

# Air Defense Artillery Branch

## 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 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. ADAM cells at the divisions, BCTs, functional brigades (fires and CAB), multifunctional brigades, and the ground-based mid-course defense (GMD) brigade add challenging assignment opportunities. Current positions include assignments to Patriot battalions, Patriot/Avenger composite battalions, indirect fire protection capability (IFPC)/Avenger battalions, terminal high altitude area defense (THAAD) batteries, and the AN/TPY-2 forward based mode radar batteries.

b. *Proponent information.* Chief of Air Defense Artillery, 730 Schimmelpfennig Road, Fort Sill, Oklahoma 73503. Telephone number is DSN 495-0617 or commercial (580) 442-0617.

c. *Functions.*

(1) *Air Defense Artillery 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 command, control, communications, computers, and intelligence (C4I) digital communications architecture provide early warning, detection, and identification of enemy aircraft, helicopters, UASs, remotely piloted vehicles, and cruise missiles.

(c) Patriot missile systems neutralize a wide variety of air and missile threats. Routinely in support of joint and multinational operational echelons. Patriot primarily functions as a tactical ballistic missile killer in the lower tier of the terminal phase of flight.

(d) THAAD missile systems defeat ballistic missile threats in the terminal phase of flight. Combatant commanders 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 some growth as new units are activated.

(3) *Unique features of work in Air Defense Artillery.* 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 CMF 14. Specific career-path information is provided throughout this document.

(a) Assignments to 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 matters of personnel (S1), intelligence (S2), training and operations (S3), and supply and logistics (S4).

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

(4) *Air Defense Artillery 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 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) *Air Defense Artillery assignment opportunities other than modified table of organization and equipment.*

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

(b) Train, develop, and evaluate ADA skills at CTC.

(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 ARNG and USAR component organizations.

## 2. Officer characteristics required

*a. General.* An Army officer and leader, by virtue of assumed role or assigned responsibility, inspires 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 has articulated the expectations of leaders in the Army. The Army leadership requirements model (see FM 6-22 figure 1-1 on page 1-4) illustrates expectations of every leader. Air Defense Artillery and the Army relies 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. Knowledge and skills of an Air Defense Artillery officer.* ADA officers are expected to be:

(1) Joint and expeditionary minded.

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

(3) Grounded in core Army Values.

(4) 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.

(5) Mentors, counselors, and coaches (see Part One of DA PAM 600-3).

## 3. Officer leader development

*a. Army Leader Development Strategy* (see Part One of DA PAM 600-3). The Army Leader Development Strategy articulates characteristics desired in Army leaders, providing guidance for career-long development through education, training, and experience.

*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, through the leader development domains of institutional training and education, operational assignments, and self-development.

*d. Branch life-cycle functions.*

(1) Structure. The preponderance of the ADA force serves in Patriot structures. There will be 13 Patriot battalions, two composite Patriot/Avenger battalions, two IFPC/Avenger battalions, eight THAAD

batteries under the construct of six ADA brigades and three AAMDCs within the AC in accordance with the Total Army Analysis 2018–2022. The AAMDC, three ADA brigades, seven 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/brigade Aviation element (BAE) functional concept as well as the Counter-UAS concept of operations.

(2) *Acquisition.* Officers will continue to be accessed through USMA, ROTC, and OCS. Warrants will continue to be recruited from the NCO Corps, and sister services. Both officer and warrant officer accessions are based on preference, 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) *Voluntary Transfer Incentive Program.* The VTIP program replaces the functional designation board. This program allows officers to transfer into another branch or FA from their 4th year of active Federal service through their 15th year. This program also allows officers who are branch detailed into another branch to request to remain in Air Defense. The VTIP panel meets quarterly. Submission of a VTIP packet does not guarantee branch transfer.

(4) *Branch eligibility.* Officers of other branches who desire a branch transfer to Air Defense should submit a request in accordance with AR 614–100 DA Pam 611–21; and VTIP MILPER messages.

(5) *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.

(6) *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. As the Army draws down from overseas contingency operations, some legacy force structures will be eliminated or changed, and new force structures will be added, which will ultimately drive assignments.

*g. 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.

(7) *Sustainment.* OPMS.

(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 DOPMA goals.

(b) *Command.* Commands at battalion and brigade level are organized into four functional categories: operations, strategic support, recruiting and training, and installation. Officers selected for command may submit operational and personal deferment requests. Since the CSL process may change, officers should contact ADA assignments officers at HRC to receive the latest information. The results of the command selection process are announced in the CSL. (*Note. This subparagraph is not applicable to warrant officers.*)

(c) *Officer evaluation report.* The OER will reinforce the link between officer development and the OPMS.

(8) *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 professionally develop officers to expertly perform ADA mission essential task list-related functions during joint and combined arms operations. A detailed discussion of officer development can be found in Part One of DA PAM 600-3.

(9) *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 overstrength.

(10) *Broadening Guiding Principles.* Assignments that are not KD (see figure 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
- (d) Right size the program to ensure quality.

(11) *Other branch developmental assignments.* Asymmetric Warfare Group; 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]; U.S. Army Human Resources Command (HRC) positions; HQDA Positions; Army Air Missile Defense Command; Combat Training Center (CTC); Army Test and Evaluation Command (ATEC); U.S. Army Recruiting Command (USAREC) staff positions; service in a cross-component billet; advanced civil schooling (based on Army requirements); Reserve Officer Training Corps (ROTC) instructor; United States Military Academy (USMA) instructor or tactical officer; Foreign Service exchange officer or Foreign Service school exchange officer; JIIM assignments; fellowship/internship positions; aide-de-camp.

e. *Lieutenant development.* (See Part One of DA PAM 600-3).

(1) *Education.* The lieutenant attends the ADA BOLC B (proponent institutional training) after completing pre-commissioning training in BOLC A.

(2) *Key developmental assignments.* Lieutenants are assigned to battery platoon leader positions in THAAD batteries, pure Patriot, Patriot/Avenger composite, IFPC/Avenger composite, or Avenger battalions. 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.

(3) *Developmental and broadening assignments.* (See figure 1).

(4) *Self-development.* By law, officers must obtain a baccalaureate degree before promotion to captain. 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 captains. Inculcation of the Warrior Ethos and Army Values are essential to the character development of young officers. Prior to promotion to captain, officers must possess an in-depth knowledge of ADA and combined arms operations gained through experience in MTOE warfighting units.

f. *Captain development.* (See Part One of DA PAM 600-3).

(1) *Education.* Officers generally attend the CCC following selection for promotion to captain. 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) *Key developmental assignments.* Captains must aggressively prepare for and seek the skills and experience to prepare them for duties at the grade of major. The following are considered KD assignments for ADA captains:

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

(b) Headquarters and headquarters battery or maintenance company/service battery commander of an AC ADA organization.

(c) Headquarters and headquarters company (HHC) commander of an AC non-ADA organization (such as company command of divisional HHC units, company commander of basic training company, or initial entry training company).

(d) Battery command of Joint Tactical Ground Station or AN/TPY-2 forward based mode radar battery.

(e) Officers in cohort YG 2004 or earlier receive KD credit for ADAM Cell officer in charge (OIC) assignments within a divisional BCT, multifunctional brigade, or functional brigade to include Aviation, Fires, and battlefield surveillance brigades (in accordance with HRC assignment policy during

that timeframe).

(f) Officers in cohort YG 2010 or earlier receive KD credit for ADA fire control officer positions.

(3) *Developmental and broadening assignments.* (See figure 1).

(4) *Self-development.* All captains must exercise continuous self-development to fully master all aspects of ADA operations including JIIM operations. Self-development initiatives may include (among others) online/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 FAs is based on the needs of the Army, officer preference, military experience, and civilian schooling. Several FAs provide advanced civil schooling, which may be granted upon selection to the FA (subject to change).

(5) *Desired experience.* Developmental assignments, both branch specific and generalist, will provide ADA captains with exposure to the Army and in some cases JIIM organizations. The captains 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 captains must recognize how the Army functions and fights.

*g. Major development.* (See Part One of DA PAM 600-3).

(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 FA in one of three functional categories. Officers selected to remain in the ADA basic branch (functionally designated) must successfully complete ILE/JPME I and their KD assignment(s) to become competitive for promotion to lieutenant colonel. 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. (See para 4–7e for further discussion of ILE.) This prepares them for success in their next 10 years of service and is a prerequisite for SSC attendance. Upon completion of ILE/JPME I, ADA majors must continue to aggressively prepare for and seek the skills and experience that will prepare them for promotion to lieutenant colonel.

(2) *Key developmental assignments.* The following are considered KD assignments for AC ADA majors:

- (a) Battalion/brigade S3 or XO of an AC ADA organization.
- (b) Battalion/brigade S3 or XO of a special troops battalion or another AC combat arms unit.
- (c) 10<sup>th</sup> AAMDC deputy G–3.
- (d) AAMDC chief of war plans (future).
- (e) AAMDC chief of war plans (current).
- (f) AAMDC plans officer.
- (g) AAMDC or ADA brigade, Senior ADA fire control officer.
- (h) Multinational transition team trainer/advisor.
- (i) Developmental and broadening assignments. See figure 1.

(3) *Self-development.* All majors must exercise continuous self-development to fully master all aspects of ADA operations, including JIIM operations. Majors should also begin the process of mastering the Fires functional concept.

(4) Self-development initiatives may include (among others) online/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 1.

(5) *Desired experience.* At this stage, an ADA major must hone skills in the planning and execution of ADA TTPs and develop expertise in the JIIM operational environment.

*h. Lieutenant colonel development.* (See Part One of DA PAM 600-3).

(1) *Education.* Officers selected for lieutenant colonel must seek assignments of greater responsibility in branch positions. ADA lieutenant colonels' records will be screened by the SSC selection board after their 16<sup>th</sup> year of service. Completion of ILE/JPME I 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 cohort year group is

selected to attend during their years of eligibility that run between the 16<sup>th</sup> and 23<sup>rd</sup> years of service. Officers selected for command will attend the PCC.

(2) *Key developmental assignments.* ADA lieutenant colonels must continue to aggressively prepare for and seek the skills and experience that will prepare them for promotion to colonel. The objective in lieutenant colonel assignments is to give ADA officers the opportunity to make a greater contribution to the branch and the Army. KD assignments for lieutenant colonels include the following:

- (a) CSL battalion-level command.
- (b) DIVARTY deputy commander.
- (c) Transition team commander.
- (d) Brigade deputy commander.
- (e) 10<sup>th</sup> AAMDC chief of staff.
- (f) 10<sup>th</sup> AAMDC ACoS G-3.
- (g) 32<sup>nd</sup>/94<sup>th</sup> AAMDC deputy chief of staff.
- (h) 32<sup>nd</sup>/94<sup>th</sup> AAMDC deputy G-3.
- (i) Corps chief of AMD operations.
- (j) Division chief of AMD operations.

(3) *Developmental and broadening assignments.* (See figure 1).

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

(5) *Desired experience.* ADA lieutenant colonels 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, ASCC, Combatant Command); at a major subordinate command, (TRADOC, U.S. Army Forces Command (FORSCOM)); or Army/Joint staff. Officers selected as battalion commanders should have this experience prior to or immediately following command.

*i. Colonel development.* (See Part One of DA PAM 600-3).

(1) *Education.* The annual SSC selection board reviews the files of colonels until their 23<sup>rd</sup> year of service. The majority of colonels will attend the resident training or be awarded MEL SSC certification from the U.S. Army War College Distance Education Course during the latter 3 years of their eligibility window. (See Part One of DA PAM 600-3) for more information on the available SSC-level courses. Officers selected for command will also attend the PCC. Colonels and lieutenant colonels (P) selected to serve as TRADOC capabilities manager should attend the Combat Developers Course.

(2) *Key developmental assignments.* ADA colonels contribute to the branch by serving in key and developmental assignments to include the following:

- (a) CSL brigade-level command (for example, 10<sup>th</sup> AAMDC, ADA brigade, garrison command, recruiting, and GMD brigade).
- (b) AAMDC deputy commander/chief of staff.
- (c) Battlefield Coordination Detachment.
- (d) FCoE G-3/5/7.
- (e) DOD/Army staff.
- (f) Joint staff.
- (g) TRADOC capabilities managers at Fires Center of Excellence.
- (h) Fires Center of Excellence chief of staff.
- (i) Multinational transition team trainer/advisor.

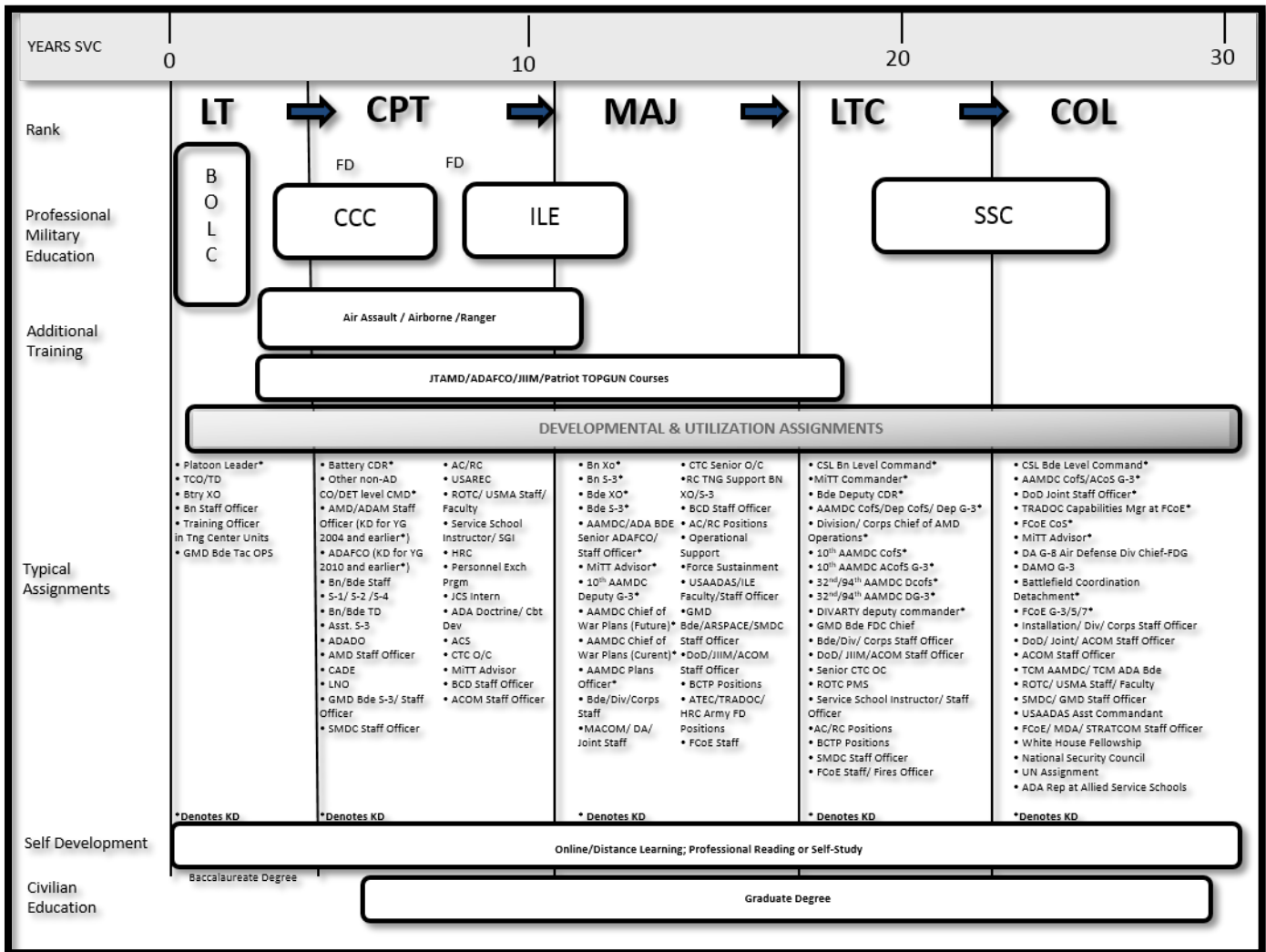
(3) *Developmental and broadening assignments.* (See figure 1).

(4) *Self-development.* ADA colonels 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 colonels 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, combatant command); an ACOM, (TRADOC, FORSCOM); or Army/Joint staff. Officers selected as brigade commanders should have this experience prior to or immediately following command.

**Figure 1. AA/RC Air Defense Artillery officer development model**



#### 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, train, operate, and innovatively integrate a wide variety of emerging technologically advanced Air Defense specific computer application software used to develop command and control communication/data-link architecture and AMD 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) 140A. 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 C2)/ Counter-Rocket, Artillery, and Mortar Command and Control (CRAM C2) systems; Patriot Tactical

Command Systems (TCS); Patriot Information Coordination Centrals (ICC); Patriot Battery Command Posts (BCP); Air and Missile Defense Planning Control Systems (AMDPCS); Air Defense and Airspace Management (ADAM) Cells; and the Theater Missile-Warning Detachments (TMWD). 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 (SICO) or Joint Interface Control Cell (JICC) 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.

(2) 140E AMD System tactician/technician serves as a subject matter expert on the employment and operations of AMD systems as a tactical control officer at the battery level, tactical director at the battalion level, battalion/brigade AMD system standardization officer, and ADA fire control officer at the ADA brigade and AAMDC levels. Monitors/ identifies aircraft according to established procedures, initiates and monitors engagements of threat aircraft and missiles, and plans/develops AMD designs in support of assigned/contingency missions. Advises the commander on capabilities and limitations of the AMD system. Supervises maintenance of equipment in an AMD unit. Monitors the AMD system and related support equipment to detect, diagnose, and repair operator error and/or system malfunctions. Coaches, teaches, mentors, and evaluates Soldiers and Officers in AMD system operating tactics, techniques, and procedures. Performs joint kill chain functions, maintenance procedures, uses and cares for special tools and support equipment within the auspices of The Army maintenance management system. Evaluates the effectiveness of maintenance programs and tactical crew training. Monitors and coordinates installation of modifications of the AMD system. Implements proper safety and security procedures applicable to the operation and maintenance support to the AMD system. Advises the commander on all tactical and technical considerations at all levels. Can serve in nominative positions within the Army and Branch with duties as instructors, career managers, Chief Warrant officer of the ADA Branch or staff positions in directorates.

*b. Warrant officer one development.*

(1) *Education.* After graduation from WOCS and appointment to grade WO1, all warrant officers will attend the 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, coordinate, and manage TDL maintenance, and training associated with FAAD C4I systems; Patriot and THAAD TCS with the automated BCPs; AMDPCS; and ADAM cells. WO1 140As should be knowledgeable and prepared for Computing Technology Industry Association (CompTIA) instruction while in the 140A WOBC. The following are courses taught in the 140A WOBC or are mandatory courses that 140A WO1s are required to complete prior to promotion to CW2:

(1) JT102 Multi-tactical Data Link Advanced Interoperability Course (received during 4F-140A WOBC).

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

(b) MOS 140E attends the Patriot System Technician WOBC (Course Number: 4F-140E). 140E WOBC provides the principles and functional theory of operations and integration, both vertically and horizontally, of Army ADA systems, Joint Services, and allied nations. The following are courses taught in the 140E WOBC or are mandatory courses that 140E WO1s are required to complete prior to promotion to CW2:

(1) SAMS1-E Clerk: Course (received during 4F-140E WOBC).

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

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

(2) *Assignment.*

(a) 140A: After WOBC, WO1s should be assigned as command and control systems



integrators as depicted in figure 2. WO1s first assignment will not be assigned to space and missile defense commands until promotion to CW2.

(b) 140E: After WOBC, it is strongly recommended that WO1s are initially assigned as Patriot fire unit AMD tactician/technician - Patriot system support section OIC/Patriot fire unit and field level maintenance manager.

*(3) Self-development.*

(a) 140A: Recommend completion of the following to facilitate development as a 140A and it is recommended the courses be completed prior to promotion to CW2.

(1) College level courses: 6 credit hours English and 6 credit hours Math.

(2) A+ Software and Hardware Certification.

(3) Cisco Networking Fundamentals.

(4) Introduction to Computer Operating Systems.

(5) ADAM/BAE Cell Air Ground Integration Course – Course Number: 2G-F110/043-F33.

(b) 140E: Recommend completion of the following to facilitate development as a 140E and it is recommended the courses be completed prior to promotion to CW2.

(1) FB SAMS1–E Manager Course: Course Number: SAMS1–E MGR.

(2) Test Measuring and Diagnostic Equipment Coordinator Course.

(3) Army Maintenance Management Course: Course Number: 8A–F3.

(4) Support Operations Course Phase I (DL): Course Number: 907 F30 (ALMC–SO).

(5) Support Operations (Phase II): Course Number: ALMC–SO.

*(4) Desired experience.*

(a) 140A: Command and control systems integrator capable of configuring and integrating command and control systems into an Army and joint data-link network architecture to provide situational awareness, early warning, ADA planning, and ADA interoperability.

(b) 140E: AMD System tactician/technician Patriot system support section OIC capable of managing Patriot Fire unit field level maintenance operations to include SAMS–E/prescribed load list/diagnostic mandatory parts list and test measuring and diagnostic equipment and Patriot fire unit operational readiness reporting.

*c. Chief warrant officer two development.*

*(1) Education.*

(a) 140A. Attend the ADA WOAC Course Number: 2–44–C32–140A and Multi-tactical Data Link Planners Course: Course Number: JT–201 (JT–201 is a prerequisite for attendance of WOAC). CW2s are strongly encouraged to complete an associate's degree or equivalent in a discipline related to MOS 140A to be competitive for selection to CW3.

(b) 140E. Attend the ADA WOAC Course Number: 2–44–C32–140E and Link 16 Joint Interoperability Course: Course number JT–101 (JT 101 is a prerequisite for attendance of WOAC). CW2s are strongly encouraged to complete an associate's degree or equivalent in a discipline related to MOS 140E to be competitive for selection to CW3.

*(2) Assignments.*

(a) 140A. CW2s are assigned as depicted in figure 2. CW2s may be assigned to nominative position as a tactical advisor and counselor (TAC) officer at the WOCC, but only after completing at least 3 years in an ADAM cell or ADA battalion.

(b) 140E. CW2s are assigned as depicted in figure 3. CW2s may be assigned to such nominative positions as TAC officer at the WOCC, but only after 3 years serving at a battery level or higher.

*(3) Self-development.*

(a) 140A. Completion of an associate 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 – Course Number: JFC.

(2) Joint Air Operations Command and Control Course – Course Number: JAOC2C

(3) MULT\_TDL Planners Course – Course Number: JT 201

(b) 140E. Completion of an associate degree or equivalent in a discipline related to MOS 140E 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-tactical Data Link Advanced Interoperability -- Course Number: JT-102.
- (2) Patriot Top Gun Course – Course Number: 2F-SIT5/4F-ASIT5.
- (3) Introduction to Joint AMD Operations-- Course Number: J3OP-US020.
- (4) Unit Movement Officer Course --Course Number: UMO.
- (5) SAMS 1-E MANAGER

(4) *Desired experience.*

(a) 140A. Command and control systems integrator capable of configuring and integrating BCT and ADA battalion command and control systems into an Army joint, or combined tactical data-link network architecture to provide situational awareness, voice, early warning, ADA planning, ADA and Joint/combined interoperability.

(b) 140E. AMD System Tactician/Technician that successfully served as the Patriot system support section OIC for minimum of 1 year/maximum of 2 years. Successfully served as a tactical control officer, battery trainer, and/or tactical director for a minimum of 2 years.

*d. Chief warrant officer three development.*

(1) *Education.*

(a) 140A. The officer should complete the following courses for career development prior to promotion to CW4

- (1) Joint Interoperability Control Officer (JICO) Course – Course Number: JT-301
- (2) Combat Development Course – Course Number: ALMC-CD
- (3) Army Acquisition Basic Course – Course Number: ALMC-QA
- (4) Warrant Officer ILE – Course Number: 1-250-C8 (DL Phase of WOILE is a mandatory prerequisite prior to WOILE attendance)

(b) 140E. The officer should complete the following courses for career development prior to promotion to CW4:

- (1) Patriot Top Gun Course --Course Number: 2F-SIT5/4F-ASIT5.
- (2) ADA Fire Control Officer Course – Course Number: 2G-F98
- (3) Multi-tactical Data Link Advanced Joint Interoperability Course - Course Number: JT-

102.

- (4) SARSS-1 Manager/Supervisor Course - Course Number: SARSS-1 Manager.
- (5) Warrant Officer ILE – Course Number: 1-250-C8 (DL Phase of WOILE is a mandatory prerequisite prior to WOILE attendance)

(2) *Assignments.*

- (a) 140A. CW3s are assigned as depicted in figure 2.
- (b) 140E. CW3s are assigned as depicted in figure 3.

(3) *Self-development.*

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

(b) 140E. Completion of a baccalaureate degree in a discipline related to MOS 140E is recommended prior to eligibility for selection to CW4.

(4) *Desired experience.*

(a) 140A. Command and control systems integrator capable of configuring and integrating command and control systems into an Army joint, or combined data-link network architecture to provide situational awareness, early warning, ADA planning, and ADA interoperability. Have successfully served as the Army interface control officer for assigned units at the division and ADA brigade.

(b) 140E. Successfully served as a Patriot Fire unit organizational maintenance manager, tactical control officer, or tactical director, battalion S3 AMD tactician/technician, Battalion Readiness Center OIC.

*e. Chief warrant officer four development.*

(1) *Education.* 140A and 140E: Must complete WOILE no later than 1 year after promotion to CW4 and prior to promotion to CW5 (DL Phase of WOILE is a mandatory prerequisite prior to WOILE attendance).

(2) *Assignments.*

- (a) 140A. CW4s are assigned as depicted in figure 2.

(b) 140E. CW4s are assigned as depicted in figure 3.

(3) *Self-development.* 140A and 140E. Completion of a master's degree is recommended prior to promotion board eligibility. Complete the following courses for career development and prior to promotion to CW5:

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

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

(c) MANPRINT Applications Course - Course Number: ALMC-MZ.

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

(e) Defense Planner Course - Course Number: 1-250-C68 (DL)

(f) Defense Strategy Course (DSC) - Course Number: 1-250-C22 (DL)

(g) Warrant Officer SSE Course - Course Number: 1-250-C9 (DL Phase of WOSSE is a mandatory prerequisite prior to WOSSE attendance)

(4) *Desired experience.*

(a) 140A. Command and control systems integrator capable of configuring and integrating command and control systems into an Army joint, or combined data-link network architecture to provide situational awareness, early warning, ADA planning, and ADA interoperability. Can serve in joint positions as a joint interface control cell watch officer, regional/sector interface control officer, and when needed as a joint interface control officer. Additionally can serve within the U.S. Army ADA School (USAADASCH) 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) 140E. CW4s should have experience at the AAMDC and/or ADA brigade FDC ADA fire control officer, brigade AMD Planner (ASI T5) or ADA fire control officer, as well as within USAADASCH 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. Chief warrant officer five development.*

(1) *Education 140A and 140E.* No later than 1 year after promotion to CW5, must complete the WOSSE (the DL Phase of the WOSSE is a mandatory prerequisite prior to WOSSE attendance). Technical certifications and continuous lifelong learning to enhance their mastery of ADA systems are required. Recommend completion of a graduate degree.

(2) *Nominative assignments.* Nominative warrant officer positions throughout the Army Assignments.

(a) 140A. CW5s are assigned as depicted in figure 2 or other specialty assignments.

(b) 140E. CW5s are assigned as depicted in figure 3 or other specialty assignments.

(3) *Self-development.* Technical certifications and continuous lifelong learning.

(4) *Desired experience.*

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

(b) 140E CW5 at the master level should have tactical/technical experience with AMD systems and maintain proficiency throughout their career.

Figure 2. AA/RC MOS 140A development model

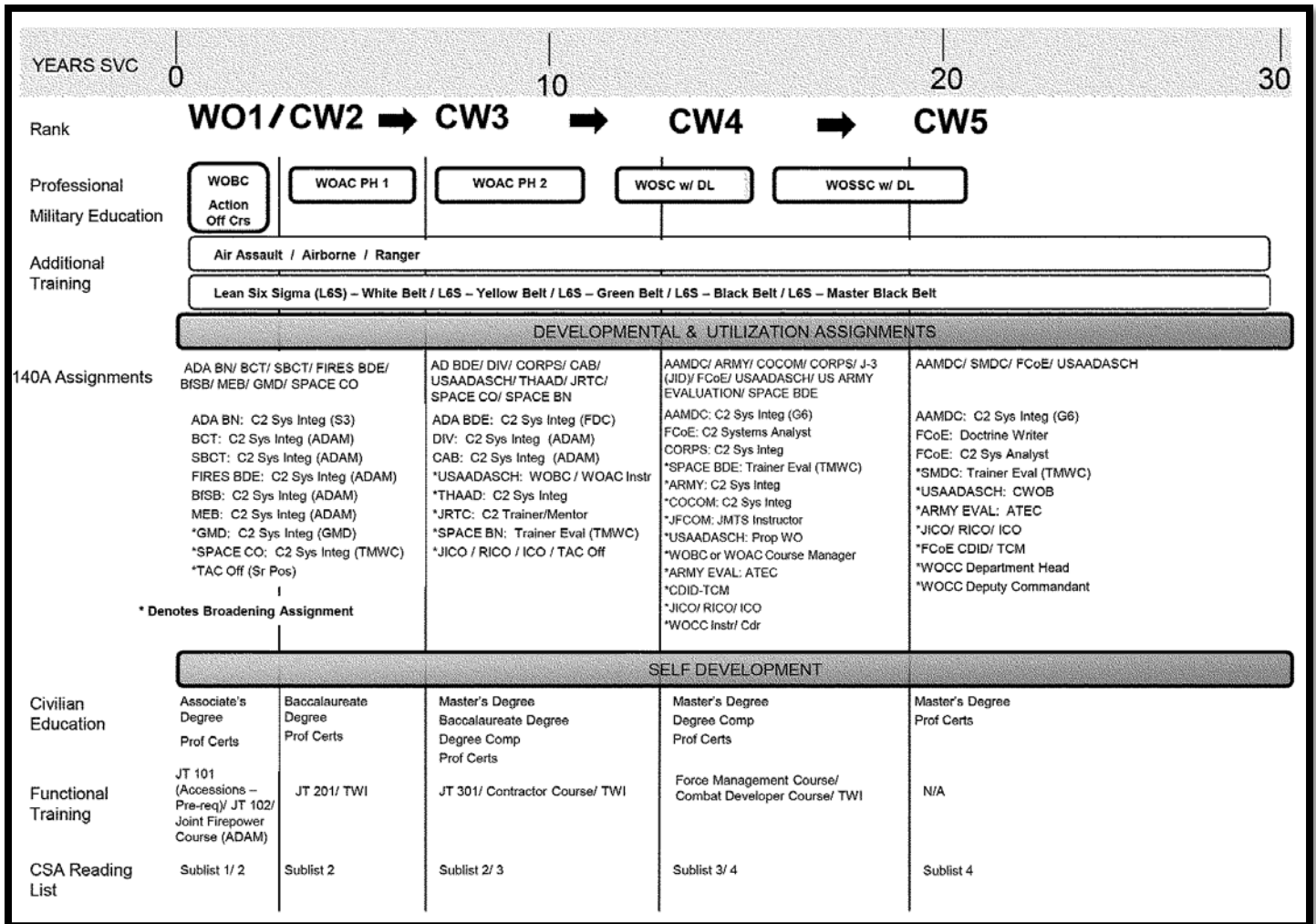
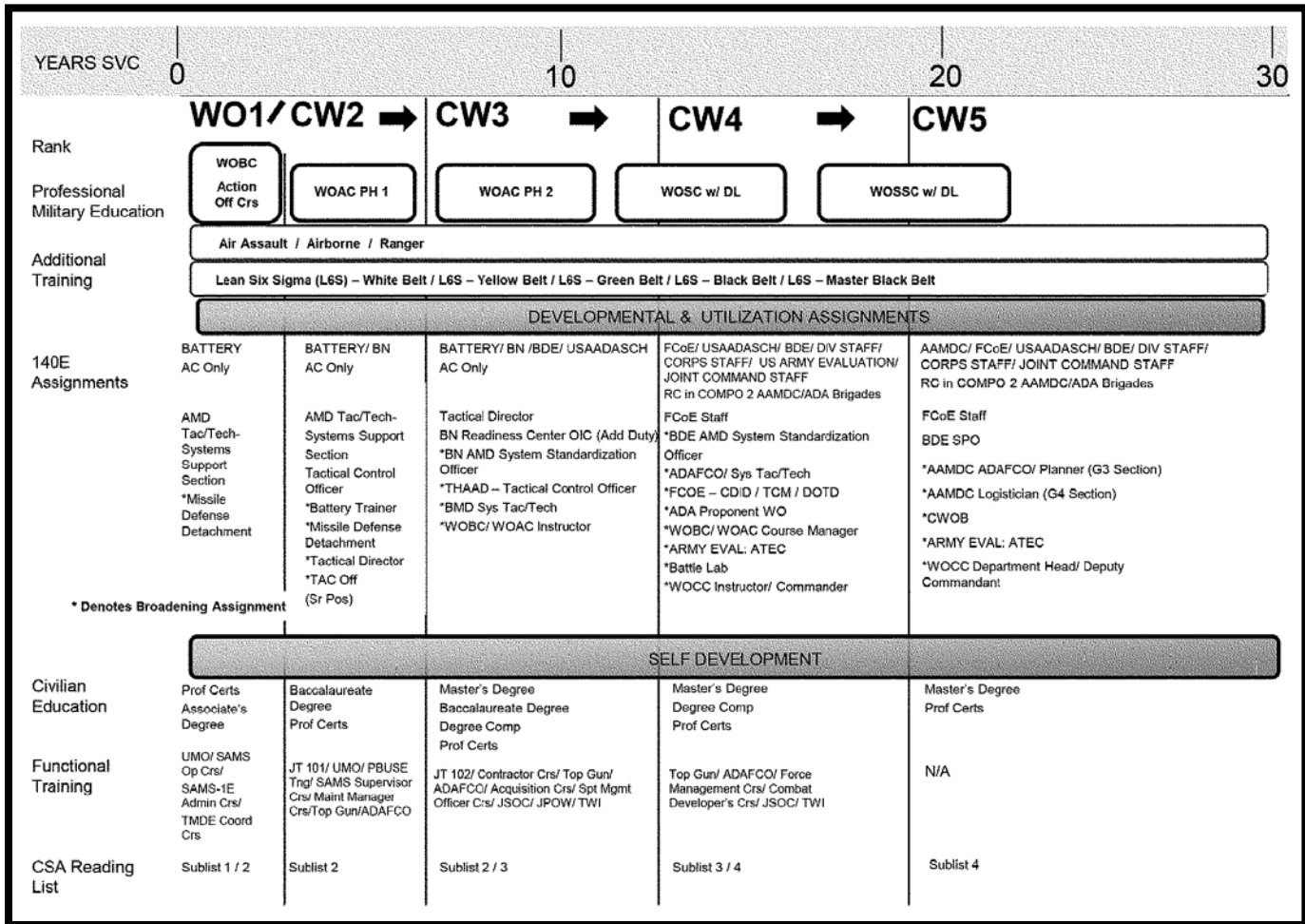


Figure 3. AA/RC MOS 140E development model



### 5. Reserve Component officers

a. *General career development.* The RC career development model for ADA will essentially mirror that of AC officers/warrant officers, except that assignments will not be limited to one component or control group within a component. Figures 1 (officers) and 2 (warrant officers) 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/warrant officers serve in most of the same roles and missions as their AC counterparts. The unique nature of the RC Soldier's role as a citizen Soldier poses a challenge for professional development; however, RC officers/warrant officers are expected to follow AC development patterns as closely as possible. RC officers/warrant officers have increased windows to complete mandatory educational requirements. To meet professional development objectives, RC officers/warrant officers must be willing to rotate between ARNG and USAR TPU, IRR, the IMA program, and other AC and RC programs. Geographical considerations necessitate these transfers, as well as the need to provide as many officers/warrant officers as possible the opportunity to serve with troops in leadership and staff positions. Additionally, there may be occasions when RC

officers/warrant officers will be transferred to the IRR while they complete mandatory education requirements. Such transfers will be temporary and should not be seen as impacting negatively on the officer's/warrant officer's career. The success of an RC officer/ warrant officer is not measured by the length of service in any one component or control group, but by the officer's/ warrant officer's breadth of experience, duty performance, and adherence to branch requirements. (Note. Figures 1, 2, and 3 illustrate the typical AC and RC officer and warrant officer careers from accession to separation.)

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

*d. Reserve Component officer qualification and development.* Career development model is at figure 1.

(1) *Lieutenant (years 1 through 6).* 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 eighteenth month for ARNG officers (the second year for USAR officers), or prior to the end of the third 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 tactical control officer, 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 a baccalaureate degree from an accredited college/university to qualify for promotion to captain.

(2) *Captain (years 7 through 13).* During this phase, all officers are highly encouraged to pursue a specialty-related undergraduate or graduate degree and must complete the resident CCC in the AC or RC curriculum. The RC CCC program is to be completed within a 13 month timeframe. The course includes two phases of DL consisting of nonresident instruction and two phases of 2 weeks of active duty in residence at USAADASCH. 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 captains include battery command; TASS/regional training institute tactical officer; battalion, brigade, division, joint force headquarters, or USAR RSC staff officer; battalion liaison officer; CTC observer/controller; and multifunctional billets. Officers may select a FA designation between the seventh and tenth years of service. The designation of FAs should be based upon the needs of the Army, geographical considerations, and officer preference. FA 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) *Major (years 14 through 21).* During this phase, officers should enroll in 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/S3, ADAM Cell OIC, CTC observer/controller, TASS/regional training institute battalion tactical officers, and ROTC instructor duty.

(4) *Lieutenant colonel (years 21 through 26).* During this phase, officers should seek PME 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 IMA Program for RC officers. Lieutenant colonels 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 PCC under the auspices of USAADASCH. (Note: Exceptional officers selected to command an ADA battalion (minimum 2-year, optimum 3-year tour) may 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/regional training institute commanders, brigade

XO, brigade XO/S3/, division staff officer; and CONUSA/JIIM/HQDA-level staff assignment. RC ADA command opportunities are only available in ARNG units.

(5) *Colonel (years 26 through 30)*. Assignments during this phase should provide for maximum utilization skills in ADA or FA. Assignment standards include regional training institute/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 NGB Headquarters, USARC, and on CONUSA/JIIM/HQDA staffs. If transferring from another branch and designated to a colonel-level command, officers must have attended a transition course and PCC under the auspices of USAADASCH. (Note. Exceptional officers selected to command an ADA brigade [minimum 2 years, optimum 3 years] may also be selected for resident SSC or the Army War College Distance/Distributive Education Course.)

*e. Reserve Component warrant officer qualification and development.*

(1) MOS 140A, Command and control systems integrator. The ADA warrant officer development and utilization model (RC) is at figure 2. The 140X specialty code allows GMD positions to be filled by 140A or 140E.

(a) WO1 and CW2. Same as AC MOS 140A description at paragraphs 5b(1)(a) and 5c(1)(a). (References to THAAD and Patriot 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 AC MOS 140A description at paragraph 5d(1)(a). (References to USAADASCH do not apply.) Additionally, successful completion of WOSC is required for both ARNG and USAR warrants prior to being eligible for promotion to CW4.

(c) CW4. Same as AC MOS 140A description at paragraph 5e(1)(a). (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 JFHQ. Both ARNG and USAR warrants are required to successfully complete WOSSC prior to eligibility for promotion to CW5.

(d) CW5. Same as AC MOS 140A description at paragraph 5(f). (Reference to USAADASCH does not apply.)

(2) MOS 140E, ADA systems tactician/technician. The 140X specialty code allows GMD positions to be filled by 140A or 140E.

(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 AC MOS 140E description at paragraph 5(e) except that positions are only available in the ADA brigades and AAMDC. ARNG warrants are required to successfully complete WOSSC prior to being eligible for promotion to CW5. At this juncture, CW4s should begin, continue, or complete graduate-level studies.

(c) CW5. Same as AC MOS 140E description at paragraph 5(f) except that positions are only available in the ADA brigades and AAMDC.