Air Defense Artillery

1. Introduction.

a. Purpose. Army ADA organizations provide the Army and Joint Forces with a capability to defend against a wide array of hostile aerial and missile threats while ensuring a modular and expeditionary force able to meet future Joint Force requirements. Combat-proven ADA weapons platforms (shooters) and early warning systems (sensors) provide the Army and Joint Forces with technologically advanced, fully digitized capabilities enabling detection and engagement of air and missile threats much earlier, at greater distances, and with increased lethality while simultaneously reducing risk to friendly forces. ADA organizations are ideally suited for frequent support to Joint, Interagency, Intergovernmental, and Multinational (JIIM) operations and their employment can achieve strategic, operational, and/or tactical advantage on the battlefield. In concert with the entire Army, ADA organizations are constituted to remain operationally adaptable. Air Defense-Airspace Management (ADAM) cells at the divisions, brigade combat teams (BCTs) (e.g. Armor, Infantry and Stryker), functional brigades (e.g. Fires and Combat Aviation Brigades (CAB)), multifunctional brigades, and the Ground-Based Mid-Course Defense (GMD) Brigade continue to add challenging assignment opportunities. Current positions include assignments to Patriot Battalions, Patriot/Avenger Composite Battalions, Terminal High Altitude Area Defense (THAAD) Batteries, Indirect Fire Protection Capability (IFPC)/Avenger Battalions, Avenger Battalions, Maneuver Short Range Air Defense (M-SHORAD) Battalions, AN/TPY-2 Forward Based Mode (FBM) Radar Batteries, and Joint Tactical Ground Station (JTAGS) Detachments. The Air Defense Branch resides within the Fires Center of Excellence, a collaboration of ADA and Field Artillery training institutions and communities. This relationship has generated interest in forging a holistic Fires Officer, versed in ADA, FA, maneuver, fires and effects (MFE), and tactical and technical employment concepts.

b. Proponent Information. Office, Chief of Air Defense Artillery (OCADA), 730 Schimmelpfennig Road, Fort Sill, Oklahoma 73503. The telephone number is or commercial (580)442-0617 or DSN 495-0617

c. Functions.

(1) ADA unit missions vary based on system capabilities.

(a) Avengers provide a gun/missile capability to supported maneuver elements. Integration with infantry, armor, artillery, aviation, and logistics elements are critical to the success of these systems on the battlefield.

(b) Sentinel Radars and the Forward Area Air Defense (FAAD) Command, Control, Communications, Computers, and Intelligence (C4I) digital communications architecture provide early warning, detection, and identification of enemy aircraft, helicopters, unmanned aerial systems (UASs), remotely-piloted vehicles, and cruise missiles.

(c) Patriot missile systems defeat a wide variety of air and missile threats. Routinely in support of joint and multi-national operational echelons, The Patriot missile system primarily functions as a Tactical Ballistic Missile (TBM) interceptor in the lower tier of the terminal phase of flight.

(d) THAAD missile systems defeat Ballistic Missile (BM) threats in the terminal phase of flight. Combatant Commanders (COCOM) deploy THAAD systems and radar variants as tactical and/or strategic assets.

(e) IFPC systems provide advanced warning and intercept capability to Soldiers and critical assets from indirect fire threats.

(2) The Way Ahead. As the Army experiences an era of increasing requirements in the face of diminishing resources, ADA expects to see growth in both the active component and reserve component. M-SHORAD and IFPC is being reestablished within Army Division and Corps formations. Total Army analysis (TAA) 22-26 indicates four M-SHORAD Battalions and four IFPC Battalions will stand up incrementally over the next seven fiscal years in the active Army. Follow on TAAs are expected to identify one additional IFPC Battalion for the active Army, as well as four M-SHORAD and three IFPC Battalions for the Army National Guard (ARNG).

(3) Unique features of work in ADA. The descriptions below provide a general overview of the nature of work specific to ADA officers, and warrant officers based on organizational design. The term ADA officer(s) refers to both commissioned and warrant officers assigned to Branch code 14 or the 140 series military occupational specialty (MOS). Although the nature of some work is similar at company-level grades, not all assignment functions and requirements are interchangeable. Specific career path information is provided throughout this document.

(a) Assignments to Modified Table of Organization and Equipment (MTOE) units provide opportunities to command, control, and direct ADA organizations at detachment, platoon, battery, battalion, and brigade

levels. Staff assignments are also characteristic of MTOE assignments. These skills are essential to professional development and expansion of experience in personnel matters (S-1), intelligence (S-2), training and operations (S-3), and supply and logistics (S-4).

(b) Assignments in table of distribution and allowances (TDA) organizations provide opportunities similar to those stated above, but lend themselves more to broadening experiences such as capabilities, materiel, and training development, and platform instruction for officers.

(4) ADA Officer tasks. The information below provides a broad outline of an ADA officer's mission essential task list:

(a) Serve as Soldiers first and maintain empathy and the Warrior Ethos.

(b) Integrate (plan and employ) ADA forces into Army or JIIM organizations to defeat third-dimension threats.

(c) Plan Army airspace command and control and targeting as part of an Army or JIIM team.

(d) Provide early warning of air and missile threats to Army and/or JIIM forces.

(e) Serve as ADA advisors to U.S., allied, and coalition forces.

(5) ADA assignment opportunities other than MTOE.

(a) Develop, review, and evaluate doctrine and training for all ADA organizations.

(b) Train, develop, and evaluate ADA skills at combat training centers (CTCs).

(c) Serve in positions requiring specific as well as general technical and tactical skills, such as staff officers in organizations and activities requiring ADA expertise (includes JIIM and Army staffs).

(d) Serve as instructors at pre-commissioning programs and service schools.

(e) Serve as ADA advisors to Army National Guard (ARNG) and U.S. Army Reserve (USAR) component organizations.

(f) Serve as a Fires Officer at the Fires Center of Excellence (FCoE).

2. Officer Characteristics required

a. General. For Army officers, everything begins with the warrior ethos. They must be warriors who can effectively apply the four core dimensions of leadership: values, attributes, skills, and actions. The four core leadership dimensions provide the basis for what a leader must be, know, and do. Values and attributes set the basis for the character of the leader - what a leader must be. Skills developed by leaders establish competence - what a leader must know. Actions leaders conduct and execute constitute leadership - what a leader must do. This leadership framework, in concert with embracing the warrior ethos, describes a leader of character and competence who acts to achieve results across the spectrum of operations, from total war to stability and support operations, disaster relief, or realistic training operations. An Army officer and leader, by virtue of assumed role or assigned responsibility, inspire and influences people to accomplish organizational goals. Army leaders motivate people both inside and outside the chain of command to pursue actions, focus thinking, and shape decisions for the greater good of the organization ADP 6-22. These occur through leadership - the process of influencing people by providing purpose, direction, and motivation to accomplish the mission and improve the organization ADP 6-22. The nation and the Army have articulated the expectations of leaders in the Army. The Army leadership requirements model in FM 6-22 illustrates the expectations of every leader. Air Defense Artillery and the Army rely on effective teams to perform tasks, achieve objectives, and accomplish missions. As such, building and maintaining teams (internally and externally to the organization) is essential to mission command FM 6-22.

b. Unique knowledge and skills of an ADA officer. ADA officers are:

(1) Premier Warfighters who maintain the Warrior Ethos at all times.

(2) Joint and expeditionary minded.

(3) Worldwide deployable, motivated, disciplined, and physically fit.

(4) Grounded in Army Core Values.

(5) ADA officers must be capable of employing systems in tactical, operational, and/or strategic environments, training Soldiers, and units to perform their wartime missions, and developing plans as part of an Army or JIIM team.

(6) ADA officers are guided by the four dimensions of leadership: values, attributes, skills, and actions (for additional discussion of these leader development dimensions, see FM 6-22, Leader Development). Leaders who consistently display competencies enabling them to adapt to the full spectrum of operations comprising today's contemporary operating environment (peacetime, disaster relief, contingency operations, and war).

3. Officer Leader Development.

a. Officer Development Model. All officers are expected to possess the base characteristics enabling them to develop into agile and adaptive leaders. These leaders must be competent in their core proficiencies. They must be broad enough to operate across the spectrum of conflict. Be able to operate in JIIM environments and leverage other capabilities in achieving their objective, culturally astute and able to use this awareness and understanding to conduct operations innovatively, courageous enough to observe and exploit opportunities in the challenges and complexities of the objective environment, and grounded in Army values and warrior ethos. Further explanations of these characteristics are referenced in FM 3-0 and a more detailed discussion of officer leader development can be studied in this publication.

b. Air Defense Artillery Officer Development. The ADA branch provides diverse assignment opportunities allowing for numerous career developmental paths. The branch strives to produce and sustain highly qualified tactically and operationally oriented officers through experience gained during a variety of assignments in either operational or generating force units, or during broadening assignments and self-development activities.

c. Goal. The goal is to maintain a vigorous, viable career path for ADA branch officers, optimizing the company and field grade inventory to meet branch authorizations, providing sufficient flexibility to support branch or multi-functional positions and providing optimal time in key developmental assignments while stabilizing the force.

d. Branch life cycle functions.

(1) Structure. The preponderance of the ADA force serves in Patriot organizations. Within the Active Component, there are Patriot Battalions, Composite Patriot/Avenger Battalions, IFPC/Avenger Battalions, M-SHORAD Battalions, AN/TPY-2 Forward Based missile defense batteries, and THAAD Batteries under the construct of ADA Brigades and Army Air and Missile Defense Commands (AAMDCs). The Army National Guard (ARNG) has a AAMDC, ADA brigades, and Avenger battalions. The GMD brigade and battalion in the ARNG will remain vital to global force missions and the National Defense Strategy. Critical assignments remain in multifunctional and functional BCTs, divisions, and corps and are integral to the ADAM/BAE functional concept as well as the Counter-Unmanned Aerial Systems (C-UAS) concept of operations.

(2) Acquisition. Officers will continue to be accessed through United States Military Academy (USMA), ROTC, and the Officer Candidate School (OCS). Warrant Officers will continue to be recruited from both the Noncommissioned Officer Corps and Regular Army Officer Corps. Both officer and warrant officer accessions are based on preference, technical and tactical qualifications, and needs of the Army. The branch will also remain a donor branch for detailed officers from other combat support/combat service support branches.

(3) Individual Training and Education. Job analysis identifying the required knowledge, skills, and abilities originally led to the suggested training and education for CMF 14 officers listed within this publication. The training and education has been periodically updated to conform to changing requirements and to maintain a clear path to professional development.

(4) Distribution. Officers will be provided assignment opportunities to develop the skills and experience base necessary for service at the next higher grade. The sequencing and timing of assignments is driven by Army priorities.

(5) Deployment. ADA officers are warfighters who must remain personally and professionally prepared to deploy worldwide at all times. Whether assigned to warfighter-centric units or training organizations, readiness is imperative to the success of the mission. ADA officers must prepare themselves and their Families for planned and no-notice deployments. In today's fast-paced and uncertain operating environment, Families must be ready for multiple deployments of unknown duration.

(6) Sustainment. Officer Personnel Management System:

(a) Promotion. Skills, experience, duty performance, and adherence to branch requirements are all factors influencing promotion; promotion rates will be determined by Army needs and the Defense Officer Personnel Management Act goals.

(b) Command. Commands at battalion and brigade level are organized into four functional categories: operations, strategic support, recruiting and training, and installation. Officers have the option to compete for selection within a desired command category and can decline other categories without prejudice. Officers selected for command may submit operational and personal deferment requests. Since Centralized Selection List (CSL) process may change, officers should contact ADA assignments officers at Human Resources Command (HRC) to receive the latest information. The results of the

command selection process are announced in the CSL. (Note: Though not currently selected via CSL, ADA has recently implemented Command Chief Warrant Officer positions at each AAMDC and the U.S. Army Space and Missile Defense / Army Forces Command)

(c) Officer Evaluation Report (OER). The OER will reinforce the link between officer development and the Officer Personnel Management System.

(7) Professional Development. Officer development should occur through a methodological sequence of institutional training and education, progressive operational and broadening assignments in tactical, training, and staff assignments, and self-development. The goal is to develop officers professionally to proficiently accomplish ADA mission essential task list-related functions during joint and combined arms operations. A detailed discussion of officer development can be found in this publication.

(8) Transition. The officer separation process remains unchanged; however, ADA officers need to be mindful of the coming fluctuations of the Army force structure and leverage opportunities to transition to a shortage career field should ADA become over strength.

(9) Broadening Guiding Principles - Assignments that are not Key Developmental (KD) (see figure 12-1) are considered broadening. However, in order to maximize broadening return on investment, consider the following:

(a) Assignment must be tied to future Army requirements.

(b) Broadened officers must be deliberately managed on a continuous career path.

(c) Select the right person for the program/opportunity.

e. Lieutenant Development.

(1) Education. The Lieutenant attends the ADA Basic Officer Leader Course (BOLC) Phase B (proponent institutional training) after completing pre-commissioning training in BOLC Phase A.

(2) KD Assignments. Lieutenants are assigned to a Battery/Company in a platoon leader position within a Patriot battalion, Patriot/Avenger composite battalion, Avenger battalion, M-SHORAD battalion, IFPC/Avenger composite battalion, Missile Defense Battery, or THAAD battery. As platoon leaders, lieutenants will gain valuable experience and training that becomes the "cornerstone" of their career development. Platoon leaders in Patriot and THAAD batteries are expected to train and perform as tactical control officers (TCO).

(3) Developmental and Broadening Assignments. Additional developmental duty positions for seasoned platoon leaders include executive officer (XO), battalion staff officer, liaison officer, and aide-de-camp.

(4) Self-development. By law, officers must obtain an Undergraduate degree before promotion to captain (CPT). A self-development program enhancing professional development through lifelong learning must also begin at the grade of lieutenant.

(5) Desired experience. The focus of effort during the lieutenant years is to master the basic skills of the ADA Branch and acquire, reinforce, and hone troop-leading skills. Lieutenants must seek leadership positions in troop units whenever possible, as this is the best means to become educated in Army operations, building a strong foundation for future service as an Army officer. Accompanying development of technical, tactical, logistics, and administrative skills are important in these assignments, but leading Soldiers embodies the essence of leadership development for lieutenants and CPTs. Inculcation of the Warrior Ethos and Army Core Values are essential to the character development of young officers prior being promoted to CPT, officers must possess an in-depth knowledge of ADA and combined arms operations gained through experience in MTOE warfighting units.

f. Captain Development.

(1) Education. Officers generally attend the Captains' Career Course (CCC) following selection for promotion to CPT. Select ADA officers may have an opportunity to attend the resident phase of another combat arms branch CCC or the U.S. Marine Corps Expeditionary Warfare School. These schools are extremely competitive and provide increased benefits to the officer and both branches.

(2) KD Assignments. CPTs must aggressively prepare for and seek the skills and experience to prepare them for duties at the grade of major (MAJ). The following are considered KD assignments for ADA CPTs:

(a) ADA battery command (exceptions may include command of another combat arms battery or company).

(b) HHB or Maintenance Company/Service Battery commander of an active component ADA organization.

(c) HHC commander of an active component non-ADA organization (such as company command of Divisional HHC Units, company commander of Basic Training Company, or Initial Entry Training Company).

(d) Joint Tactical Ground Station (JTAGS)/AN/TPY-2 FBM detachment command.

(e) Officers in Corps Year Groups 2004 or earlier receive KD credit for ADAM Cell OIC assignments within a Divisional BCT, Multifunctional Brigade, or Functional Brigade to include Aviation, Fires, and Battlefield Surveillance Brigades (BfSB). (IAW HRC assignment policy during that timeframe)

(3) Developmental and Broadening Assignments. Completion of CCC and a minimum of 12 months in one of the above KD positions will fully qualify CPTs for promotion to MAJ; the optimal timeline will provide for an 18-month command experience. Officers will not suffer prejudice towards promotion or assignment consideration because of not having commanded at the battery/company level. Some CPTs may also be assigned to either branch-specific or generalist assignments, allowing them to develop a wider perspective of the Army or other services (some examples below):

(a) ADA Brigade/AAMDC Air Defense Artillery Fire Control Officer (ADAFCO; ASI: T4)

(b) Patriot Top Gun positions (ASI: T5)

(c) Multinational Transition Team Trainer (MTT)/Advisor.

(d) CTC observer/controller (O/C).

(e) Small group instructor.

(f) ADA battalion/brigade staff officer.

(g) GMD brigade staff officer.

(h) Battalion or brigade tactical director (TD).

(i) Space and Missile Defense Command (SMDC) staff officer.

(j) Battlefield Coordination Detachment staff officer.

(k) Army/Army Command (ACOM)/Army Space (ARSPACE) staff officer.

(l) ADAM cell officer within a BCT, Multifunctional Brigade, or Functional Brigade to include Aviation, Fires, and BfSB.

(m) Security Force Assistance Brigade (SFAB).

(n) Other branch developmental positions (e.g., Asymmetric Warfare Group (AWG); ADA doctrine or combat developer in the Capability Development Integration Directorate (CDID); Directorate of Training and Doctrine Development (DOTD); Office, of Chief of Air Defense Artillery (OCADA); HRC positions; Army Test and Evaluation Command (ATEC); U.S. Army Recruiting Command staff positions; AC/Reserve Component (RC) positions; advanced civil schooling (based on Army requirements); Reserve Officer Training Corps (ROTC) instructor; USMA instructor or tactical officer; Foreign Service exchange officer or Foreign Service school exchange officer; JIIM assignments; fellowship/internship positions; aide-de-camp.)

(4) Self-development. All CPTs must exercise continuous self-development and must master all aspects of ADA operations including JIIM operations. Self-development initiatives may include (among others) on-line/correspondence courses, civilian education, professional reading programs, and other institutional training to broaden their warfighting perspective. Officers are eligible for functional designation at both their 4th and 7th years of service. The formal designation of functional areas is based on the needs of the Army, officer preference, military experience, and civilian schooling. Several functional areas provide advanced civil schooling, which may be granted upon selection to the functional area (subject to change).

(5) Desired experience. Developmental assignments, both branch-specific and generalist, will provide ADA CPTs with exposure to the Army and in some cases JIIM organizations. The CPTs must have mastered their troop leading skills and fully understand operations at battery, battalion, and brigade levels. At this stage in their career development, ADA CPTs must recognize how the Army functions and fights.

g. MAJ Development.

(1) Education. At the 7th year, an HQDA-level board considers Army requirements and each officer's skills, experience, and preferences before assigning each officer to a branch or functional area in one of three functional categories. Officers selected to remain in the ADA basic branch (functionally designated) must successfully complete Intermediate Level Education (ILE) and their KD assignment(s) to become competitive for promotion to lieutenant colonel (LTC). ILE/JPME I is critical at this point in an ADA officer's career and must be completed prior to the 15th year of commissioned service. This prepares them for success in their next 10 years of service and is a prerequisite for Senior Service College (SSC) attendance. Upon completion of ILE/JPME I, ADA MAJs must continue to aggressively prepare for and seek the skills and experience that will prepare them for promotion to LTC.

(2) KD Assignments. The following are considered KD assignments for ADA MAJs:

(a) Battalion/Brigade S-3 or XO of an ADA organization.

(b) Battalion/Brigade S-3 or XO of a Special Troops Battalion (STB) or another combat arms unit.

(c) AAMDC Plans Officer.

(d) AAMDC or ADA Brigade, Senior ADA Fire Control Officer.

(e) Security Force Assistant Brigades

(3) Developmental and Broadening Assignments. Completion of ILE and a minimum of 12 months in a key developmental assignment fully qualify for promotion to LTC. The optimal timeline provides officers with the opportunity to serve in one or more of the above listed positions for at least 18-24 months. Officers will not suffer prejudice towards promotion or assignment consideration because of not having served as an ADA battalion or brigade S-3/XO. Some ADA MAJs may be assigned to either branch-specific or generalist assignments allowing them to develop a wider perspective of the Army or other services (some examples below):

(a) CTC senior O/C.

(b) ADA brigade staff officer.

(c) USAADAS/ILE faculty and staff officer.

(d) Brigade/division/corps staff officer.

(e) GMD Brigade/ARSPACE/SMDC staff officer.

(f) Department of Defense (DoD)/JIIM/Army/ACOM staff officer.

(g) Battle Command Training Program (BCTP) positions.

(h) Service school instructor.

(i) AC/RC Service in a cross-component billet positions.

(j) Other branch or multi-functional positions.

(1) Inspector General.

(2) Fellowship/Internship positions.

(3) ROTC/USMA instructor.

(4) FCoE Staff/CDID/DOTD/OCADA.

(5) ATEC/U.S. Army Training and Doctrine Command (TRADOC).

(6) AWG assignments.

(7) Futures/Army Staff G-8 (Force Development [FD]) and HRC positions.

(4) Self-development. All MAJs must exercise continuous self-development to fully master all aspects of ADA operations, including JIIM operations. MAJs should also begin the process of mastering the Fires functional concept. Self-development initiatives may include (among others) on-line/correspondence courses, civilian education, professional reading programs, and other institutional training to broaden their warfighting perspective. Skills and experience continue to drive an officer's career path and future assignments. See Figure 13-1.

(5) Desired experience. At this stage, an ADA MAJ must hone skills in the planning and execution of ADA TTPs and develop expertise in the JIIM operational environment. While 12 months is the minimum standard, an officer should serve for as long as possible in key developmental assignments.

h. LTC Development.

(1) Education. Officers selected for LTC must seek assignments of greater responsibility in branch positions. The SSC selection board will screen ADA LTCs' records after their 16th year of service. Completion of ILE is required for attendance consideration. SSC is the final major military educational program available to prepare officers for position of greatest responsibility in the DoD Approximately 30-35 percent of a corps year group is selected to attend during their years of eligibility that run between the 16th and 23rd years of service. Officers selected for command will attend a Pre-Command Course.

(2) KD Assignments. ADA LTCs must continue to aggressively prepare for and seek the skills and experience that will prepare them for promotion to COL. The objective in LTC assignments is to give ADA officers the opportunity to make a greater contribution to the branch and the Army. KD assignments for LTCs include the following:

(a) CSL battalion-level command.

(b) Transition Team Commander.

(c) AAMDC Deputy Chief of Staff.

(d) AAMDC Deputy G3.

(e) Corps Chief of AMD Operations.

(f) Division Chief of AMD Operations.

(3) Developmental and Broadening Assignments. The following are some possible examples of branch-specific/generalist assignments for LTCs:

(a) SMDC staff officer.

(b) DoD/JIIM/Army/ACOM staff officer.

(c) Service school instructor/staff officer.

(d) AC/RC Service in a cross-component billet positions.

(e) BCTP positions.

(f) Director of OCADA, selected FCoE assignments (G5 Chief of Plans & Futures, Senior AMD Concepts Officer, Chief of Force Development, Senior TCM Staff Officer, or Chief of Lessons Learned).

(g) HRC staff.

(h) Chief, GMD fire direction center (FDC).

(i) FCoE staff/Fires Officer.

(4) Self-development. Completion of SSC and a minimum of 12 months in a KD assignment will fully qualify lieutenant colonels for promotion to COL. LTCs should also continue to develop Fires skills.

(5) Desired experience. ADA LTCs must have mastery level understanding of ADA Operations, Logistics, and the Command and Control required for Combatant Command level operations. Officers are expected to complete a minimum of 12 months of assignment at a Theater Level Command; (AAMDC, Army Service Component Command [ASCC], Combatant Command [COCOM]); at a Major Subordinate Command, (TRADOC, FORSCOM); or Army / Joint Staff. Officers selected as Battalion Commanders should have this experience prior to or immediately following command.

 i. Colonel (COL) Development.

(1) Education. The annual SSC selection board reviews the files of COLs until their 23rd year of service. The majority of COLs will attend the resident training or be awarded Military Education Level (MEL) SSC certification from the U.S. Army War College Distance Education Course during the latter 3 years of their eligibility window for more information on the available SSC-level courses. Officers selected for command will also attend a Pre-Command Course. COLs and LTC (P) selected to serve as TRADOC Capabilities Manager should attend the Combat Developers Course.

(2) KD Assignments. ADA COLs contribute to the branch by serving in key and developmental assignments to include the following:

(a) CSL brigade-level command (e.g., ADA brigade, garrison command, recruiting, GMD Brigade).

(b) DA G-8 Air Defense Division, Chief-FDG.

(c) AAMDC Chief of Staff.

(d) AAMDC Assistant Chief of Staff G-3.

(e) MTT Trainer/Advisor.

(3) Developmental and Broadening Assignments. The following are some possible examples of branch-specific/generalist assignments for COLs:

(a) SMDC/German Air and Missile Defense Force/GMD staff officer.

(b) DoD/Joint/Army/ACOM staff officer.

(c) Installation staff officer.

(d) ROTC/USMA staff officer.

(e) AC/RC Service in a cross-component billet positions.

(f) USAADAS Assistant Commandant.

(g) FCoE G 3/5/7, TCM-AAMDC, TCM-ADA Brigade; MDA, Director Warfighter Integration; USSTRATCOM Deputy Commander or Director of Operations JFCC-IMD.

(4) Self-development. ADA COLs must maintain their branch skills and keep current on all changes that affect the Soldiers they command and/or manage. Mastery of all aspects of offensive and defensive Fires is critical to service as a Fires General Officer. JIIM assignments are important during this phase.

(5) Desired experience. ADA COLs must have mastery level understanding of Strategic, Political, and National Security implications of ADA Operations. Officers are expected to complete 12 months

assignment as a G3, Chief of Staff, Senior Staff Officer, or Division Chief at a Theater Level Command; (AAMDC, ASCC, COCOM); an ACOM, (TRADOC, FORSCOM); or Army / Joint Staff. Officers selected as Brigade Commanders should have this experience prior to or immediately following command.
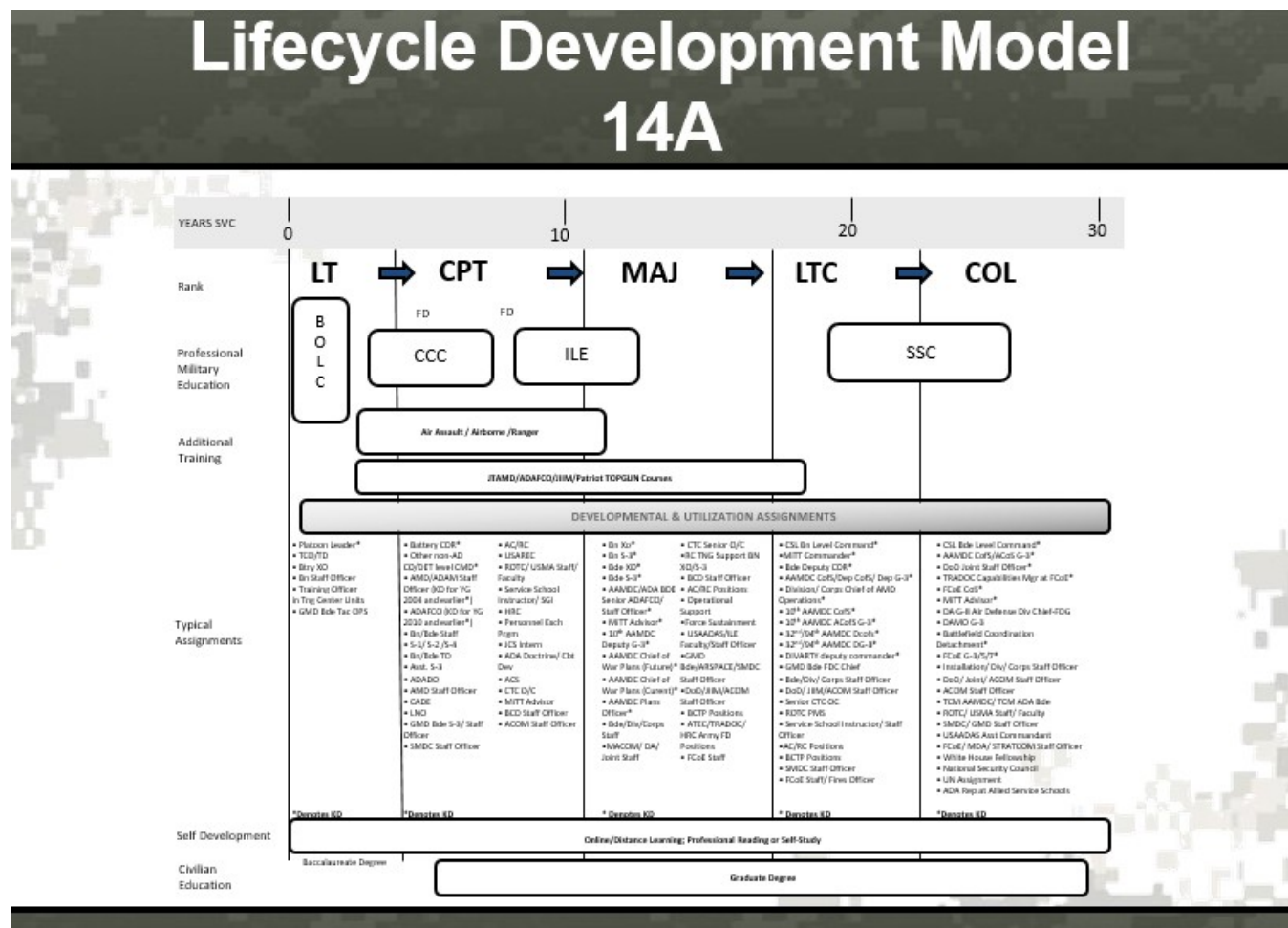
(Figure 12-1)

4. Warrant Officer Development.

a. Unique knowledge and skills of Air Defense Warrant Officers. Air Defense Warrant Officers are adaptive and experienced combat leaders who administer, manage, maintain, operate, and innovatively integrate a wide variety of emerging technologically advanced Air Defense specific computer application software used to develop C2 communication / data link architecture and air and missile defense designs to employ various Air Defense Missile and JIIM systems. Air Defense Warrant Officers must be dynamic trainers, confident warfighters, and advisors, developers of specialized teams, and technical experts.

(1) The 140A Command and Control Systems Integrator supervises, coordinates, plans, and manages joint tactical data link (TDL) operations, maintenance, and training associated with Air Defense systems to include the Forward Area Air Defense Command, Control, and Intelligence (FAAD C2I)/ Counter-Rocket, Artillery, and Mortar Command and Control systems; Patriot Tactical Command Systems; Patriot Information Coordination Centrals; Patriot Battery Command Posts (BCP); Air and Missile Defense Planning Control Systems (AMDPCS); ADAM Cells; and the Theater Missile-Warning Detachments. Advises the commander on joint TDL implementation, employment, capabilities, and configuration management for all Air Defense systems. Trains Soldiers and Officers on the necessary tasks of employing TDL capabilities and software configuration that best supports Army Air Defense operations. Analyzes and interprets data employed in the joint TDL architecture for a joint theater to support immature

or sustained operations with the Air Defense assets on hand, and when necessary, serve as detachment commander. Serves as the unit Interface Control Officer (ICO) and may serve as the Joint Interface Control Officer (JICO), Regional Interface Control Officer (RICO), Sector Regional Interface Control Officer, or Joint Interface Control Cell Watch Officer. Coordinates with the JICO to conduct Multi TDL Network (MTN) planning and execution, to include track data management, TDL operations, and TDL maintenance. Can serve in other nominative positions army wide with duties as instructors, career managers or staff positions in directorates.140A Command and Control Integrators supervise, plan, maintain, manage, and coordinate all joint data link operations and command, control, communications, computers, and intelligence (C4I) systems training associated with FAAD; Patriot Battery Command Post (BCP); Patriot Tactical Control System (TCS); AMDPCS; Corps, Division, and Brigade-level Air Defense Airspace Management (ADAM) cells; and the JTAGS, with ancillary equipment. Responsible for coordinating the activities of enhanced operators for the maintenance of computers, commercial off the shelf and common hardware and software including ancillary equipment. Estimates repair priorities based on fix or fight criteria and availability of required assets. Advises the commander on system employment options, capabilities, and configuration management for all Army AMD Command and Control (C2) systems. Responsible for materiel reporting and readiness, system employment, and crew certifications. Acts as instructors for Soldiers and officers, teaching the necessary tasks of employing assets and adapting the software that best supports Army and AMD C2 doctrine. Analyzes and interprets data employed in the communications architecture for a joint theater to support immature or sustained operations with the C2 assets on hand, and when necessary, serves as the detachment commander. Serves as the Army track data coordinator for the regional area AMD coordinator; and the regional RICO. Daily duties include configuration management for the AMDPCS, including ancillary equipment. Serves as data-link managers providing prioritization and standard operating procedures for joint interoperability. Can serve in other nominative positions Army-wide, with duties as instructors, career managers, or in staff positions.

(Figure 12-2)

(2) 140K Air and Missile Defense Systems Tactician serves as a Subject Matter Expert (SME) on the employment and operations Air & Missile Defense (AMD) systems as a Tactical Control Officer (TCO) at the battery level, TD and Standardization Officer at the battalion level and ADAFCO and Standardization Officer at the brigade and Army Air and Missile Defense Command level. Monitor/Identify aircraft according to established procedures, initiate and monitor engagements of threat aircraft and missiles, and plan/develop air and missile defense designs in support of assigned/contingency missions. Advise the commander on capabilities and limitations of the AMD systems. Coach, teach, mentor and evaluate Soldiers in AMD system operating tactics, techniques, procedures, and Joint Kill Chain (JKC) functions Advises the commander on all tactical and technical considerations at all levels.

ACT Career Map - 140K

		WO1	CW2	CW3	CW4	CW5
OPERATIONAL DOMAIN	DEVELOPMENT / BROADENING ASSIGNMENTS	• Tactical Control Officer Patriot	• Tactical Control Officer Patriot • WOCC TAC Officer	• THAAD/Patriot Standardization Officer Patriot BN • Tactical Control Officer THAAD Battery • Tactical Director Patriot Battalion • WOCC TAC Officer • ADA School Instructor or Doctrine Writer • TWI AMRDEC • Technical Assistance Field Team (TAFT)	• Air Defense Artillery Fire Control Officer (ADAFCO) AAMDC • Air Defense Artillery Fire Control Officer (ADAFCO) ADA Brigade • AMD Tactical System Analysis (ATEC) • BDE AMD Standardization Officer • HRC ADA Career Manager • WOCC Instructor/Writer • ADA School Instructor/Writer • TRADOC TCM-AAMDC/TCM-BDE • WOES Writer/Developer • Functional Course Instructor (PTG, ADAFCO, THAAD) • ADA Proponent Warrant Officer • Technical Assistance Field Team (TAFT)	• Nominative Position Army Staff • Nominative Position TRADOC Staff/WOCC • TCM-AAMDC/TCM-B DE • AAMDC Standardization Officer • SMDC Command Chief Warrant Officer (CCWO) • AAMDC Command Chief Warrant Officer (CCWO) • Chief Warrant Officer of the Branch (CWOB)
INSTITUTIONAL DOMAIN	PME	• Warrant Officer Basic Course (WOBC), Fort Sill OK	• Warrant Officer Advanced Course (WOAC), Fort Sill OK	• Warrant Officer Intermediate Level Education (WOILE), Fort Rucker AL	• Warrant Officer Senior Service Education (WOSSE, PH1); DL	• Warrant Officer Senior Service Education (WOSSE, PH2), Fort Rucker AL • Senior Leader Seminar at Army War College
	FUNCTIONAL TRAINING	• JT 102 (MAGIC) • Space Enabler (BY ASI) • JT-201 Multi-TDL Planners Course • THAAD ASI-7A Course	• JT-201 Multi-TDL Planners Course • Patriot Top Gun Course • Army Space Cadre Basic Course (ASCBC) Phase 1 & 2 • THAAD ASI-7A Course • BMDS Staff Course	• JT-201 Multi-TDL Planners Course • Air Defense Artillery Fire Control Officer (ADAFCO) • Manpower and Force Management, Course • Patriot Top Gun Course • Army Space Cadre Basic Course (ASCBC) Phase 1 & 2 • Airspace Operations Center Initial Qualification Training IAMD • Space 200 Course • Joint Air Operations Command and Control CRS • C2BMC Planners Course • Systems Approach to Training Basic Course (SATBC) • Capabilities Development Course	• Air Defense Artillery Fire Control Officer (ADAFCO) • Manpower and Force Management, Course • Patriot Top Gun Course • Space 200 Course • Airspace Operations Center Initial Qualification Training IAMD • Joint Air Operations Command and Control CR • TRADOC Middle Managers Course • ATEC Test and Evaluation Basic Course (TBEC)	• Force Management Course • Airspace Operations Center Initial Qualification Training IAMD • Associate in Project Management (CAPM-PMI) Certification
SELF-DEVELOPMENT DOMAIN: STRUCTURED		• Action Officer Development Course 131-F00 • CompTIA NET+ Certification • CompTIA A+ Certification • DAU: ACQ 101: Fundamentals of Systems Acquisition management	• Completion of an Associate Degree • Introduction to Joint Air and Missile Defense Operations Course • COMP TIA A+ Certification • Comp TIA SEC+ Certification • Lean Six Sigma (Yellow Belt) Certification • DAU: ACQ 120: Fundamentals of International Acquisition (FIAC)	• Completion of Undergraduate degree • CompTIA Server+ Certification • Lean Six Sigma (Green Belt) Certification • DAU: CON 127: Contract Management • DAU: PMT 252 Program MGMT Tools Course, Part I	• Completion of Graduate Degree • DL Phase of WOSSE • CASP Certification • DAU: PMT 257 Program MGMT Tools Course, Part II • DAU: CLL 001 Life Cycle Management • Army Force Management Course (How the Army Runs) • Lean Six Sigma (Black Belt Certification)	• Completion of a Graduate Degree • Completion of Doctorate • DL Phase of WOSSE • Army Force Management Course (How the Army Runs)
SELF-DEVELOPMENT DOMAIN: GUIDED		• MOS Related Degree: Western Oklahoma State College for Associates of Science in Military Studies	• MOS Related Degree: Western Oklahoma State College for Associates of Science in Military Studies • MOS Related Degree: Webster University for a Bachelors in MGMT, Media Communication, Religion and Global Society, and Project Mgmt. Grad Certificate	• MOS Related Degree: Western Oklahoma State College for Associates of Science in Military Studies • MOS Related Degree: Webster University for a Bachelors in MGMT, Media Communication, Religion and Global Society, and Project Mgmt. Grad Certificate	• MOS Related Degree: Western Oklahoma State College for Associates of Science in Military Studies • MOS Related Degree: Webster University for a Bachelors in MGMT, Media Communication, Religion and Global Society, and Project Mgmt. Grad Certificate	• MOS Related Degree: Western Oklahoma State College for Associates of Science in Military Studies • MOS Related Degree: Webster University for a Bachelors in MGMT, Media Communication, Religion and Global Society, and Project Mgmt. Grad Certificate

(Figure 12-3)

(3) 140L Air and Missile Defense Systems Technician serves as a SME on the employment and operations of AMD systems as an AMD System Support Technician. Plans and supervises the maintenance and logistical requirements/activities within AMD units. Monitors the AMD system and related support equipment to prevent, detect, diagnose, or repair operator error and/or system malfunctions. Coaches, teach mentor, evaluate Soldiers in AMD system maintenance procedures, and evaluate the effectiveness of maintenance programs. Manages the use and care of special tools and support equipment, oversees the utilization of The Army Maintenance Management System (TAMMS). Monitors and coordinates the installation of modifications to the AMD system. Implements proper safety and security procedures applicable to the operation and maintenance support of the AMD system. Advises the commander on all AMD technical considerations at all levels.

Report generated on:

		WO1	CW2	CW3	CW4	CW5
OPERATIONAL DOMAIN	DEVELOPMENT / BROADENING ASSIGNMENTS	• Battery Maintenance Officer • THAAD Battery System Maintenance Officer	• Battery Maintenance Officer • THAAD Battery System Maintenance Officer • TAC Officer WOCC	• Battalion Readiness Center OIC (Patriot) • WOCC TAC Officer • ADA School Instructor or Doctrine Writer • TWI Letterkenny • Technical Assistance Field Team (TAFT)	• BDE Support Ops • AMD Technical Systems Analyst (WTEC) • HRC ADA Career Manager • WOCC Instructor • ADA School Instructor or Doctrine Writer • ADA Proponent Warrant Officer • WOCC WOILE INSTR • ADA Logistics Officer AAMDC G-4 • Technical Assistance Field Team (TAFT)	• ADA Logistics Officer AAMDC G-4 • ADA Logistics Officer HQDA G-4 • Nominative Position Army Staff • Nominative Position TRADOC Staff/WOCC • TRADOC TCM-AAMDC/TCM-BDE • AAMDC Command Chief Warrant Officer (CCWO) • TCM-AAMDC/TCM-BDE • WOILE / WOSSE Instructor • Chief Warrant Officer of the Branch (CWOB)
INSTITUTIONAL DOMAIN	PME	• Warrant Officer Basic Course (WOBC); Fort Sill OK	• Warrant Officer Advanced Course (WOAC); Fort Sill OK	• Warrant Officer Intermediate Level Education (WOILE); Fort Rucker AL	• Warrant Officer Senior Service Education (WOSSE, PH1); DL	• Warrant Officer Senior Service Education (WOSSE, PH2); Fort Rucker AL • Senior Leader Seminar at Army War College
	FUNCTIONAL TRAINING	• GCSS-Army Manager Course • GCSS-ERPS • GCSS-Master Driver • GCSS-Army Maintenance Manager/Supervisor ORS • GCSS- Organizational Supply • THAAD 140L ASI Course	• GCSS-Army Mid-Level Manager Course • GCSS-Army Supervisor Course • Lean Six Sigma (Yellow Belt) Certification • Associate in Project Management (CAPM-PMI) Certification • AC Certification Level 2 • DC Certification Level 2 • THAAD 140L ASI Course	• Manpower and Force Management Course • GCSS-Army Mid-Level Manager Course • GCSS-Army Supervisor Course • Support Operations Course • Lean Six Sigma (Green Belt) Certification • Associate in Project Management (CAPM-PMI) Certification • AC Certification Level 3 • DC Certification Level 3 • Systems Approach to Training Basic Course	• Manpower and Force Management Course • Lean Six Sigma (Black Belt Certification) • Associate in Project Management (CAPM-PMI) Certification • Project Management Professional (PMP) Certification • Support Operations Course • GCSS-A Material and Execution Management Course • Joint Logistics Course • TRADOC Middle Managers Course	• Manpower and Force Management Course • Lean Six Sigma (Black Belt) Certification • Associate in Project Management (CAPM-PMI) Certification • Project Management Professional (PMP) Certification • Joint Logistics Course
SELF-DEVELOPMENT DOMAIN: STRUCTURED		• Action Officer Development Course 131-P00 • DAU: ACQ 101; Fundamentals of Systems Acquisition management • DAU: BCF 110; Fundamentals Business Financial management	• Completion of an Associate Degree • Lean Six Sigma Green Belt Certification • Demonstrated Logistician Program (DL) • DAU: ACQ 120; Fundamentals of International Acquisition (FIAC) • DAU: BCF 110; Fundamentals Business Financial management	• Completion of Undergraduate degree • GCSS-Army Manager/Supervisor • Associate Certified Electronics Tech (A/C D/C) • Demonstrated Senior Logistician (DSL) • DAU: CON 127: Contract Management • DAU: PMT 252 Program MGMT Tools Course, Part I	• Completion of Graduate Degree • Lean Six Sigma Black Belt Certification • Maintenance and Reliability Professional Certification • DL Phase of WOSSE • Demonstrated Master Logistician (DML) • DAU: PMT 257 Program MGMT Tools Course, Part II • DAU: CLL 001 Life Cycle Management • Army Force Management Course (How the Army Runs)	• Completion of a Graduate Degree • Completion of Doctorate • DL Phase of WOSSE • Demonstrated Master Logistician (DML) • Army Force Management Course (How the Army Runs)
SELF-DEVELOPMENT DOMAIN: GUIDED		• MOS Related Degree: Western Oklahoma State College for Associates of Science in Military Studies • MOS Related Degree: Webster University for a Bachelors in MGMT, Media Communication, Religion and Global Society, and Project Mgmt. Grad Certificate • MOS Related Degree: Embry-Riddle Aeronautical University: Associates of Science- Associate in Science in Technical Management	• MOS Related Degree: Western Oklahoma State College for Associates of Science in Military Studies • MOS Related Degree: Webster University for a Bachelors in MGMT, Media Communication, Religion and Global Society, and Project Mgmt. Grad Certificate • MOS Related Degree: Embry-Riddle Aeronautical University: Associates of Science- Associate in Science in Technical Management	• MOS Related Degree: Western Oklahoma State College for Associates of Science in Military Studies • MOS Related Degree: Webster University for a Bachelors in MGMT, Media Communication, Religion and Global Society, and Project Mgmt. Grad Certificate • MOS Related Degree: Embry-Riddle Aeronautical University: Bachelor of Science- Project Management (4+1 Program)	• MOS Related Degree: Western Oklahoma State College for Associates of Science in Military Studies • MOS Related Degree: Webster University for a Bachelors in MGMT, Media Communication, Religion and Global Society, and Project Mgmt. Grad Certificate • MOS Related Degree: Embry-Riddle Aeronautical University: Master of Science- Project Management (4+1 Program)	• MOS Related Degree: Western Oklahoma State College for Associates of Science in Military Studies • MOS Related Degree: Webster University for a Bachelors in MGMT, Media Communication, Religion and Global Society, and Project Mgmt. Grad Certificate • MOS Related Degree: Embry-Riddle Aeronautical University: Master of Science- Project Management (4+1 Program)

(Figure 12-4)

b. WO1 Development.

(1) Education. After graduation from Warrant Officer Candidate School (WOCS) and appointment to grade WO1, all Warrant Officers will attend the Warrant Officer Basic Course (WOBC). WOBC provides functional training in the MOS while reinforcing the leadership training provided in WOCS.

(a) MOS 140A attends the Command and Control Systems Integrator WOBC (Course Number: 4F-140A). 140A WOBC trains 140A WO1s to supervise and coordinate data link management, maintenance, and training associated with FAAD C4I systems; Patriot and THAAD Tactical Control Station with the automated Battery Command Post; Air and Missile Defense Planning and Control System and ADAM Cells. The following are courses taught in the 140A WOBC or are mandatory courses that 140A W01s are required to complete prior to promotion to CW2:

(1) Fundamental Basic Electronic Course (received during 4F-140A WOBC).

(2) JT102 Multi-TDL Advanced Joint Interoperability Course – MAJIC (received during 4F-140A WOBC).

(3) Action Officer Development Course: Course Number: 131-P00.

(b) MOS 140K attends the Air and Missile Defense Tactician WOBC (Course Number: 4F-140K WOBC). 140K WOBC provides the principles and functional theory of operations and integration, both vertically and horizontally, of Army ADA systems, and joint services and allied nations. The following are courses taught in the 140K WOBC or are required courses that 140K W01s are required to complete prior to promotion to CW2:

(1) Action Officer Development Course: Course Number: 131-P00.

(c) MOS 140L attends the Air and Missile Defense Technician WOBC (Course Number: 4F140L WOBC). WOBC provides the principles and functional theory of operations and integration, both vertically and horizontally, of Army ADA systems, and joint services and allied nations. The following are courses taught in the 140L WOBC or are mandatory courses that 140L WO1s are required to complete prior to promotion to CW2:

(1) Fort Sill Global Combat Support System-Army (GCSS-Army): Course Number: (Received during 4F- 140L WOBC).

(2) Action Officer Development Course: Course Number: 131-P00.

(3) Fundamental Basic Electronic Course, Alternate/Direct Current Certification Level I (received during 4F-140L WOBC).

(4) MOS 140L attends the Air and Missile Defense Technician WOBC (Course Number: 4F140L (P)). WOBC provides the principles and functional theory of operations and integration, both vertically and horizontally, of Army ADA systems, and joint services and allied nations. The following are courses taught

in the 140L WOBC or are required courses that 140L WO1s are required to complete prior to promotion to CW2:

(1) Fort Sill GCSS-Army Clerk: Course Number: FB GCSS-ARMY Clerk (Received during 4F-140L WOBC).

(2) Action Officer Development Course: Course Number: 131-P00.

(3) Fundamental Basic Electronic Course (received during 4F-140L WOBC).

(2) Assignment.

(a) 140A: After WOBC, WO1s should be assigned as C2 Systems Integrator at ADAM Cell BCTs, Fires Brigades, Battlefield Surveillance Brigades (BfSB), Maneuver Enhancement Brigades (MEB), CAB, or ADA Battalions. WO1s for their first assignment should not be assigned to Space and Missile Defense Commands until promotion to CW2.

(b) 140K: After WOBC, it is strongly recommended that WO1s be initially assigned as Patriot Fire Unit AMD Tactician in an ADA Battalion (Patriot), ADA Composite Battalion (Patriot/IFPC), ADA Composite Battalion (C-RAM/IFPC), or ADA Battalion (IFPC).

(c) 140L: After WOBC, it is strongly recommended that WO1s be initially assigned as an AMD Technician in an ADA Battalion (Patriot) or ADA Composite Battalion (Patriot/IFPC). WO1s for their first assignment should only be assigned to a THAAD Battery after special consideration, CW2s should fill following assignments - Patriot System Support Section Officer / Patriot Fire Unit and Field Level Maintenance Manager.

(3) Self Development.

(a) 140A: Recommend completion of the following college level courses: Associates Degree (MOS related). The following courses will facilitate your development as a 140A and it is recommended the course be completed prior to promotion to CW2

(1) CompTIA NET+ Certification

(2) CompTIA A+ Certification

(3) Introduction to Computer Operating Systems.

(b) 140K: Recommend completion of the following college level courses: Associates Degree (MOS related). The following courses will facilitate your development as a 140K and it is recommended the course be completed prior to promotion to CW2:

(1) CompTIA NET+ Certification

(2) CompTIA A+ Certification

(3) Introduction to Joint Air and Missile Defense Operations Course.

(c) 140L: Recommend completion of the following college level courses: Associates Degree (MOS related). The following courses will facilitate your development as a 140L and it is recommended the course be completed prior to promotion to CW2:

(1) Support Operation Course: Course Number: 8A-FA90/551-F39)

(2) Army Maintenance Management Course: Course Number: 8A-F3

(3) DAU: BCF 110: Fundamentals Business Financial management.

(4) DAU: ACQ 101: Fundamentals of Systems Acquisition management

(5) Desired experience.

(a) 140A: Command and Control Systems Integrator capable of configuring and integrating C2 systems into an Army and Joint Data Link Network Architecture to provide situational awareness, early warning, ADA planning, and ADA interoperability.

(b) 140K: Air and Missile Defense System Tactician/Technician Patriot/THAAD System Support Officer capable of managing Patriot/THAAD Fire Unit Field Level Maintenance Operations to include GCSS-ARMY / Prescribed Load List (PLL)/DMPL and Test Measuring and Diagnostic Equipment (TMDE) and Patriot/THAAD Fire Unit Operational Readiness Reporting. WOBC graduates, will be warfighters skilled in in all areas of AMD and joint operations. Soldiers are capable of operating some of the most complex and lethal systems in the United States Army. The Warrant Officer who attends this course will demonstrate an intimate knowledge of AMD tactics and doctrine by expertly designing AMD defenses that defend important geopolitical assets against realistic and robust threats posed by determined enemies. They will be able to create and implement these feasible and effective AMD defense plans under any conditions, anytime, anywhere in the world. They will emerge as better leaders having continued their self-development via civilian education opportunities and they will serve as force multipliers within their units and the Army. 140K WO1s are required to complete prior to promotion to CW2:

(1) JT 101: Link-16 Joint Interoperability Course

(2) Action Officer Development Course: Course Number: 131–P00

(c) 140L: WOBC graduates will be capable and competent AMD leaders and technical experts who are confident in their ability to maintain a wide array of complex Army Integrated Air and Missile Defense (AIAMD) equipment as well as manage the extensive logistical requirements of those AMD units. These leaders will emerge from the course more technically proficient, by leveraging the available opportunities provided within the 140L curriculum, they will advance their civilian education and progress toward obtaining professional certifications. The critical thinking skills gained by these well-rounded officers who graduate the 140L course will enhance their value to their future organizations and to the Army as a whole. 140L WO1s are required to complete prior to promotion to CW2:

(1) GCSS-Army Certification

(2) Action Officer Development Course: Course Number: 131–P00

c. CW2 Development.

(1) Education.

(a) 140A: Attend the Air Defense Artillery Warrant Officer Advanced Course (WOAC) Phase I: Course Number: 2-44-C32-140A and Multi-TDL Planners Course: Course Number: JT-201 (JT-201) is pre-requisite for attendance of WOAC PH 1). Completion of an associate's degree or equivalent in a discipline related to MOS 140A prior to eligibility for selection to CW3.

(b) 140K: Attend the Air Defense Artillery WOAC Phase I: Course Number: 2-44-C32-140K and Link 16 Joint Interoperability Course: Course number: JT-101 the prerequisite for attendance of WOAC.

(c) 140L: Attend the Air Defense Artillery WOAC Phase I: Course Number: 2-44-C32-140L the prerequisite for attendance of WOAC.

(2) Assignments.

(a) 140A: CW2s are assigned to ADAM Cell BCT, Battlefield Surveillance Brigades (BfSB), Maneuver Enhancement Brigades (MEB), SMDC or ADA battalions. CW2s may be assigned to nominative position as a TAC Officer at the Warrant Officer Career College (WOCC), but only after completing at least three years in an ADAM/BAE cell or ADA battalion.

(b) 140K: CW2s with assignment/duty as a Patriot/THAAD Fire Unit AMD Tactician TCO, Battery Trainer, and Army Integrated Air and Missile Defense (AIAMD) Test Detachment, performing friendly protect functions, enforcing rules of engagement (ROE), and managing air battle functionality. CW2s may be assigned to such nominative positions as TAC Officer at the Warrant Officer Career Center (WOCC), but only after completing at least 2 years as a TCO.

(c) 140L: CW2s with assignment/duty as a Patriot/THAAD Fire Unit AMD Patriot System Support Officer /Patriot Fire Unit and Field Level Maintenance Manager. CW2s may be assigned to such nominative positions as TAC Officer at the Warrant Officer Career Center (WOCC), but only after completing at least 2 years as an AMD Systems Technician.

(3) Self Development.

(a) 140A: Completion of an Undergraduate Degree or equivalent in a discipline related to MOS 140A prior to eligibility for selection to CW3 is the civilian education goal at this stage of development. Additional recommended courses to be completed prior to promotion to CW3 include:

(1) Joint Firepower Course.

(2) Joint Air Tasking Order Processes Course (JATOPC), Army Joint Support Team, Hurlburt Field, Florida.

(b) 140K: Completion of an Undergraduate Degree or equivalent in a discipline related to MOS 140K prior to eligibility for selection to CW3 is the civilian education goal at this stage of development. Additional recommended courses to be completed prior to promotion to CW3 include:

(1) Multi-TDL Advanced Joint Interoperability Course - MAJIC: Course Number: JT-102.

(2) Patriot Top Gun Course: Course Number: 2F-SIT5/4F-ASIT5.

(3) Introduction to Joint Air and Missile Defense Operations Course: Course Number: J3OP-US020.

(4) Army Space Cadre Basic Course (ASCBC) Phase 1 & 2.

(5) THAAD ASI-7A Course.

(6) BMDS Staff Course.

(c) 140L: Completion of an Undergraduate Degree or equivalent in a discipline related to MOS 140L prior to eligibility for selection to CW3 is the civilian education goal at this stage of development. Additional recommended courses to be completed prior to promotion to CW3 include:

(1) GCSS-Army Mid-Level Manager Course.

(2) AC/DC Level II Certification.

(3) Lean Six Sigma (Yellow Belt) Certification.

(4) THAAD 140L ASI Course.

(7) Desired experience.

(a) 140A: Command and Control Systems Integrator capable of configuring and integrating BCT and ADA battalion C2 systems into an Army and Joint Data Link Network Architecture to provide situational awareness, early warning, ADA planning, and ADA interoperability.

(b) 140K: Air and Missile Defense System Tactician that successfully served as a TCO, Battery Trainer, and/or TD for a minimum of two one year with a maximum of 3 years.

(c) 140L: Air and Missile Defense System Technician that successfully served as the Patriot/THAAD Systems Support Officer for minimum of one with a maximum of 3 years.

d. CW3 Development.

(1) Education.

(a) 140A: ADA Warrant Officer Advanced Course Phase II, course number: 2-44-C32

Ph. 2. The officer should complete JT-301, Joint Interoperability Control Officer (JICO) Course for career development prior to promotion to CW4.

(b) 140K: ADA Warrant Officer Advanced Course Phase II, Course number 2-44-C32

Ph. 2. The officer should complete the following courses for career development prior to promotion to CW4.

(c) 140L: ADA Warrant Officer Advanced Course Phase II, Course number 2-44-C32

Ph. 2. The officer should complete the following courses for career development prior to promotion to CW4

(1) 140K: Patriot Top Gun Course: Course Number: 2F-SIT5/4F-ASIT5.

(2) 140K: ADAFCO Course Number: 2G-SI/ASIT4.

(3) 140A/K: Multi-TDL Advanced Joint Interoperability - MAJIC: Course Number: JT-102.

(4) 140L: GCSS-Army Supervisor Course: Course Number: GCSS-Army Supervisor Course.

(2) Assignments.

(a) 140A: Army Air and Missile Defense Command, ADAM Cell Division, Combat Aviation Brigade, Maneuver Enhancement Brigade, Space and Missile Defense Command, Theater Missile Warning Detachment, THAAD, or ADA Brigade. Assigned as an instructor or doctrine writer at the United States Army Air Defense Artillery School, JRTC Trainer/Mentor, TAC Officer at WOCC, or other special assignments.

(b) 140K: ADA Battalion FDC as TD, ADA Battalion S3 Standardization Officer, THAAD TCO, Instructor/Doctrine writer at the United States Army Air Defense Artillery School (USAADAS), TAC Officer at the WOCC or other special assignments.

(c) 140L: ADA Battalion Readiness Officer as Manager and supervisor the Battalion Readiness Center (BRC) or Army Integrated Air and Missile Defense (AIAMD) Test Detachment; monitoring, logistically supporting, and reporting of ADA Weapon systems and ancillary equipment to HQDA, TAC Officer at the WOCC or other special assignments.

(3) Self Development.

(a) 140A: Completion of an Undergraduate degree in a discipline related to MOS 140A is recommended prior to eligibility for selection to CW4.

(b) 140K: Completion of an Undergraduate degree in a discipline related to MOS 140K is recommended prior to eligibility for selection to CW4.

(c) 140L: Completion of an Undergraduate degree in a discipline related to MOS 140L is recommended prior to eligibility for selection to CW4.

Recommend completion of the following courses for career development prior to promotion to CW4:

(4) Desired experience.

(a) 140A: Command and Control Systems Integrator capable of configuring and integrating C2 systems into an Army and Joint Data Link Network Architecture to provide situational awareness, early warning, ADA planning, and ADA interoperability. Have served as the Army ICO for assigned units at the Division and ADA Brigade.

(b) 140K: Successfully served as a TCO (Patriot and/or THAAD), TD, and/or BN S3 Standardization Officer.

(c) 140L: Successfully served as a Patriot/THAAD Fire Unit Organizational Maintenance Manager or Battalion Readiness Center OIC.

e. CW4 Development.

(1) Education.

(a) 140A, 140K, and 140L: Must complete Warrant Officer Intermediate Level Education (WOILE), not later than 1 year after promotion to CW4 and prior to promotion to CW5 (DL Phase of WOSSE is a mandatory prerequisite prior to WOSSE attendance).

(2) Assignments.

(b) 140A: AAMDC Watch Officer, MACOM Watch Officer, Corps Watch Officer, AMD Cross Functional Team (CFT), USAADAS ADA Proponent Warrant Officer or Writer/Instructor, TRADOC Capability Manager – ADA Brigade (TCM-ADA BDE), ADAM Cell Corps, Space and Missile Defense Command, FCoE, JFCOM, Theater Missile Warning Detachment. ATEC, HRC ADA Career Manager, WOCC Commander, Instructor, or other specialty assignments.

(c) 140K: AAMDC and ADA Brigade, ADAFCO, CDID, Brigade S3 Standardization Officer, USAADAS ADA Proponent Warrant Officer or Writer/Instructor, ATEC, Wargaming and Exercise (Futures Battle Lab), AEC, OTC, HRC ADA Career Manager, WOCC Commander or Instructor or other specialty assignments.

(d) 140L: AAMDC and ADA Brigade Support Operations, CDID, USAADAS ADA Proponent Warrant Officer or Writer/Instructor, ATEC, AEC, OTC, HRC ADA Career Manager, WOCC Commander or instructor or other specialty assignments

(3) Self Development: 140A, 140K, and 140L. Completion of a Graduate Degree is recommended prior to promotion board eligibility. Complete the following courses for career development and prior to promotion to CW5:

(1) Combat Development Course: Course Number: ALMC-CD.

(2) Army Acquisition Basic Course: Course Number: ALMC-QA.

(3) Manpower and Force Management Course: Course Number: 7C-F49/500-ASIA3.

(4) Desired Experience

(a) 140A: Command and Control Systems Integrator capable of configuring and integrating C2 systems into an Army and Joint Data Link Network Architecture to provide situational awareness, early warning, ADA planning, and ADA interoperability. Can serve in Joint positions as a Track Data Coordinator, Tactical Data Link Manager, Regional/Sector Interface Control Officer, and when needed as well as within USAADAS as a writer/instructor/directorate action officer, Proponent Warrant Officer, or as a Career Manager at HRC. These warrant officers provide leadership, guidance, technical input, and direction to subordinate elements, staff agencies, and field commanders up to and including theater level.

(b) 140K: CW4s should have experience at the AAMDC and/or ADA BDE ADAFCO, Brigade Standardization Officer, as well as within USAADAS as a writer/instructor/directorate action officer, Proponent Warrant Officer, or as a Career Manager at HRC. These warrant officers provide leadership, guidance, technical input, and direction to subordinate elements, staff agencies, and field commanders up to and including theater level.

(c) 140L: CW4s should have experience at the AAMDC and/or ADA BDE Support and Logistic Operations, as well as within USAADAS as a writer/instructor/directorate action officer, Proponent Warrant Officer, or as a Career Manager at HRC. These warrant officers provide leadership, guidance, technical input, and direction to subordinate elements, staff agencies, and field commanders up to and including theater level.

f. CW5 Development

(1) Education 140A, 140K, and 140L: No later than 1 year after promotion to CW5, must complete Warrant Officer Senior Service Education (DL-A Phase of WOSSE is a mandatory pre-requisite prior to WOSSE attendance). Technical certifications and continuous lifelong learning to enhance their mastery of Air Defense Artillery systems are required. Recommend completion of a graduate degree.

(2) Nominative Assignments: Nominative WO positions throughout the Army.

(3) Assignments

(a) 140A: AAMDC Strategic TDL Coordinator, AAMDC Command Chief Warrant Officer (CCWO), United States Army Space and Missile Defense / Army Forces Strategic Command (SMDC/ARSTRAT)

Command Chief Warrant Officer, Chief Warrant Officer of the Air Defense Artillery Branch (CWOB), or other specialty assignments.

(b) 140K: AAMDC, Standardization Officer, AAMDC, CCWO, United States Army Space and Missile Defense / Army Forces Strategic Command (SMDC/ARSTRAT) Command Chief Warrant Officer, Chief Warrant Officer of the Air Defense Artillery Branch (CWOB), ATEC, AEC, OTC, TRADOC Capability Manager – Army Air and Missile Defense Command (TCM-AAMDC) Life Cycle Manager, or other specialty assignments.

(c) 140L: AAMDC, Support Operation, AAMDC, CCWO, United States Army Space and Missile Defense / Army Forces Strategic Command (SMDC/ARSTRAT) Command Chief Warrant Officer, Chief Warrant Officer of the Air Defense Artillery Branch (CWOB), Air and Missile Defense (AMD) Cross Functional Team (CFT), ATEC, AEC, OTC, TRADOC Capability Manager – Army Air and Missile Defense Command (TCM-AAMDC) Life Cycle Manager, or other specialty assignments.

(4) Self Development. Technical certifications and continuous lifelong learning.

(5) Desired experience:

(a) 140A CW5 should have ADA C2 systems experience at all levels and maintain proficiency throughout their career.

(b) 140K CW5 at the master level should have tactical experience with all AMD systems in the ADA portfolio, and maintain proficiency throughout their career.

(c) 140L: CW5 at the master level should have technical experience with all AMD systems in the ADA portfolio, and maintain proficiency throughout their career.

5. Reserve Component Officers

a. General career development. The RC career development model for ADA will essentially mirror that of RA officers/WOs, except that assignments will not be limited to one component or control group within a component. Figures 12-4 (officers) and 12-5 (WOs) delineate the mandatory timeline for promotion to the next higher grade. In certain cases, an RC officer can be promoted to the next higher grade after meeting minimum time in grade requirements. The ADA officer should count on being dual branched to facilitate career progression. In addition, an ADA officer will most likely be required to branch transfer to another basic branch due to limited geographical and upward mobility positions; however, these officers should remain proficient.

b. Role. ADA RC officers/WOs serve in most of the same roles and missions as their RA counterparts. The unique nature of the RC Soldier's role as a citizen Soldier poses a challenge for professional development; however, RC officers/WOs are expected to follow RA development patterns as closely as possible. RC officers/WOs have increased windows to complete mandatory educational requirements. To meet professional development objectives, RC officers/WOs must be willing to rotate between ARNG and USAR Troop Program Units, Individual Ready Reserves, the Individual Mobilization Augmentee Program, and other RA and RC programs. Geographical considerations necessitate these transfers, as well as the need to provide as many officers/WOs as possible, the opportunity to serve with troops in leadership and staff positions. Additionally, there may be occasions when RC officers/WOs will be transferred to the Individual Ready Reserves while they complete mandatory education requirements. Such transfers will be temporary and should not be seen as affecting negatively on the officer's/WO's career. The success of an RC officer/WO is not measured by the length of service in any one component or control group, but by the officer's/WO's breadth of experience, duty performance, and adherence to branch requirements. (Note: Figures 12-1, 12-2, 12-3, 12-4, and 12-5 illustrate the typical RA and RC officer and WO careers from accession to separation.)

c. WO assignments. WOs, as the branch's technical experts, are considered certified upon successful completion of the Warrant Officer Basic Course (WOBC) and remain so throughout their WO career (140X specialty code denotes a position that can be filled by either a 140A, 140K, or 140L, currently only approved for GMD positions).

d. RC officer qualification and development. Career development model is at Figure 12-4.

(1) Lieutenant (1 through 6 years). RC officers must complete a minimum of 90 hours of college/university credits to receive a commission. ADA BOLC-B is the starting point for newly accessed RC ADA officers. RC ADA officers should complete the resident initial leadership instruction by the 18th month for ARNG officers (the 2nd year for USAR officers), or prior to the end of the 3rd year for OCS graduates and direct appointees. Officers should seek to serve in more than one unit position during this phase, allowing for maximum exposure to the diversified functions within an ADA unit. Typical ADA lieutenant assignments

include TCO, platoon leader, battery XO, battery maintenance officer, and battalion staff officer. Officers are encouraged to actively participate in professional reading programs and continue correspondence studies. Officers must earn an Undergraduate degree from an accredited college/university to qualify for promotion to CPT.

(2) CPT (7 through 13 years). ADA officers must complete the resident CCC in the RA or RC curriculum. The RC CCC program is divided into four phases of instruction that is to be completed within a 13 month timeframe. The course includes two phases of distance learning (DL) includes nonresident instruction and two phase weeks of Active Duty in residence at USAADAS. During this phase, all officers are highly encouraged to pursue a specialty related undergraduate or graduate degree. RC ADA officers should aggressively seek opportunities to command an ADA battery for a minimum tour of 2 years (optimally 3 years). RC ADA command opportunities are only available in ARNG units. Typical assignments for CPTs include battery command; The Army School System (TASS)/Regional Training Institute (RTI) tactical officer; battalion, brigade, division, Joint Force Headquarters, or USAR Regional Support Command (RSC) staff officer; battalion liaison officer; CTC O/C; and multi-functional billets. Officers may select a functional area designation between the 7th and 10 years of service. The designation of functional areas should be based upon the needs of the Army, geographical considerations, and officer preference. Functional area assignments are useful for bypassing temporary roadblocks to career progression in the ADA branch due to geographical constraints or position availability; however, RC ADA officers should endeavor to return to an ADA assignment as soon as practicable. A limited number of qualified officers will be accessed into the Army Acquisition Corps.

(3) MAJ (14 through 21 years). During this phase, officers should enroll and complete Common Core ILE and pursue a specialty-related graduate degree. ADA officers should seek further development in ADA assignments during this phase. Branch standard assignments include (but are not limited to) battalion/brigade/division staff officer, battalion/brigade XO/S-3, ADAM Cell OIC, CTC O/C, TASS/RTI battalion tactical officers, and ROTC instructor duty.

(4) LTC (21 through 26 years). During this phase, officers should seek professional military education at the SSC level. Officers may seek assignments to senior command and staff positions. Additionally, many assignments in both HQDA and joint staffs are available in the Individual Mobilization Augmentee Program for RC officers. LTCs with 3 years' time in grade must complete JMPE Phase I to qualify for assignment to any principal staff position at brigade or higher levels of command. If transferring from another branch and designated to command at the battalion level, RC officers must have attended a transition course and pre-command course under the auspices of USAADAS. (Note: Exceptional officers selected to command an ADA battalion [minimum two-year, optimum three-year tour] might also be selected for resident SSC or the Army War College Distance/Distributive Education Course.) Branch standard assignments include (but are not limited to) battalion commander, TASS/RTI commanders, brigade XO, brigade XO/S-3/operations officer, division staff officer; and CONUSA/JIIM/HQDA-level staff assignment. RC ADA command opportunities are only available in ARNG units.

(5) COL (26 through 30 years). Assignments during this phase should provide for maximum utilization skills in ADA or functional area. Assignment standards include RTI/garrison commander, brigade deputy commander, division/corps staff officer, and training support/combat division chiefs of staff. Senior staff assignments include (but are not limited to) positions at National Guard Bureau Headquarters, U.S. Army Reserve Command, and on CONUSA/JIIM/HQDA staffs. If transferring from another branch and designated to a COL level command, officers must have attended a transition course and pre-command course under the auspices of USAADAS. (Note: Exceptional officers selected to command an ADA brigade [minimum 2 years, optimum 3 years] might be selected for resident SSC or the Army War College Distance/Distributive Education Course.)

e. RC WO qualification and development.

(1) MOS 140A, Command and Control Systems Integrator. ADA WO Development & Utilization Model (RC) is at Figure 12-5. The 140X specialty code allows GMD positions to be filled by 140A, 140K, or 140L.

(a) WO1 and CW2. Same as RA MOS 140A. (References to THAAD do not apply and reference to Theater Missile Warning Detachment is replaced by GMD.) ARNG CW2s are required to successfully complete WOAC to meet eligibility requirements for promotion to CW3.

(b) CW3. Same as RA MOS 140A. (References to USAADAS do not apply.) Additionally, successful completion of WOILE is required for both ARNG and USAR Warrant Officer prior to being eligible for promotion to CW4.

(c) CW4. Same as RA MOS 140A. (References to THAAD, TRADOC, joint commands, Army/ACOM staffs, and career managers do not apply.) These CW4s also serve in directorate staff positions at the Joint Forces Headquarters. Both ARNG and USAR Warrant Officer are required to complete WOSSE prior to eligibility for promotion to CW5.

(d) CW5. Same as RA MOS 140A. (Reference to USAADAS does not apply.)

(2) MOS 140E, ADA Systems Tactician/Technician will be rescinded in FY19 and replaced with MOS 140K AMD Systems Tactician and MOS 140L AMD Systems Technician. The 140X Specialty Reporting Code (SRC) allows GMD positions for 140A, 140K, or 140L.

(a) WO1 to CW3. At the time of publishing, there are no positions in the RC for WO1 through CW3 for MOS 140E.

(b) CW4. Same as RA MOS 140K/L except that positions are only available in the ADA brigades and AAMDC. ARNG Warrant Officer are required to complete WOSSE prior to being eligible for promotion to CW5. Currently, CW4s should begin, continue, or complete graduate-level studies.

(c) CW5. Same as RA MOS 140K/L except that positions are only available in the ADA brigades and AAMDC.

Lifecycle Development Model / Army Career Map

Figure 12-1. AOC 14A Lifecycle development model (Active/Reserve)
Figure 12-2. MOS 140A Army Career Map (Active/Reserve)
Figure 12-3. MOS 140K Army Career Map (Active/Reserve)
Figure 12-4. MOS 140L Army Career Map (Active/Reserve)