army operations. They bring an unequalled depth and breadth of knowledge, experience, and perspective to the organizations in which they serve. Increased responsibilities mandate an ability to operate and integrate within staff functions at all levels. As they become more senior they focus on integrating branch and Army systems at the national-level.

(a) Education. All Warrant Officers are expected to complete WOILE prior to promotion to CW4 or should complete it no later than one year after promotion to CW4. WOILE is a common core resident course that prepares warrant officers to serve in staff positions at the highest levels, and is taught at the Warrant Officer Career College. After one year time in grade, CW4s are eligible to attend WOSSE and OD WOSSE-FO Courses. OD WOSSE-FO is conducted at ALU, Ft. Lee. Although not a requirement for promotion, all officers in the grade of CW4 should strive to complete a graduate degree.

(b) Developmental and broadening assignments. CW4s are senior-level tactical and technical experts who normally serve in supervisory, advisory, staff, logistics, and nominative MOS non-specific positions in the following type units: sustainment brigade/sustainment command distribution management center, logistics support test, measurement, diagnostic evaluation (branch, detachment, company, activity), maintenance control section or maintenance section (ordnance, maintenance, support, supply company), brigade support battalion, Ordnance battalion, service school, branch proponent, Combat Training Centers, or Centers of Excellence.

(c) Self-development. CW4s should continue acquiring and refining their depth in senior MOS-unique technical expertise, knowledge and experience. CW4s should master the MDMP, staff skills, and strategic communication skills as they prepare for strategic level assignments.

(d) Desired experience. CW4s should provide leader development, mentorship, advice, and counsel to NCOs, Warrant Officers, and officers. The CW4s have special mentorship responsibilities for other Warrant Officers and provide essential advice and counsel to commanders on technical and warrant officer issues.

(5) Chief Warrant Officer Five. At this point in a Warrant Officer's career, CW5s are master-level technical and tactical experts who perform the primary duties of technical leader, manager, integrator, and advisor. They are the senior technical expert in their branch and serve at the highest levels. The model highlights the need to be comfortable operating in ambiguity and skilled at solving ill-structured problems. CW5s are highly adept and adaptive leaders, trainers, and advisors who operate by design in specialized roles across a range of Army operations. They bring an unequalled depth and breadth of knowledge, experience, and perspective to the organizations in which they serve. Increased responsibilities mandate an ability to operate and integrate within staff functions at the tactical to strategic level, and necessitate the ability to thrive in increasingly complex and uncertain environments. CW5 assignments are available both in and outside one's normal career path that are nominative or broadening in nature. Lifelong learning, supported by both civilian and military education, provides critical opportunities to develop expeditionary competencies. Flexible timelines enable CW5s to serve longer in developmental assignments ensuring they have adequate time to utilize their skills and expertise in their understanding of the complex operating environment.

(a) Education. All Warrant Officers are expected to complete WOSSE and WOSSE-FO prior to promotion to CW5 or should complete it no later than one year after promotion to CW5. WOSSE is the capstone for warrant officer PME. It is a branch immaterial resident course conducted at the Warrant Officer Career College. OD WOSSE-FOs conducted at ALU, Ft. Lee. WOSSE provides master-level chief warrant officers with a broader Army level perspective required for assignment to CW5 positions as technical, functional, and branch systems integrators and trainers at the highest organizational levels. Instruction focuses on "How the Army Runs" and provides up-to-date information on Army level policy, programs, and special items of interest. Although not a requirement for promotion, all officers in the grade of CW5 should possess a graduate degree.

(b) Developmental and broadening assignments. CW5s serve in strategic supervisory, advisory, nominative, staff, logistics and MOS-specific positions in division and higher commands, Service school, CASCOM, Army staff or separate DOD agencies. CW5s may serve in positions that are MOS immaterial.

(c) Self-development. CW5s should sharpen their knowledge of the DOD acquisition process, equipment life cycle management, and other functions across the DOTMLPF domains as it pertains to the Ordnance branch. CW5s should become familiar with the constitutional, statutory, and regulatory basis for Army force projection and the capabilities that must be sustained through management of doctrinal, organizational, and materiel change.

(d) Desired experience. CW5s are master-level tactical and technical experts and provide leader development, mentorship, advice, and counsel to NCOs, Warrant Officers, and officers in support of a globally responsive and regionally engaged Army. CW5s have special mentorship responsibilities for other Warrant Officers at all levels and are responsible for providing essential advice to commanders on technical and Warrant Officer issues. CW5s will be familiar with Army organizational roles, functions, and missions at the ACOM and Army staff level. This includes force management processes, from the determination of force requirements through the resourcing of requirements, and the assessment of their utilization in order to accomplish Army functions and missions in a complex environment.

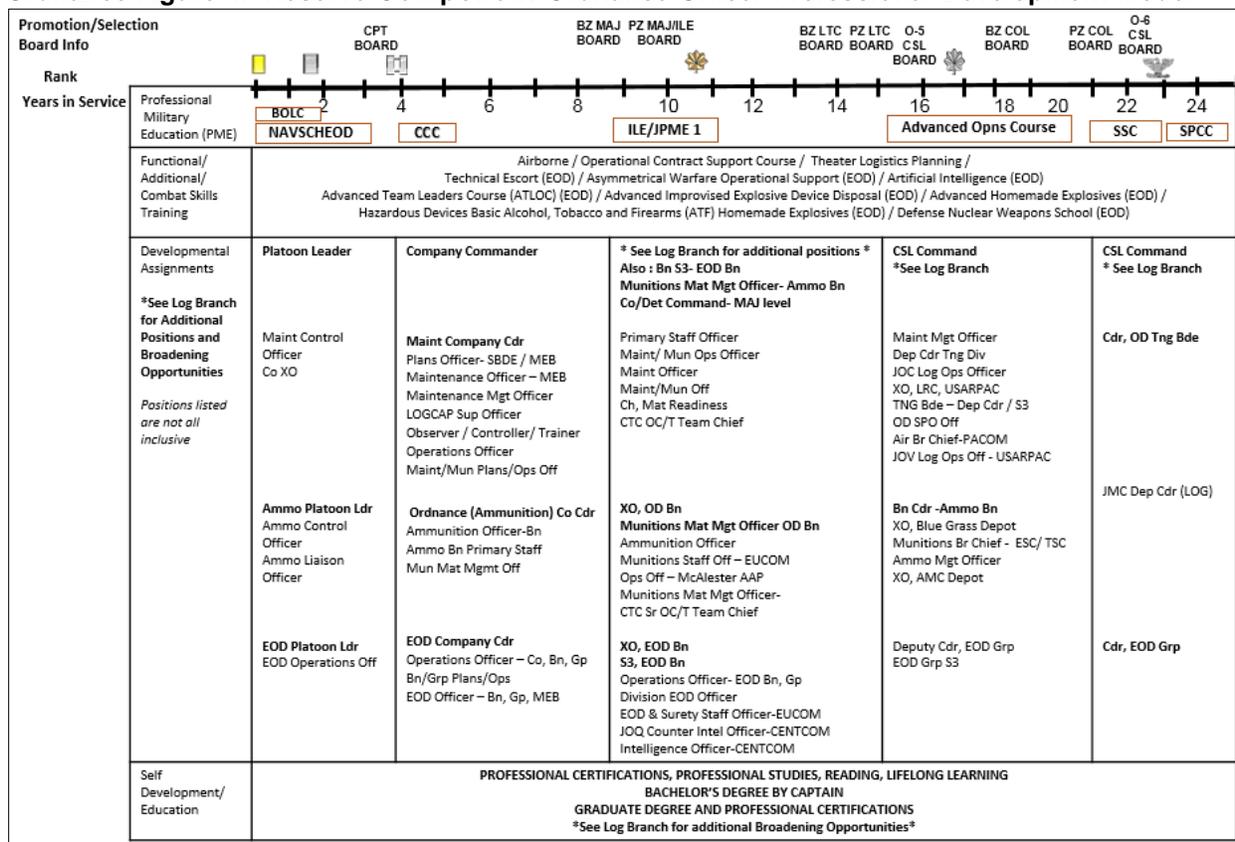
Ordnance Figure 3. RA Ordnance Warrant Officer Professional Development Model

Active Army Ordnance Warrant Officer Professional Development Model											
Soldier for Life	Years WO SVC	0-2 Years	3-4 Years	5-6 Years	7-8 Years	9-10 Years	11-12 Years	13-14 Years	15-16 Years	17+ Years	
	Grade	WO1	CW2		CW3		CW4		CW5		
	PME	WOBC		WOAC	WOILE / WOILE -FO		WOSSE / WOSSE -FO		Senior Service College Seminars		
Functional Training	CIVED Goals	Associate's Degree			Bachelor's Degree			Master's Degree / Doctorate			
	Airborne Air Assault Pathfinder	Action Officer Development Course			Joint Logistics Course / Theater Sustainment Planners Course / Army Force Management Defense Acquisition University Logistics and Acquisitions Web Based and on site training						
		LOG C3 Sustainment Learning Assessment Course & Support Ops Phase II					CSS Senior Leaders Course				
Developmental Assignments	Human Dimension	890A Ammunition WO	Ammo PLT in OD Company / ABCT, IBCT, SBCT (BSB) / Field Artillery Bde / Aviation Support Bn / Ranger Regiment / RSG, 7th Army Training CMD, ESC SPO (* EFF FY22)		JMTC SPO / Sust Bde SPO / SOAR S3 / AFRICOM SPO / AFC Cap Dev / TSC SPO / SF AB / OD BN, USACRC, LOG R&D, ASC, Instr,Writer, PM-SANG, AFC Cap Dev, Training Dev (* EFF FY22)		Instr,Writer / Training Dev / ESC SPO / TSC SPO / AFC Cap Dev / JSOF / USASOC / Security Assistance Training Mgmt / 8A SPO, DAMO-TRA (* EFF FY22)		PEO A&A / AFRICOM, CENTCOM, USAREUR (munitions planner) / HQDA G4		
		913A Armament Systems Maintenance WO	IBCT, SBCT (BSB) / Spt Maint Co / Special Forces Group Spt Bn /		ASC Materiel Readiness Div / DLA / ASG Kuwait / Sust Bde SPO / ABCT, SBCT (BSB)		ESC, ALU INSTR, CASCOM Training Developer, Capability Developer (*EFF FY21)				
		914A Allied Trades WO	Field Artillery Bde (HSC) / ABCT, IBCT, SBCT (BSB) / RSS		Instr / Training Dev / Spt Maint Co / Field Maint Co		TSC, ALU INSTR, CASCOM Capability Developer, Training Developer (*EFF FY21)				
		915A Automotive Maintenance WO	JMRC Maint Div / Bde Mod Cmd (Force Integration) / Field Arty Sch, MCOE, WOCC (Instr, TAC) / ADA / MI BN / MP BN / CA Bde / CM BN / CAV / ENG BN / MED BN / AV Reg / Sig BN / SFG / ABCT, IBCT, SBCT (BSB) / Trans Co		ARSOUTH / SETAF / Ops Grp JRTC / ACRC / JPMAC / TACOM / ADA / Spt Maint Co / Sig Bde / USASOC / OPM SANG / NETCOM / IBCT, ABCT, SBCT (BSB) / TACOM / MP BDE / OC/T / 196 INF / IG MSE						
		919A Engineer Equipment Maintenance WO	TSC (Mat Maint Branch) / ABCT, IBCT, SBCT (BSB) / Spt Maint Co / EN BN / MRBC / EN CO		Army Evaluation Center / ABCT / IBCT / SBCT (BSB) / TACOM / ALU Instr / Training DEV / EN School Instr						
		948B Electronic Systems Maintenance WO	ABCT / IBCT / SBCT (BSB) / Civil Affairs Bde / Aviation Maint / Sig Bn / Spt Maint Co		ATC / Div G6 / AMDC Cmd / SOAR / Sig Bde / Aviation Maint / CAB		Corps G6 / Sig Cmd / ATC / OPM SANG / HQDA IG / USARPAC Hqs				
		948D Electronic Missile Systems Maintenance WO	ABCT / IBCT (BSB) / ADA LPWS, Patriot / Field Artillery Bde (HIMARS, MLRS)		SBCT (BSB) / ADA Land Based Phalanx Weapons System, Patriot / Field Artillery Bde SPO / Sust Bde SPO		AAMDC SPO / Sust Bde SPO / Field Artillery Bde SPO / ESC SPO / TSC SPO / OD Proponent				
		915E Senior Automotive Maintenance WO					TSC (SPO, MRB) / Test Cmd / HQDA G3, 5, 7 / DOD / Sig Cmd (SPO) / CRC / ASC, AMC, USA Sec Ast Tng Mgt / Engineer BDE, ABCT, IBCT, SBCT, Sust Bde (SPO) / ESC / Instr / Capability DEV / Training DEV / Sys Intgr / SGL / DLA		TSC / HQDA G4 / Chief of Engineers (DOL) / Div G4 / Corps G4 / TSC / ASC MRB / OD School / ALU / Joint Comms / SFG / TACOM / ACRC / FSD Branch Chief / Mission Support Element Europe / FORSCOM G4 / PEO GCS / PEO CS/CS5		
		948E Senior Electronics Maintenance WO							ASC / OD School / NETCOM / Sig Cmd / TSC / PEO M&S / PEO C3T		
		Developing / Broadening Assignments			WOCS TAC (All)		CTC Observer Controller		Strategic Broadening Seminars		
			WOBC / WOAC Instructor (All)		AC-RC		HRC Assignment Officer		Nominative 011A Billets		
					CASCOC (Capability / Training Developer) (All)						
Self Development			TWM (CW3)		HQDA IG (All) / WHCA (948B)		CSA Strategic Study Group				
	CSA Professional Reading List / Army Operating Concept / Human Dimension Concept / Learning Concept / Training Concept / Army Leader Development Strategy / Logistics Leader Development Strategy / Army Ethic White Paper / Army Posture Statement										
Credentialing / Certifications	Automotive Service Excellence / American Welding Society / EPA Section 608/609 / NET + Networks Basics / A+ / Electronics Tech Association Fiber Cable Repair / FCC Radar Endorsement / Lean Six Sigma / Gunsmithing / National Institute for Metalworking Skills										

17. Reserve Component Ordnance Officer Development.

Over 60% of the Ordnance capability resides in the RC. RC Ordnance officer career development closely parallels the active Army as described in the paragraphs above. Key differences are in RC time in service/time in grade requirements. Although RC officers may be limited by unit availability and geographical considerations, RC OD officers should strive for an assignments within the Ordnance competencies of ammunition, maintenance, and EOD (Army National Guard).

Ordnance Figure 4. Reserve Component Ordnance Officer Professional Development Model



a. Reserve Component Ordnance Lieutenants.

(1) **RC OD LT Development (91A and 89E).** At the rank of lieutenant, the RC officer should concentrate on developing leadership skills and communicative, management, technical, and tactical skills. This is the stage where officers develop their branch core competency for the rest of their careers. In all assignments, lieutenants should concentrate on learning the basics of how the Army works, how to lead Soldiers, and how to maintain a motivated and positive outlook.

(2) **RC OD LT Education.** As lieutenants, RC officers are required to complete Ordnance BOLC. Those lieutenants selected to become EOD officers in the Army National Guard can expect to attend Phase 1 EOD School at Fort Lee and Phase 2 EOD School at NAVSCOLEOD immediately after BOLC.

(3) **RC OD LT Additional Training.**

(4) **RC OD LT Desired Experience and KSBs.** During the lieutenant years, the focus is on acquiring and refining troop-leading skills, Ordnance competencies, coordination skills, and increasing logistics and administrative skills. Within 2 years of consideration for promotion to captain, RC officers should enroll and begin the CCC-RC Ordnance or Logistics CCC and continue to hone troop-leading procedures. Because all initial assignments are important, an officer should be primarily concerned with manner of performance, development of professional attributes, enthusiasm for the job, and demonstrate potential. Before promotion to captain, officers should possess an excellent knowledge of the Ordnance competencies, and have basic knowledge of other logistics competencies. Lieutenants should strive to become technical and tactical experts by training with the warrant officers and senior enlisted Soldiers in their units. Lieutenants must learn the intricacies of how best to lead their formations and support their command. Lieutenants not only lead their platoons they must develop technical competencies by managing the maintenance process, such as manage work order flow, common equipment failures and repair, repair parts management, and tracking work orders and parts status through automated systems.

(5) **RC OD LT Assignments.**

b. RC OD Captains. (See Logistics Branch).

(1) RC OD CPT Development.

(2) RC OD CPT Education. For promotion to the rank of captain, a bachelor's degree is required. Within 2 years of consideration for promotion to captain, RC officers should enroll and begin the CCC-RC Ordnance or Logistics CCC and continue to hone troop-leading procedures. Officers will complete the CCC-RC (Ordnance) or complete the resident Logistics CCC. At the completion of either course, they will be inducted into the Logistics branch and be designated 90A. Additionally, it is recommended they complete the Support Operations Course to prepare captains for the transition into the Logistics branch.

(3) RC OD CPT Additional Training.

(4) RC OD CPT Desired Experience and KSBs. Captains should seek the responsibility of commanding troops. ARNG EOD captains, who are not selected for an EOD company command, should strive for other types of logistical command assignments for their KD assignment, or serve as Operations Officers at the EOD BN or GP level.

(5) RC OD CPT assignments. When not in command, typically captains will occupy assignments as battalion staff officers, battalion-level primary staff officers, training division staff officers, joint force headquarters (JFHQ) staff officers, or RC school commandants. RC captains may also serve in branch immaterial broadening assignments.

c. RC OD Major. (See Logistics Branch).

(1) RC OD MAJ Development.

(2) RC OD MAJ Education. The general development goals are to complete ILE, and successfully complete other branch, FA or broadening assignments prior to consideration for promotion to lieutenant colonel. ILE will provide a quality education for all field grade officers and prepare them for their next 10 years of service.

(3) RC OD MAJ Additional Training.

(4) RC OD MAJ Desired Experience and KSBs. Majors should continue to gain an in-depth understanding of logistics operations and become proficient in other logistics competencies. Job performance, developmental assignments, and logistics experience are required to prepare the officer for advancement to the next grade.

(5) RC OD MAJ Assignments.

d. RC OD Lieutenant colonels. (See Logistics Branch).

(1) RC OD LTC Development.

(2) RC OD LTC Education. For selection to LTC, officers must complete the Intermediate Level Education-Common Core (ILE-CC) Course. An ILE equivalent course listed in AR 350-1, paragraph 3-20 in which an officer attended in residence as a Military officer as a result of a centralized DA selection board will also meet the military education requirement for Promotion to LTC.

(3) RC OD LTC Additional Training. The full gamut of schools is available to RC officers subject to lesser funding and seat availability.

(4) RC OD LTC Desired Experience and KSBs.

(5) RC OD LTC Assignments. KD assignments include battalion commander of a multifunctional logistics, ammunition, or EOD Battalion (Army National Guard), key staff in sustainment brigades, maintenance division chief, joint staff in a state command, director for maintenance at area readiness support groups, deputy assistant chief of staff materiel, materiel maintenance officer, plans officer at a ESC, or maintenance evaluation team leader at a training division.

e. RC OD Colonels. (See Logistics Branch).

(1) RC OD COL Development.

(2) RC OD COL Education. For selection to COL, officers must be Military Education Level (MEL) 4 qualified by completing the ILE-CC and the Advanced Operations Course. An ILE equivalent course listed in AR 350-1, paragraph 3-12c in which an officer attended in residence as a military officer as a result of a centralized DA selection board will also meet the MEL 4 requirement for promotion to COL. This requirement may not be waived for promotion selection to COL. Officers must attend the SSC or enroll in the Army War College Distributed Learning Course in order to become competitive for General Officer nomination.

(3) RC OD COL Additional Training.

(4) RC OD COL Desired Experience and KSBs. Colonel career objectives include the following: successfully complete colonel-level command of a sustainment brigade, united services property and fiscal offices (USP&FOs), or regional support group (RSG) if selected and serve on a general staff.

(5) RC OD COL Assignments.

f. Branch transfer. Branch transfer is not open to lieutenants. Officers who wish to branch transfer above the grade of captain must transfer into the Logistics branch. Officers who wish to have Ordnance as their Basic Branch within the Logistics branch must take the Ordnance Officer Branch Qualification Course, available online on the Army Distributed Learning Website.

18. Ordnance Reserve Component Warrant Officers

a. General career development. The RC warrant officer development and Warrant Officer Education System objectives and qualifications basically parallel those of the RA, with the difference being the RC time in service/time in grade requirements and goals for PME completion. See paragraph 16 above for unique knowledge and skills and specific career development information by grade. See AR 135-155 for time in service and time in grade requirements. Refer to RC warrant officer developmental model, Ordnance figure 5, for an overview of warrant officer educational system goals, operational assignments, functional training, broadening opportunities and self-development guidance.

b. Reserve Component warrant officer education system goals.

(1) WO1 to be promoted to CW2 must have completed their MOS WOBC.

(2) CW2 to be promoted to CW3 must have completed their MOS WOAC.

(3) CW3 to be promoted to CW4 must have completed their WOILE and WOILE-FO.

(4) CW4 to be promoted to CW5 must have completed their WOSSE and WOSSE-FO.

c. Recommended assignment oriented functional training. The RC warrant officers, like their RA counterparts, are assigned to positions requiring their master MOS-unique technical skills and grade. Assignment oriented training listed below is advantageous in preparing the warrant officer to progress to specific types of assignments as noted.

(1) Battalion (CSSB, BSB - WO1/CW2/CW3) - Logistics Information Systems (LIS: GCSS-A) maintenance management training (USARC G4), Support Operations Course (DL phase or resident course, Joint Logistics Course Commanders Safety Course (DL).

(2) Brigade (Sustainment, Engineer, and Signal - CW3/CW4) - LOGSA ILAP/LIW training, Support Operations Course (resident phase).

(3) Command (ESC, Signal Command (T), TEC, TSC, USARC G4 section, Proponent Ft Lee, VA - CW4/CW5) - RC Theater Sustainment Planners Course (resident), Army Force Management Course.

c. Ordnance warrant officers must have a combination of professional development and developmental assignments to evolve as a well-rounded senior warrant officer. As highly specialized maintainers, they support a multitude of Army mission throughout their careers.

d. Potential broadening opportunities: Potential broadening assignments for RC Ordnance Warrant Officer are limited based on needs of the Army. These assignments are funding (budget) dependent and vary and change rapidly. Broadening assignments are not considered for career management decisions within the USAR. Some examples of possible broadening assignments are listed below for reference only.

(1) CW2/CW3-opportunities exist to serve as TAC officers and regional training institute instructors for ARNG Regional Training Sites, at the approved regional WOCS schools.

(2) CW3/CW4- opportunities exist to serve as Career Managers at HRC Command (Ft Knox, KY) (AGR only).

(3) CW4/CW5- opportunities exist at commands above Brigades for CCWO positions and ARNG regional training institute regimental chief positions. (These are nominative non-MOS specific positions, managed by the individual Commands, these are not TOE approved positions and require a term limit in the position).

Ordnance Figure 5. RC Ordnance Warrant Officer Professional Development Model

		Army Reserve Ordnance Warrant Officer Professional Development Model									
SOLDIER FOR LIFE	Years W/O S/V C	0 Year	1-2 Years	3-5 Years	6-8 Years	9-11 Years	12-14 Years	15-17 years	18-20 Years	21+ Years	
	Grade	W/O1	W/O2	W/O3	W/O4	W/O5	W/O6	W/O7	W/O8	W/O9	
Functional Training	PME	W/OBC	W/OAC	W/OAC	W/OAC	W/OAC	W/OAC	W/OAC	W/OAC	W/OAC	
	CIV ED Goals	ASSOCIATE DEGREE			BACHELOR'S DEGREE			MASTERS DEGREE/DOCTORATE			
Key Developmental Assignments	HUMAN DIMENSION	Action Officer Development Course			Support Operations Course			Army Force Management			
		Defense Acquisition University Logistics and Acquisitions Web Based and on site training									
		Joint Logistics Course						RC Theatre Sustainment Course (ALU)			
		890A Ammunition WO	OD PLT (A MMO)/ OD CO (AMMO)/ SUP BN (SUS CMD)/ FSC CO (ENG)/ BSB			T SC/ESC/ SUS BDE/ SUS CMD (HHC/ ORD BN (A MMO)/ MI BN			SUS CMD/ESC/T SC		
		913A Ammunition Systems Maintenance WO	FSC CO (ENG)/ SUP BN (SUST CMD)/ SMC/MI IntELL BN			SUST BDE/ SUP BN (SUST CMD)					
		914A Allied Trades WO	FSC CO (ENG)/ SMC			Boat Repair CO/FSC CO (ENG)/ SUP BN (SUST CMD)/ BSB/ SMC					
		915A Automotive Maintenance WO	FSC CO (ENG)/ SUPT BN (SUST CMD), Chem BN/ Trans BN/ SIG BN/ QM CO/Trans CO/ HHD QM BN/ MP BN/ MI IntELL BDE/MI BN/ MSC (Europe)/ MSE (7th EUROPE)			TRNG DM/AV CMD(MSE)/ESC/Deply SUPT CMD/Resv SUPT CMD/Legal CMD/ SUPT BN (MSE)/ SMC/ SIG BDE/ MSC (7th EUR)/ MSE (7th EUR)/ T SB (Int BDE)					
		919A Engineer Equipment Maintenance WO	ENG CO/ ENG Bridge CO/ SMC/ ENG BN (MC)/ 9th RRC (TDA)/ T SC HHC			ENG TEC HQ(M SE)					
		948B Electronic Systems Maintenance WO	SIG BN/ SMC/ RT S-M			JT COMMO SPT Ele/ Psys OP S/ SIG BN/ SUPT BN/ESC (TDA)			SUST CMD		
		949D Electronic Missile Systems Maintenance WO	SMC			SUST BDE			ESC/T SC		
915E Senior Automotive Maintenance WO							TRNG DM/ Civil AFF CMD/ Forscom AUG Unit/ OPS Resp CMD/MI (READ) CMD/ ESC (HHC)/ ESC (SPO)/ MSC (PR)/ SIG CMD/ SUST BDE? MP BDE/ TEC HQ (ENG)/ T SC/ BA SOP S (Pacific)/ RT S-M		MP CMD(200th)/ T SC/ TEC HQ (ENG)/ MSC HQ (9th Pacific)/ USAR HQ (G4)/ ESC (SPO)/ OD SCH(Pt Lee)		
948E Senior Electronics Maintenance WO									SG CMD		
Developing/ Broadening Assignments				WOC STAC -nominative		CTC Observer Controller		Strategic Broadening Seminars			
Self Development				WOCs Academ(Rucker) nominative		HRC Assignment Officer		Nominative 011A Billets			
				A-C-RC		CA SCOM (Capability/ Training Developer) (ALL) (nominative)					
Credentialing/ Certifications				Airborne/ Air Assault Graduate (nominative)		HQDA IG (ALL)					
	CSA Professional Reading List / Army Operating Concept / Human Dimension Concept / Learning Concept / Training Concept / Army Leader Development Strategy / Logistics Leader Development Strategy / Army Ethic White Paper / Army Posture Statement										
Automotive Service Excellence / American Welding Society / EPA Section 608/609 / NET + Networks Basics / A+ / Electronics Tech Association Fiber Cable Repair / FCC Radar Endorsement / Lean Six Sigma / Gunsmithing / National Institute for Metalworking Skills											