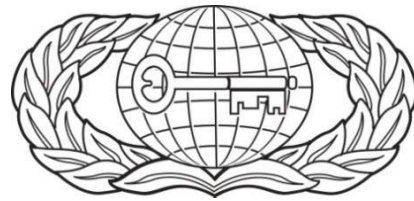


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Parts I-II
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AFSC 1A8X2

Airborne Intelligence, Surveillance, and Reconnaissance (A-ISR) Operator Specialty



CAREER FIELD EDUCATION AND TRAINING PLAN

(CFETP)

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**CAREER FIELD EDUCATION AND TRAINING PLAN
AIRBORNE INTELLIGENCE SURVEILLANCE AND RECONNAISSANCE (A-ISR)
AIRBORNE ISR OPERATOR SPECIALTY: 1A8X2**

PART I

Preface

1. This Career Field Education and Training Plan (CFETP) is a comprehensive education and training document that identifies life-cycle education and training requirements, training support resources, and minimum core task requirements for this specialty. The CFETP provides personnel a career path to guide success and should instill rigor in all aspects of career field training. The CFETP parent publication is DAFI 36-2670, Training Program.
2. The CFETP consists of two parts; both parts are used by supervisors to plan, manage, and direct training within the specialty.
3. Use of the guidance provided in this CFETP provides the foundation for effective training for individuals in this specialty at the appropriate points in their careers. This plan enables the AF to train today's work force for tomorrow's requirements.

Abbreviations/Terms Explained

Advanced Degree Programs. Programs at locations such as National Intelligence University (NIU) and Air Force Institute of Technology (AFIT) that prepare A-ISR professionals, through education and research, to work with skill and dedication in identifying and effectively integrating foreign, military, and domestic intelligence in defense of the homeland and of U.S. interests abroad.

Air Reserve Component (ARC): An overarching term used when referring to both the Air National Guard and AF Reserve

Air Force Enlisted Classification Directory (AFECD). The directory containing the official specialty descriptions for all enlisted military classification codes and identifiers used to identify an AF occupation. The AFECD outlines the minimum mandatory qualifications necessary to fill a particular job. These standards are used to procure, classify, and employ personnel.

Air Force Service Cryptologic Component (AF SCC). Principal advisor to Headquarters Air Force (HAF), A2 Directorate for all cryptologic programming, budgeting, training, personnel, policy, doctrine, governance, and foreign relationships for USAF cryptologic activities. Service lead for USAF cryptologic activities and has management oversight of those elements of the USAF performing cryptologic functions. This applies to the cryptologic staff of the 16 AF, its subordinate elements, and cryptologic elements assigned to other USAF organizations. The 16 AF Commander is the AF/SCC Commander and principal USAF advisor to The Director, National Security Agency (DIRNSA)/Chief of Central Security Service (CHCSS) for USAF cryptologic matters (Ref: AFMAN 14-405).

Air Force Career Field Manager (CFM). Representative appointed by the respective HAF Deputy Chief of Staff or Under Secretariat, to ensure assigned USAF specialties are trained and utilized to support mission requirements. Their responsibilities include establishing career field entry requirements, managing trained personnel requirements, and developing and managing career-long training plan requirements and programs. They also construct viable career paths, evaluate training effectiveness, monitor health and manning of the career field, and provide input on manning personnel policies and programs. Additionally, they implement and advise on changes to force management policies and programs, develop contingency planning actions, validate deployment requirements, and verify workforce availability. Enlisted CFMs are typically CMSgts and are normally located at HAF. There is a separate CFM for Active Duty, Air National Guard, and the Air Force Reserve components for a career field (Ref: DAFI 36-2670).

Air Force Job Qualification Standard/Command Job Qualification Standard (AFJQS/CJQS). A comprehensive task list that describes a particular job type or duty position. It is used by supervisors to document task qualifications. The tasks on AFJQS/CJQS are common to all persons serving in the described duty position.

Air Force Specialty Code (AFSC)/Reporting Identifier (RI). A combination of alpha-numeric characters which are used to identify an AF specialty. (Ref: AFMAN 36-2100, Classifying Military Personnel (Officer and Enlisted), Table 1.1 and Table 1.2 for explanation of codes.)

Basic Aircraft Qualification (BAQ). An aircrew member who has satisfactorily completed training prescribed to maintain the skills necessary to perform aircrew duties in the unit aircraft. (Ref: AFMAN 11-202V1)

Basic Mission Capable (BMC). An aircrew member who has satisfactorily completed Mission Qualification Training (MQT), is qualified in some aspect of the unit mission, but does not maintain Mission Ready (MR)/Combat Mission Ready (CMR) status. (Ref: AFMAN 11-202V1)

Career Development Plan (CDP). The ISR CDP is an online, modular, interactive, learner-centric, scenario-based training course for ISR Airmen completing their skill level upgrades; basic for 5-level and intermediate for 7-level. The CDP will contain information to be utilized throughout the career of an ISR Airman centered on the improvement of critical thinking skills, National and AF strategic guidance and organization, and managing the ISR Force. The advanced CDP (formerly known as SEIMSC) is for senior non-commissioned officers and is designed to expand their knowledge of ISR core competencies and distinctive capabilities in preparation for increased leadership and professional responsibilities.

Career Enlisted Aviator (CEA). An enlisted Airman awarded and performing permanent duty in AFSCs 1AXXX and 1U0X1. (Ref: AFD 11-4)

Control Air Force Specialty Code (CAFSC). A management tool used to make enlisted Airman Assignments, to assist in determining training requirements, and to consider individuals for promotion.

Career Field Education and Training Plan (CFETP). A CFETP is a comprehensive core training document that identifies life-cycle education and training requirements, training support resources, and minimum core task requirements for a specialty. The CFETP provides personnel a career path to guide success and should instill rigor in all aspects of career field training. (Ref: AFI 36-2670).

CEA Center of Excellence (CoE). The cornerstone of all CEA training conducted at Lackland AFB, TX. Provides undergraduate and initial skills training through the award of the 1-skill level.

Chief Enlisted Manager (CEM) Code. A five-digit code ending in 00 to identify CMSgts and CMSgt-selects as top enlisted. (Ref: 1A8 AFECD).

Combat Mission Ready (CMR). An aircrew member who has satisfactorily completed MQT and maintains qualification and proficiency in the command or unit combat mission (Ref: AFMAN 11-202V1)

Continuation Training (CT). Provides Airmen with the volume, frequency, and mix of training necessary to maintain proficiency in the assigned qualification, skill level or certification.

Core Task. The CFM identifies core tasks as a minimum qualification requirement for everyone within an AFSC, regardless of duty position. Core tasks may be specified for a particular skill level or in general across the AFSC. (Ref: DAFI 36-2670).

Course Objective List. A publication derived from initial and advanced skills Course Training Standard, identifying the tasks and knowledge requirements, and respective standards provided to achieve a 3- or 7-skill level in this career field. Supervisors use the continuum of learning to assist in conducting graduate evaluations. (Ref: DAFI 36-2670)

Crew Resource Management (CRM). The effective use of all available resources, to include people, weapon systems, facilities and equipment, and environment, by individuals or crews to safely and efficiently accomplish an assigned airborne mission or task. (Ref: AFMAN 11-290)

Cryptologic Training Advisory Group (CTAG). Group composed of decision-makers and representative SME from higher headquarters and NSA/CSS, for the purpose of establishing, revising, reviewing, and validating cryptologic training conducted under the auspices of an Executive Agent or Responsible Training Authority to ensure technical adequacy (Ref: NSA Policy 4-25)

Cryptologic Training System-Training Standard (CTS-TS). Tasks and knowledge that personnel in a specialty may be expected to perform or to know on the job. These training tasks are developed through the CTAG process and are common to all NSA/CSS personnel and Service-members for a particular skill community. If a particular Service has training requirements that are not common to NSA/CSS personnel or the other Services, they are developed through the STRT/U&TW process (NSA/CSS Policy 4-25).

Enlisted Development Team (EDT). Provides key input on functional progression and succession planning. They execute enlisted vectoring and identify key leadership and developmental positions in their functional communities. The CFM collaborates with AF/A1 and AFPC on enlisted force development and management programs. (Ref: DAFI 36-2670).

Field Evaluation Questionnaire An extensive survey designed to solicit feedback from supervisors and/or graduates of technical school to determine if graduates were trained as specified in the training standard. This survey is sent approximately 6 months after graduation to the MAJCOM from the Career Field Manager for distribution to members at the unit level for completion. This feedback data is used to identify efficient and effective training delivery methods. In coordination with the AF Career Field

Manager, determine if proficiency levels for AETC courses require adjustment based on feedback data and available resources.

Initial Qualification Training (IQT). An aircrew member engaged in training needed to qualify for basic aircrew duties in an assigned position for a specific aircraft, without regard for the unit's operational mission. (Ref: AFMAN 11-202V1)

Initial Skills Training. A formal school course(s) that result in an AFSC 3-skill level award for enlisted or mandatory training for updated to qualified officers. (Ref: DAFI 36-2670).

Instructional System Development (ISD). Deliberate and orderly, but flexible, process for planning, developing, implementing, and managing instructional systems. It ensures that personnel are taught in a cost-efficient way the knowledge, skills, and attitudes essential for successful job performance.

Major Weapons Systems (MWS). For the purpose of this CFETP, MWS consists of all applicable airborne platforms with a crew complement including at least one 1A8X1X.

Mission Design Series (MDS). A term used to identify a specific aircraft designation (e.g., EC- 130H, RC-135U, and AC-130).

Mission Qualification Training (MQT). Training necessary to qualify a crewmember in a specific aircrew position to perform the command's or unit's operational mission. MQT completion is a prerequisite for MR status. (Ref: AFI 11-202V1)

Occupational Analysis Report (OAR). Detailed report showing the results of an occupational survey of tasks performed within a particular AFSC. The Microsoft Excel®-based product includes narrative analysis and data formatted into tables that can easily be sorted by the user to quickly identify and highlight data tailored to user needs.

Qualification Training (QT). Hands-on performance training designed to qualify an airman in a specific position. This training occurs both during and after upgrade training to maintain up-to- date qualifications. (Ref: DAFI 36-2670)

Quality of Analysis (Q of A) Program. The General Defense Intelligence Program funds this program to improve the quality of DoD intelligence analysis and help train qualified intelligence professionals by increasing their depth of analytical, area, and functional expertise.

Special Experience Identifier (SEI). A code used to identify special experience and training not otherwise identified within the military personnel data system (MilPDS). SEIs complement the assignment process but are not substitutes for AFSCs, CEM codes, prefixes, suffixes, SDIs, RIs, personnel processing codes, and professional specialty course codes. They are established when identifying experience or training is critical to the job and person assignment match, and no other identification is appropriate or available.

Specialty Training Requirements Team (STRT)/Utilization and Training Workshop (U&TW). A forum co-chaired by the CFM and AF Training Pipeline Manager comprised of MAJCOM Functional Managers, SMEs, and AETC training personnel that determine education and training requirements and establishes the most effective mix of formal and on-the-job training for each AFSC. The forum will

create or revise training standards and set responsibilities for providing training. As a quality control tool, the STRT/U&TW will be used to ensure the validity and viability of the AFSC training that determines career ladder training requirements (Ref: DAFI 36-2670).

Specialty Training Standard (STS). An AF publication that describes an USAF specialty in terms of tasks and knowledge that an airman in that specialty may be expected to perform or to know on the job. Also identifies the training provided to achieve a 3-, 5-, or 7-skill level within an enlisted AFSC. It further serves as a contract between AETC and the functional user to show which of the overall training requirements for an AFSC are taught in formal schools and correspondence courses. (Ref: DAFI 36-2670)

Test Control Officers (TCOs). Individual assigned the responsibility for controlling and safeguarding all test materials, schedules, and proctoring.

Total Force. All collective AF components (active, reserve, guard, and civilian elements) of the USAF.

Upgrade Training. Mandatory training which leads to the attainment of a higher skill level.

Wartime Skills. Wartime skills/tasks training are initiated based upon a national emergency. These wartime skills are identified by the letter “w” in the 3-level position of the STS and will be taught at an accelerated course at Goodfellow AFB while the trainee is going through technical training school.

Section A – General Information

1. Purpose. This CFETP provides the information necessary for CFMs, MFMs, commanders, training managers, supervisors, and trainers to plan, develop, manage, and conduct an effective and efficient career field training program. The plan outlines the training that individuals in this AFSC should receive in order to develop and progress throughout their career. This plan identifies initial skills, upgrade, qualification, proficiency, and advanced training. This training program occurs both during and after the upgrade training process and is designed to provide the performance skills and knowledge required to execute mission. The CFETP also serves the following purposes:

- 1.1. Serves as a management tool to plan, manage, conduct, and evaluate a career field-training program. Also, it is used to help supervisors identify training at the appropriate point in an individual’s career.
- 1.2. Identifies task and knowledge training requirements for each skill level in the specialty and recommends education and training throughout each phase of an individual’s career.
- 1.3. Lists training courses available in the specialty, identifies sources of training, and the training delivery method.
- 1.4. Identifies major resource constraints that impact full implementation of the desired career field training process.

2. Use of CFETP. The plan will be used by MFMs down through supervisors, all levels, to ensure comprehensive and cohesive training programs are available for each individual in the specialty.

2.1. AETC training personnel will develop or revise formal resident, non-resident, field and exportable training based upon requirements established by the users and documented in Part II of the CFETP. AETC will work with the CFM to develop acquisition strategies for obtaining resources needed to provide the identified training.

2.2. MFMs will ensure their training programs complement the CFETP mandatory initial, upgrade, and proficiency requirements. OJT, resident training, and contract training or exportable courses can satisfy identified requirements. MAJCOM-developed training used to support this AFSC must be identified for inclusion into the plan.

2.3. Each individual will complete the mandatory training requirements specified in this plan. The list of courses in Part II will be used as a reference to support training.

2.4. Personnel in AFSC 1A8XX are exempt from maintaining OJT Training Folders (AF Form 623, *Individual Training Record Folder*). All training not documented in Flight Evaluation Folder (FEF) will be documented in each Airman's *Six-Part Folder* as follows:

2.4.1. Part 1: CFETP/STS

2.4.2. Part 2: Certifications

2.4.3. Part 3: CSP Documentation

2.4.4. Part 4: Waivers

2.4.5. Part 5: Narrative Remarks

2.5. All aircrew training is certified via AF Form 8/8a, *Certificate of Aircrew Qualification*, by trained evaluators. Certification of the AF Form 8/8a does not eliminate the requirement to document STS items in this CFETP.

2.6. A JQS may be used in conjunction with Part II of the CFETP upon approval of the CFM.

NOTE: CFM may supplement these minimum documentation procedures as needed or deemed necessary for the career field.

3. Coordination and Approval. The CFM is the approval authority. Also, the CFM will initiate an annual review of this document to ensure currency and accuracy. MAJCOM representatives and AETC training personnel will identify and coordinate on the career field training requirements. Using the list of courses in Part II, they will eliminate duplicate training.

Section B - Career Progression and Information

4. Specialty Description. This information supplements the AFECD. AFSC-specific duties and responsibilities can be found in the AFECD, which can be found in MyPers by searching for "AFECD". 1A8X2s process, analyze and disseminate ISR information obtained from onboard sensors during mission activities and conduct follow-on analysis of assigned collection as required. Related DoD Occupational Subgroups: 123100, 123200, and 155600.

4.1 Airborne Intelligence Surveillance and Reconnaissance (A-ISR). The 1A8 A-ISR AFSCs are a mix of CEA and ISR skills that enable capabilities in an operational and strategic capacity. 1A8s are considered low density, high demand assets. The distinct MWS 1A8s operate on enable the human

weapons system to be in the right place at the right time to enable the valuable intelligence that supports commanders at all levels to make decisions that defend our nation. Combine that with our target expertise and analytic capabilities to critically think, research, frame and communicate the relevant data across the spectrum of intelligence products make this a highly valuable, sought after force.

4.2. Airborne Intelligence Surveillance and Reconnaissance Operator. The 1A8X2s are aligned with the National Defense Strategy (NDS) and future operating framework depicted by our most senior AF and DoD leaders. The tasks of a 1A8X2 are to be ever ready for a war time environment, continually training and gaining new experiences and skills that will make each 1A8X2 a stronger more capable warrior. These experiences and skills may develop through training scenarios and events or from operational missions surrounding real-world events. The global paradigm is ever shifting, and we should be grateful for peace but be prepared for battle.

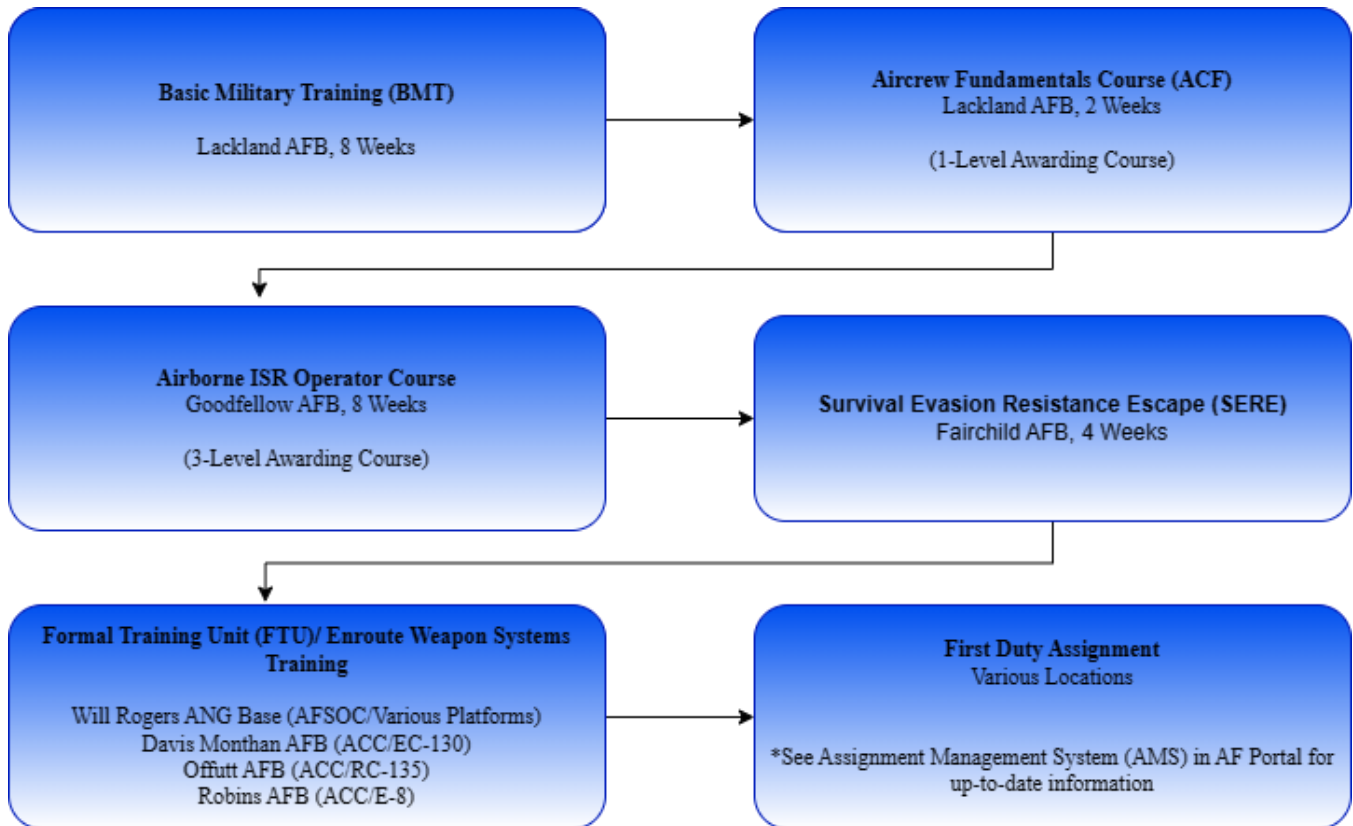
5. Training Decisions and Strategy. The CFETP uses a building block approach to encompass the entire spectrum of functional training requirements for the A-ISR specialty, including skill level, aviation, and intelligence. This CFETP was developed to include life cycle (day one through retirement) training requirements for this specialty. The spectrum includes a framework for when, where, and how to meet the training and growth requirements. Each member should establish framework that blends functional requirements with timing of institutional requirements and drives towards each member's individual goals. The strategy must be apparent and affordable to reduce duplication of training and eliminate a disjointed approach to training.

6. Skill Level Career Progression. Adequate training and timely progression from the apprentice to the craftsman skill level play an important role in the AF's ability to accomplish its functional mission. It is essential that all Airmen involved in training do their part to plan, manage, and conduct an effective training program. Progression starts with initial skills training garnering 3-skill level and moves through qualification and certification in the AFSC into 5, 7 skill levels. The guidance provided in this part of the CFETP will enable individuals to visualize and find viable training at appropriate points in their functional career path but also depicts AF institutional growth through Professional Military Education (PME) and promotions that interweave into our professional growth as Airmen.

6.1. Initial Skills Training. For 1A8X2's initial skills training is a combination of Basic Training, AFC, and Technical Training required for the award of 3-skill level and CEA basic wings; which will be granted after successful completion of technical training at Goodfellow AFB. Initial skills training continues with Survival Courses and FTU training for IQT. Normally, initial skills training is conducted by AETC at a technical training center but some FTUs fall under a lead command to complete IQT. Initial Skills Training is complete following successful completion of IQT.

Figure 6-1. Enlisted Initial Skills Path

The flow outlined in Figure 6.1 (below) represents the formal training courses required for personnel entering and becoming fully qualified in the Specialty including MQT at first duty assignment. The locations, course lengths, and titles are subject to change. Changes will be updated in the Education Training Course Announcement by the course owner.

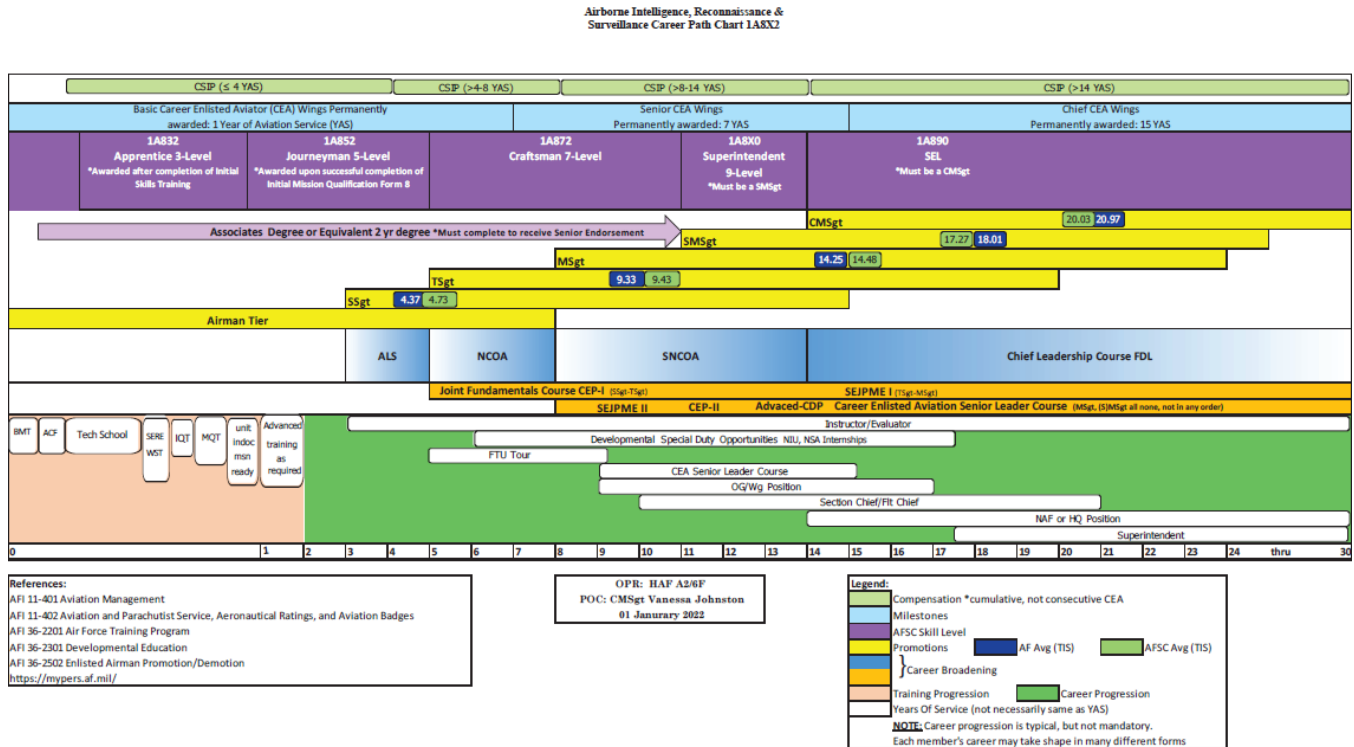


7. Assignment Locations. Authorizations are subject to change without notice and authorizations and vacancies drive assignments. A-ISR members interested in assignments should update their dream sheet and consult their Senior Enlisted Leader (SEL) for more detailed information about opportunities. SELs should engage with AFPC Assignments FAM as needed to support unique circumstances. 1A8 Broadening assignments are advertised on Talent Market Place through MyVector. <https://myvector.us.af.mil/myvector/Talentmarketplace/Home>

NOTE: AF Broadening opportunities usually require career field release, engage with your leadership teams to learn about opportunities and if release is needed your SEL will engage with the CFM.

8. Development Path. The 1A8X2 Career Development Path is a foundational depiction of basic growth model. It includes items such as flight pay and wings, A-ISR skill levels, average time in service for rank, traditional timing for PME, additional functional education and internal and external broadening opportunities. Options listed in the career development path chart are not all-inclusive and are subject to change. The timelines and opportunities may not be feasible for all personnel including the Air National Guard and Air Force Reserve personnel but are highly encouraged.

Figure 8.1. 1A8X2 Career Development Path.



NOTE: The authorizations list from previous editions of the CFETP has been removed. Authorizations are subject to change without notice. Crewmembers interested in assignments should consult their MAJCOM functional manager or the AFPC assignments manager for more detailed information about requirements at a specific location. Special Duty Assignments are posted on EQUALS Plus on the Talent Market Place in MyVector

8.1. Skill Level Recommendations (1A832 – Apprentice): Qualified individuals who are awaiting upgrade time should focus efforts on operations (ground and airborne) to gain understanding of foundational skills prior to moving into support offices such as scheduling, training, analysis, mission management. Individuals should be considered for CSP trainers, additional intelligence and cryptologic training and instructors.

8.2. Skill Level Recommendations (1A852 – Journeyman): Qualified individuals should be considered for movement into support offices such as scheduling, training, analysis, mission management. Individuals should be considered for CSP trainers if not already as well as additional advanced intelligence and cryptologic training and instructors and/or evaluators or crew position upgrade when in 5 skill level.

8.3. Skill Level Recommendations (1A872 – Craftsman): Newly upgraded personnel should be looked at for expanded breadth across support office functions. Individuals should again be considered for additional advanced intelligence and cryptologic training, instructors and/or evaluators or additional crew position upgrade at this time.

8.4. Rank Responsibilities: Airmen should develop their functional skill levels IAW with this CFETP and should develop institutional leadership skills IAW *The Enlisted Force Structure*.

8.5. **1A8 EDT.** The 1A8 career field will utilize the EDT process to develop and place individuals into E-7 Key Developmental and E-8 Key Leadership positions throughout the community. The process is governed by AFI 36-2640 and the CFM guidance.

8.6. Key Functional Positions.

8.6.1. **MAJCOM Functional Managers (MFM) and Functional Area Managers (FAMs):** IAW DAFI 36-2670, *Total Force Development*; AFMAN 36- 2100, *Military Utilization and Classification*; The Enlisted Force Structure and the *AFECD*; the MFM is appointed by the MAJCOM Director of ISR (A2) or equivalent. The MFM and FAMs advise the MAJCOM directorates and staff on 1A8 utilization and training issues. The MFM serves as the MAJCOM voting representative during career field STRT/U&TW. Assists in gathering inputs and data to complete enlisted grade allocation for Career Progression Group (CPG) reviews. Provides guidance to field units on 1A8 personnel utilization. Assists with the dissemination of information regarding AF and career field policies, plans, programs, and procedures to field units. Assists in identifying qualified SMEs to help with the development of CDPs and acts as the primary MAJCOM reviewer on CDP training and classification waiver request packages. MFM and FAMs coordinate on 1A8 staffing and manpower issues. 1A8 MAJCOM processes and FAMs are split between ACC A/2, ACC A/3 and 16 AF/AFCO, with 16 AF/AFCO executing MFM responsibilities and executing cryptologic authority to support CFM.

8.6.2. **CFM for the A-ISR Career Fields.** IAW DAFI 36-2670, *Total Force Development*; AFMAN 36-2100, *Military Utilization and Classification* and the *AFECD*; the CFM is appointed by the Deputy Chief of Staff, Intelligence, Surveillance, Reconnaissance & Cyber Effects Operations (AF A2/6). The CFM advises the FA and FM on all matters affecting the 1A8 A-ISR career fields. Communicates directly with MFMs and AETC to disseminate AF and career field policies and program requirements. Ensures development, implementation, and maintenance of the CFETP. Serves as the chairperson for the STRT/U&TW and uses it as a forum to determine and manage career field education and training requirements as they apply to mission needs. Possesses final authority to waive CFETP requirements, including Learning Programs/CDPs. Assists AETC training managers and course supervisors with planning, developing, implementing, and maintaining all AFSC-specific training courses. Assists in the development of AFSC-related manpower. 1A8 CFM coordinates across HAF directorates to drive force health initiatives.

9. Occupational Badges. A-ISR Airmen are authorized to wear Enlisted Aircrew Wings as a CEA and Intelligence badge as an Enlisted ISR Airmen. Although the wings are the only mandatory item the CFM encourages you to wear both as Airborne is how we do business, but ISR is what we do!

9.1. **Intelligence Occupational Badge.** 1A8X2 Airmen are authorized to optionally wear the current applicable skill level Intelligence badge they possess 3/5/7/9.

9.2. **Aircrew Member Badge.** The aircrew wings are a mandatory uniform item for the 1A8X2 AFSC for Airmen graduating from the 3-level (1A832) awarding course. Aircrew wings are only authorized for wear after graduating from the 3-level awarding course. Wear and permanent awarding requirements of the Basic/Senior/Chief Aircrew Member Badge will be IAW AFMAN 11- 402 *Aviation and Parachutist Service*. Failure to complete IQT is authority for supervisors to recommend revocation of wear of the aircrew member badge.

10. On-the-Job Training/MQT. For A-ISR on the job training is conducted through MQT. Each MAJCOM and MWS has its own training mechanism that combines requirements from; aviation, MWS, intelligence, cryptologic into a cohesive training framework that enables mission capability.

11. Community College of the Air Force (CCAF). CCAF is one of several federally chartered degree-granting institutions; however, it is the only 2-year institution exclusively serving military enlisted personnel. The college is regionally accredited through Air University by the Commission on Colleges of the Southern Association of Colleges and Schools (SACS) to award AAS degrees designed for specific AF occupational specialties and is the largest multi-campus community college in the world. Upon completion of basic military training and assignment to an AF career field, all enlisted personnel are registered in a CCAF degree program and are afforded the opportunity to obtain an associate degree in applied science. In order to be awarded, degree requirements must be successfully completed before the student separates from the AF, retires, or is commissioned as an Officer. See the CCAF website for details regarding the AAS degree programs at many more opportunities at <https://www.airuniversity.af.edu/Barnes/CCAF/>

11.1. CCAF Degree Requirements. Although off-duty education is a personal choice that is encouraged for all, all enlisted Airmen are automatically entered into the CCAF program. Prior to completing an associate degree, the 5-level must be awarded, and the following requirements must be met:

Semester Hours

Technical Education	24
Leadership, Management, and Military Studies	6
General Education	15
Program Elective	15
	Total: 60

11.1.1. Technical Education (24 Semester Hours): Completion of the career field apprentice course satisfies some semester hours of the technical education requirements. 24 Semester Hours are required to fulfill the technical education requirement. A minimum of 9 Semester Hours must be applied in the technical core area, with the remaining 15 Semester Hours applied in either the technical core or the technical elective areas.

11.1.2. Leadership, Management, and Military Studies (6 Semester Hours): The preferred method for completing the LMMS requirement is by completing USAF PME courses, either in-resident or distance learning. However, civilian management courses, and CLEPS are accepted. Civilian courses must emphasize the fundamentals of management and management of human resources (processes and people). Air and Space professionals who complete USAF BMT after 17 October 2019 will earn academic credit in Military Studies that can be applied toward the CCAF Leadership, Management and Military Studies (LMMS) requirement in all AAS degree programs. Number of semester hour earned will be based on course evaluation at time of attendance.

11.1.3. General Education (15 Semester Hours): A student must fulfill the General Education Requirements (GER) through acceptable freshman- or sophomore-level civilian courses in transfer and/or college level exams. Per Public Law, CCAF is not authorized to offer general education courses. Credit from AF or other service coursework cannot be used to fulfill the GER.

11.1.4. Program Elective (15 Semester Hours): Satisfied with applicable Technical Education; Leadership, Management, and Military Studies; or General Education subjects/courses, including natural science courses meeting GER application criteria. A maximum of nine semester hours of CCAF degree applicable technical credit otherwise not applicable to the program of enrollment may be applied. See the CCAF General Catalog for details regarding the Associates of Applied Science for this specialty.

11.1.5. Residency Requirement (16 Semester Hours): Satisfied by credit earned for coursework completed in an affiliated school or through internship credit awarded for progression in an AF occupation specialty. Enlisted members attending Army, Navy, and/or DOD initial or advanced training do not receive resident credit since these schools are not part of the CCAF system. However, the college awards proficiency credit to AF enlisted members completing these courses. Note: Physical education credit awarded for basic military training is not resident credit.

11.2. Professional Certifications. Certifications assist the professional development of our airmen by broadening their knowledge and skills. Additionally, specific certifications may award collegiate credit by CCAF and civilian colleges, saving time and AF tuition assistance funds. It also helps Airmen to be better prepared for transition to civilian life. To learn more about professional certifications and certification programs offered by CCAF, visit:

<https://www.airuniversity.af.edu/Barnes/CCAF/Display/Article/803252/credentialing-programs-flight/>.

In addition to its associate degree program, CCAF offers the following certification programs and resources:

11.2.1. CCAF Instructor Certification (CIC) Program. CCAF offers the three-tiered CIC Program for qualified instructors teaching at CCAF affiliated schools who have demonstrated a high level of professional accomplishment. The CIC is a professional credential that recognizes the instructor's extensive faculty development training, education and qualification required to teach a CCAF course, and formally acknowledges the instructor's practical teaching experience. https://www.my.af.mil/gcss-af/USAF/AFP40/d/s6925EC13447C0FB5E044080020E329A9/Publications/Certifications/CIC_Brochure.pdf

11.2.2. CCAF Instructional Systems Development (ISD) Certification Program. CCAF offers the ISD Certification Program for qualified curriculum developers and managers who are formally assigned at CCAF affiliated schools to develop and manage CCAF collegiate courses. The ISD Certification is a professional credential that recognizes the curriculum developers' or managers' extensive training, education, qualifications and experience required to develop and manage CCAF courses. The certification also recognizes the individual's ISD qualifications and experience in planning, developing, implementing and managing instructional systems. https://www.my.af.mil/gcss-af/USAF/AFP40/d/s6925EC13447C0FB5E044080020E329A9/Publications/Certifications/ISD_Brochure.pdf

11.3. Air Force Credentialing Opportunities On-Line (AF COOL). AF COOL replaced the CCAF Credentialing and Education Research Tool (CERT). The AF COOL Program is managed by CCAF and provides a research tool designed to increase an airman's awareness of national professional credentialing and funding opportunities available for all AF occupational specialties. AF COOL also provides information on specific occupational specialties, civilian occupational equivalencies, AFSC-related national professional credentials, credentialing agencies, and professional organizations. To learn more about AF COOL visit <https://afvec.us.af.mil/afvec/af-cool/welcome>.

11.4. Air University Associate to Baccalaureate Cooperative Program (AU ABC Program). Directs Airmen with associate in applied science Degrees from the CCAF to a collection of accredited military friendly colleges and universities to consider when completing a four-year degree. The program maximizes the application of military career education and training and provides a multitude of online academic and support services for the enlisted member. For more information visit <https://afvec.us.af.mil/afvec/au-abc/how-to-apply>.

11.5. Occupational Instructor Certification. AF and other service members currently assigned to a CCAF affiliated course are eligible for the Instructor of Technology and Military Science (ITMS) degree program. Individuals desiring to pursue the Instructor of Technology & Military Science (ITMS) degree program can obtain further information through the CCAF website. <https://www.airuniversity.af.edu/Barnes/CCAF/>

11.6. Trade Skill Certification. When a CCAF student separates or retires, a trade skill certification is awarded for the primary occupational specialty. The College uses a competency-based assessment process for trade skill certification at one of four proficiency levels: Apprentice, Journeyman, Craftsman (Supervisor), or Master Craftsman (Manager). All are transcribed on the CCAF transcript.

12. A-ISR Career Enhancement Programs. The below listed opportunities are available to 1A8 Airmen within the larger AF or DoD framework.

12.1. Intelligence Fundamentals Professional Certification (IFPC). The Intelligence Fundamentals Professional Certification (IFPC) was developed to accomplish the goal set forth by the Under Secretary of Defense for Intelligence and Security (USDI&S) to professionalize the defense intelligence workforce. The IFPC has established a common standard of the fundamental knowledge and skills expected of all who currently serve in and support, and those who hope to serve in and support, the DoD Intelligence Enterprise (DIE). The IFPC is based on cross-cutting and enterprise-wide Defense Intelligence Fundamentals standards, which depict the core expectations of what all Defense Intelligence Professionals, regardless of Service/Agency, Function/Specialty and experience level, must know and be able to do to successfully execute and contribute to the execution of intelligence missions, functions, and activities at the fundamental level. The IFPC will also serve to ensure incoming defense intelligence professionals meet knowledge standards. For more information visit: <https://dodcertpmo.defense.gov/IFPC/>

12.2. National Intelligence University (NIU). NIU is an accredited academic institution established by the Department of Defense to prepare ISR professionals for Joint, Air Staff, and MAJCOM level positions. This is a center of excellence that offers both undergraduate and graduate degree programs educating military and civilian professionals and conducting and disseminating ISR-related research. Management and outplacement are directed by the CFM office. For more information visit <https://niu.edu/wp/>

12.3. Air Force Institute of Technology (AFIT). Located at Wright-Patterson AFB, Ohio, AFIT is the AF's graduate school of engineering and management under Air University and AETC. AFIT is committed to providing defense-focused graduate and professional continuing education and research to sustain the technological supremacy of America's air and space forces. AFIT provides advanced education opportunities for both officer and enlisted personnel. For more information visit <http://www.afit.edu/>

12.4. Education with Industry (EWI). A highly selective and competitive non-degree educational assignment within an industry related to the student's career field. The program uses a hands-on educational experience to provide students with management skills and technical expertise as they study best practices with leaders of industry. The assignment is ten months in length and, in most cases, involves a Permanent Change of Station (PCS) both before and after the EWI assignment.

12.5. Internship Programs. The following internship programs are for Active Duty only and Active-Duty Service Commitments (ADSC) and follow on assignments are managed by the respective program owners. Airmen should pursue these programs just like Certification Programs to continually improve their analytic tradecraft.

12.5.1. Military Cryptologic Continuing Education Program (MCCEP). This career long development program is managed by NSA/CSS to provide cryptologic development for 1A8XX, 1N2XX, 1N3XX, and 1N4XX Airmen. Progression is based on skill proficiency, training history, and mission experience. Enrollment can be done through NSANet VuPORT. Management and outplacement are directed by 16 AF/AFCO.

12.5.2. Middle Enlisted Cryptologic Career Advancement Program (MECCAP). A 3-year internship for 1A8XX, 1N2XX, 1N3XX, and 1N4XX Airmen at NSA/CSS, Fort Meade, Maryland. Develops the technical and leadership skills of selected NCOs through advanced formal training and a series of individually tailored operational assignments. The program provides career broadening which develops highly skilled cryptologic managers. For further information on applying to MECCAP contact your supervisor, superintendent, or functional manager for details. Call for packages takes place every fall with RNLTD of the following summer. Management and outplacement is directed by 16 AF/AFCO.

12.5.3. Military Cryptologic Signals Analysis Program (MCSAP). The 3-year Crypto-analysis and Signals Analysis internship at NSA is a developmental opportunity designed to prepare personnel to fill COMINT positions through advanced formal training and individually tailored operational assignments. The program combines both formal academic curricula provided by the National Cryptologic School (NCS) and on-the-job training which will enhance the individual's capability to perform advanced COMINT signals analysis and specialized signals development duties worldwide. For further information on applying to MCSAP contact your supervisor, superintendent, or functional manager for details. Call for packages takes place every fall with RNLTD of the following summer. Management and outplacement are directed by AFCO.

Section C – Skill Level Training Requirements

13. Skill Level Training Requirements.

13.1. **Apprentice (3) Level.** 1A832. Meeting mandatory requirements listed in the AFECD, completion of the AFC and Survival training is mandatory. Individuals must complete the Aircrew Fundamentals Course and the Apprentice Airborne Intelligence, Surveillance and Reconnaissance Operator Course to be awarded the 1A832 AFSC. Specific tasks and knowledge training requirements are identified in the Specialty Training Standard (STS), Part II, Section A. Attendance of the 3- level course is mandatory to cross train into 1A8X2. Waiver authority for any training action resides with the CFM.

13.2. **Journeyman (5) Level.** 1A852. Individuals must hold 1A832 AFSC and maintain the mandatory requirements listed in the AFECD. Upgrade training to the 5-skill level in this specialty consists of successful completion of training provided in MDS Specific IQT, MQT and member must be in possession of a valid Form 8 and complete the ISR Basic CDP. Final requirement is supervisor recommendation. Retrainees are subject to the same training requirements. **NOTE:** Units will defer upgrade training and ISR CDP enrollment until after completion of IQT/FTU training and MQT/CSP and Form 8 completion at assignment to the first operational squadron.

13.3. **Craftsman (7) Level.** 1A872. Individuals must hold 1A852 Upgrade training to the 7-skill level in this specialty consists of holding at least the grade of SSgt, completion of a minimum 60 hours of structured, instructor-led cryptologic training and meeting the mandatory requirements listed in the AFECD specialty qualifications. Individuals should be considered for crew position upgrade training, intermediate and advanced skills training, or cross flow to other weapon systems at this time. Individuals must be recommended by their supervisors. Individuals in retraining status are subject to the same training requirements. Reference 16 AF/AFCO-CF for a listing of appropriate course examples. https://intellipedia.intelink.gov/wiki/Airborne_Analyst

13.4. **Superintendent (9) Level.** Upgrade training to the 9-skill level in this specialty consists of holding 1A872 AFSC, maintaining the mandatory requirements listed in the AFECD specialty description and a supervisor's recommendation. Complete upgrade with promotion to SMSgt/E-8.

13.5. **Senior Enlisted Leader (SEL).** SEL code is awarded when promoted to CMSgt/E-9.

Section D - Resource Constraints

14. Purpose. This section identifies known resource constraints, which preclude optimal/desired training from being developed or conducted, including information such as cost and manpower. Narrative explanations of each resource constraint and an impact statement describing what effect each constraint has on training are included. Also included in this section are actions required, office of primary responsibility, and target completion dates. Resource constraints will be reviewed and updated at least annually.

15. Skill-Level Training: Currently no constraints, impacts, resources, or actions required.

Section E – Transitional Training Guide.

NOTE: There are currently no transitional training requirements. This area is reserved.

PART II

Section A - Specialty Training Standard (STS)

1. Implementation.

This STS will be used for technical training provided by AETC for classes beginning not earlier than 6 March, 2023.

2. Purpose.

As prescribed in DAFI 36-2689, *Training Program*, and this STS:

2.1. Lists Tasks, Knowledge and Technical References necessary for Airmen to perform duties in a specialty. Lists in column 1 (Task, Knowledge, and Technical Reference) the most common tasks, knowledge, and technical references (TR) necessary for airmen to perform duties at the 3- and 5-skill level. These are based on an analysis of the duties in the AFECD. Column 2 lists formal training and correspondence course requirements as described in the Education and Training Course Announcements (ETCA) and the career knowledge provided by the correspondence course. There is no advanced course. Email the 17 TRSS/ISR Career Development Program 17TRSS.ISRCareer.DevelopmentProgram@us.af.mil for access to the CDP.

3. Qualitative Requirements. Attachment 1 contains the proficiency code key used to indicate the level of training and knowledge provided by resident training and ISR career field development program.

3.1 Enlisted Promotions References and Requirements Catalog (active duty only). A guide for development of promotion tests used in the Weighted Airmen Promotion System (WAPS). Specialty Knowledge Tests (SKTs) are developed at the AF Occupational Measurement Squadron (AFOMS) by senior NCOs with extensive practical experience in their career fields. The tests sample knowledge of STS subject matter areas judged by test development team members to be most appropriate for promotion to higher grades. Questions are based on study references. For further information, please consult the Enlisted Promotions Reference and Requirements Catalog at the following link: <https://www.omsq.af.mil/TE/EPRRC.pdf>. Individual responsibilities are in AFI 36-2605.

4. Recommendations. Report unsatisfactory performance of individual course graduates to 316 TRS/DOC, 156 Marauder Street, Suite 1, Goodfellow AFB TX 76908-3402. Please reference specific STS paragraphs. A 24-hour Customer Service Information Line (CSIL) has been installed for the supervisor's convenience to identify demonstrated over- or under-training on performance/knowledge items listed in the training standard. For a quick response to any training concerns, call CSIL, DSN: 312-477-3350, anytime day or night, or send an email to: 17TRG.ccme@goodfellow.af.mil. Please reference specific STS line items.

5. Chemical, Biological, Radiological, and Nuclear (CBRN) Training Requirements. The 2018 National Defense Strategy highlights the need to prioritize preparedness for war. Intelligence personnel and operations are vital to gaining and maintaining air superiority during conflict. In effort to maintain mission readiness and sustain mission assurance, intelligence Airmen must be able to perform intelligence functions despite the threat environment. Unit Commanders will identify tasks within their Master Training Plans (MTP) and ensure Airmen can perform these tasks if chemical, biological,

radiological, or nuclear (CBRN) warfare hazards are present based on their mission requirements. Units will periodically exercise the performance of these tasks while wearing Individual Protective Equipment (IPE) IAW DAFI 10-2601 to ensure sustained unit readiness.

Section B – Training Course Index

6. Purpose. This section of the CFETP identifies a partial listing of training courses available for the specialty and shows how the courses are used by each MAJCOM in their career field training programs.

6.1. Advanced Intelligence Instructor Course (AIIC) - A 23-week course with the purpose of developing enlisted intelligence instructors skilled in conducting threat analysis and facilitating intelligence, surveillance, and reconnaissance (ISR) integration into multi-mission design series (MDS) mission planning, execution, and debriefing in a contested, degraded, and operationally limited (CDO) environment. AIIC provides a unique context in which students must demonstrate advanced skills in mission planning, adversary knowledge, ISR and multi-MDS employment. The Air Force charges graduates of the Advanced Intelligence Instructor Course with leading, educating, and training their unit's personnel in core intelligence mission planning skills acquired during the course.

6.2. Tactical Systems Operator Advanced Instructor Course (TSO AIC) - A 108-day course with the purpose of developing 1A8X2 TSO instructors skilled in mission planning, execution, and debriefing across multiple mission sets, as well as integration of a multitude of USSOCOM platforms. TSO AIC will enhance enlisted aircrew leadership, develop instructional methodology for current and future missions, improve technical expertise, and develop critical thinking skills to apply to future problem sets. The Air Force charges graduates of the TSO AIC with leading, educating, and training their unit's personnel in core tactics, mission planning, and integration skills acquired during the course.

6.3. USMC Weapons and Tactics Instructor Course (USMC WTI) - The Weapons and Tactics Instructor Course (WTI) is a seven-week period of instruction (first half is academics, second half is flying evolutions), hosted by Marine Aviation Weapons and Tactics Squadron One at Yuma, Ariz., that incorporates Marine Corps planning and implementation of advanced air and ground tactics through a series of escalating evolutions in order to produce certified Weapons and Tactics Instructors. Weapons and Tactics instructors serve as squadron training officers who use their skills to act as aircraft and weapons subject matter experts to provide their units with proper training and evaluation to ensure exceptional combat readiness.

6.4. AFIT Academic Instructor Course (AIC) - Prepares newly assigned AFIT faculty to instruct in the resident graduate or professional continuing education programs. Requires extensive reading, preparation, and moderate research. Major areas are learning theory, teaching methods, including Distance Learning lessons and evaluation. Methods taught are the lecture, guided discussion, and case study. Provides maximum participation in learning. Majority of class time devoted to small-group activity. Students plan and teach lessons using a variety of teaching methods, develop rating scales, write valid test items, and construct a curriculum-development project. Each student must demonstrate effectiveness in planning and presenting teaching lessons.

Air Force In-Residence Courses.

Course ID	Course Title	Location
L3AQR1A812-01AA	Aircrew Fundamentals Course	Lackland AFB, TX
X3ABR1A8320A1D	Apprentice Airborne ISR Operator	Goodfellow AFB, TX
CRTJ3000	Applied Critical Thinking & Structured Analytic Techniques	NGA, Springfield VA
S-V97-A	SERE Training	Fairchild AFB, WA
S-V84-A	USAF Underwater Egress Training	Fairchild AFB, WA
S-V85-A	Emergency Parachute and Water Survival Training	Fairchild AFB, WA
SERE 220	Special Survival	Fairchild AFB, WA
SERE 245	Special Survival Training	Fairchild AFB, WA
TSO-ACCT	Airborne Cryptologic Certification Training	WRANG, OK
XBAZN1N2510A3A	Intermediate Signals Analysis Course (CIN: A-232-0451/CDP: 028Y)	Corry Station, FL
XBAZN1N2510A1A	Advanced Communications Signals Analysis (CIN: A-232-0452/CDP: 4375)	Corry Station, FL

Air Force Institute for Advanced Distributed Learning (AFIADL) Courses.

COURSE ID	COURSE TITLE	Location
ISR Development	ISR Career Development Program (CDP)	Correspondence
ISR Development	Intermediate ISR Career Development Program (CDP)	Correspondence
ISR Development	Advanced ISR Career Development Program (CDP)	Goodfellow AFB TX

Section C – MAJCOM Unique Requirements

The following list of MAJCOM unique requirements is not all-inclusive; however, it covers the most frequently referenced areas.

Major Command Courses.

COURSE ID	COURSE TITLE	LOCATION	MAJCOM
CCALLAO/IQ	EC-130H Baseline 2 Compass Call Acquisition Operator (IQ) Training Course	Davis Monthan AFB, AZ	ACC
CCALLMCSUG	EC-130H Baseline 2 Compass Call Mission Crew Supervisor Upgrade Training Course	Davis Monthan AFB, AZ	ACC
CCALLINST	EC-130H Compass Call Mission Crew Instructor Upgrade	Davis Monthan AFB, AZ	ACC
E8AIT-QT	E-8 Airborne Intelligence Officer/Airborne Intelligence Technician Qualification Training	Robins AFB, GA	ACC
E8AIT-RQ	E-8 Airborne Intelligence Officer/Airborne Intelligence Technician Qualification Training	Robins AFB, GA	ACC
E8IAIT	E-8 Instructor Airborne Intelligence Technician Training	Robins AFB, GA	ACC
RC135SSD	RC-135V/W Signals Search and Development Operator Qualification and Requalification	Offutt AFB, NE	ACC
RC135AA	RC-135 Airborne Analyst Qualification	Offutt AFB, NE	ACC
RC135DLO	RC-135 Data Link Operator Qualification	Offutt AFB, NE	ACC
RC135AMS	RC-135 Airborne Mission Supervisor Qualification	Offutt AFB, NE	ACC
CFIC135/E4	RC/OC/WC-135 and E4B Aircraft Central Flight Instructor Course	Offutt AFB, NE	ACC
TSO-MQT	Tactical Systems Operator Mission Qualification Training	WRANGB, OK	AFSOC
TSO-INSTRUCTOR	Tactical Systems Operator Instructor Upgrade	WRANGB, OK	AFSOC
TSO-AIC	USAF Advanced Instructor Course Tactical Systems Operator	Hurlburt Field, FL	AFSOC

BY ORDER OF THE SECRETARY OF THE AIR FORCE

OFFICIAL

**LEAH G. LAUDERBACK, Lt Gen, USAF
Deputy Chief of Staff, Intelligence, Surveillance,
Reconnaissance, and Cyber Effects Operations**

3 Attachments:

1. Qualitative Requirements
2. Aircrew Fundamentals
3. Airborne ISR Operator Specialty Training Standard

<i>Attachment 1 Qualitative Requirements</i>		
THIS BLOCK FOR IDENTIFICATION PURPOSES ONLY		
Name of Trainee		
Printed Name (<i>Last, First, Middle Initial</i>)	Initials (<i>Written</i>)	SSAN
Printed Name of Certifying Official and Written Initials		
<i>N/I</i>	<i>N/I</i>	
<i>N/I</i>	<i>N/I</i>	
<i>N/I</i>	<i>N/I</i>	
<i>N/I</i>	<i>N/I</i>	
<i>N/I</i>	<i>N/I</i>	

QUALITATIVE REQUIREMENTS

Proficiency Code Key		
	Scale Value	Definition: The individual
Task Performance Levels	1	Can do simple parts of the task. Needs to be told or shown how to do most of the task. (Extremely Limited)
	2	Can do most parts of the task. Needs only help on hardest parts. (Partially Proficient)
	3	Can do all parts of the task. Needs only a spot check of completed work. (Competent)
	4	Can do the complete task quickly and accurately. Can tell or show others how to do the task. (Highly Proficient)
*Task Knowledge Levels	a	Can name parts, tools, and simple facts about the task. (Nomenclature)
	b	Can determine step by step procedures for doing the task. (Procedures)
	c	Can identify why and when the task must be done and why each step is needed. (Operating Principles)
	d	Can predict, isolate, and resolve problems about the task. (Advanced Theory)
**Subject Knowledge Levels	A	Can identify basic facts and terms about the subject. (Facts)
	B	Can identify relationship of basic facts and state general principles about the subject. (Principles)
	C	Can analyze facts and principles and draw conclusions about the subject. (Analysis)
	D	Can evaluate conditions and make proper decisions about the subject. (Evaluation)
Explanations		
<p>* A task knowledge scale value may be used alone or with a task performance scale value to define a level of knowledge for a specific task. (Example: b and 1b)</p> <p>** A subject knowledge scale value is used alone to define a level of knowledge for a subject not directly related to any specific task, or for a subject common to several tasks.</p> <p>- This mark is used alone instead of a scale value to show that no proficiency training is provided in the course or CDC.</p> <p>X This mark is used alone in the course columns to show that training is required but not given due to limitations in resources.</p> <p>NOTE: All tasks and knowledge items shown with a proficiency code are trained during war time.</p>		

Attachment 2 Aircrew Fundamentals					
Line Item	Tasks, Knowledge, Technical References	A		B	C
		3 Skill Level		5 Skill Level	7 Skill Level
		Aircrew Fundamentals	1A8X2 Apprentice	ISR CDP 5 Skill Level	ISR CDP 7 Skill Level
1.	CAREER LADDER PROGRESSION TR: AFMAN 36-2100, AFI 36-2104, AFI 11-401, AF Mission Directives				
1.1	Progression within 1AXXX AFSC's	A	--	--	--
1.2	Duties within 1AXXX AFSCs	A	--	--	--
1.3	Total Force	A	--	--	--
1.3.1	MAJCOM Missions	A	--	--	--
1.4	Joint / Combined	A	--	--	--
2.	SECURITY TR: DODR 5200.1, AFI 10-1101, 31-201v2, 31-401, 33-208, 33-211, 10-701				
2.1.	COMSEC relating to aircrew	A	--	--	--
2.2	OPSEC relating to aircrew	A	--	--	--
2.3.	Perform Anti-Hijacking / Anti-Terrorism Procedures	1a	--	--	--
2.4.	Information Security relating to aircrew	A	--	--	--
2.5.	Physical Security relating to aircrew	A	--	--	--
2.5.1	Perform flight line security procedures	1a	--	--	--
3.	CREW RESOURCE MANAGEMENT (CRM) TR: AFI-11-290				
3.1	Crew Resource Management fundamentals	A	--	--	--
3.2	Communication	--	--	--	--
3.2.1	Terms and definitions	B	--	--	--
3.2.2	Radio discipline	A	--	--	--
4.	AVIATION SAFETY / AF OCCUPATIONAL SAFETY AND HEALTH (AFOSH) PROGRAM TR: AFI 32- 7806, 91-201, 91-202, 91-301, 91-302, 91-303, 123-1, AFMAN 24-204, AFOSH Std 91-25, 91-66, 91-100, AFPAM 91-121				
4.1	Aviator hazards	--	--	--	--
4.1.1	Engine air intake and exhaust	A	--	--	--
4.1.1.1	Apply appropriate safety measures	1a	--	--	--
4.1.2	High intensity sound	A	--	--	--
4.1.2.1	Apply appropriate safety measures	1a	--	--	--
4.1.3	Rotor / propeller planes of rotation	A	--	--	--

Line Item	Tasks, Knowledge, Technical References	A		B	C
		3 Skill Level		5 Skill Level	7 Skill Level
		Aircrew Fundamentals	1A8X2 Apprentice	ISR CDP 5 Skill Level	ISR CDP 7 Skill Level
4.1.3.1	Apply appropriate safety measures	1a	--	--	--
4.1.4	Antenna radiation	A	--	--	--
4.1.4.1	Apply appropriate safety measures	1a	--	--	--
4.1.5	Aircraft Electrical System	A	--	--	--
4.1.5.1	Apply appropriate safety measures	1a	--	--	--
4.1.6	Ground support equipment	A	--	--	--
4.1.6.1	Apply appropriate safety measures	1a	--	--	--
4.2	Weather	A	--	--	--
4.3	Bird Avoidance Strike Hazard (BASH) Program	A	--	--	--
4.4	Hazardous Materials (HAZMAT)	A	--	--	--
4.5	Foreign Object Damage (FOD) Hazards / Prevention	A	--	--	--
4.6	High intensity light (Strobes)	A	--	--	--
5.	PUBLICATIONS TR: AFI 11-215, 33-360, 37-160v1, T.O. 00-20, 00-5-1/2, DODR 4500-32v1, 11-202v2				
5.1	Air Force Technical Order's	B	--	--	--
5.1.1	Use T.O.s	2b	--	--	--
5.1.2	Post changes	2b	--	--	--
5.2	Publications	B	--	--	--
5.2.1	Use publications	2b	--	--	--
5.2.2	Post changes	2b	--	--	--
5.3	Flight Publication Improvement Reports	B	--	--	--
5.3.1	Complete flight publication improvement report (AF Form 847)	2b	--	--	--
5.4	AFTO IMT 781 series	B	--	--	--
5.4.1	Use AFTO IMT 781A	1a	--	--	--
5.5	Flight Crew Information File (FCIF)	B	--	--	--
5.5.1	Use Flight Crew Information File (FCIF)	2b	--	--	--
6.	AIRCREW/FLIGHT MANAGEMENT TR: AFPD 11-4, AFI 11-401, 11-402, 11-412, 11-202, 38-201, 48-123v3				

Line Item	Tasks, Knowledge, Technical References	A		B	C
		3 Skill Level		5 Skill Level	7 Skill Level
		Aircrew Fundamentals	1A8X2 Apprentice	ISR CDP 5 Skill Level	ISR CDP 7 Skill Level
6.1	Responsibilities of HQ USAF and MAJCOM Aircrew Managers	--	--	--	--
6.2	Flight authorization	A	--	--	--
6.3	Aviation Resource Management (ARM)	--	--	--	--
6.3.1	Host Aviation Resource Management (HARM)	A	--	--	--
6.3.2	Squadron Aviation Resource Management (SARM)	A	--	--	--
6.4	Flight Records Folder (FRF)	A	--	--	--
6.5	Aviation service, aeronautical ratings, badges	A	--	--	--
6.6	Flight pay / Career Enlisted Flight Incentive Pay (CEFIP) / gates	B	--	--	--
6.7	Flight medicine		--	--	--
6.7.1	Flight surgeon functions	B	--	--	--
6.7.2	Grounding / Duties Not Including Flying (DNIF) status	B	--	--	--
6.8	Aircrew member responsibilities		--	--	--
6.8.1	Crew rest	A	--	--	--
6.8.2	Restrictions	A	--	--	--
7.	AIRCREW TRAINING / SUPERVISION TR: AFI 11-2MDS V1, 11-202v1/2, AFMAN 36-2100, 36-2670, Education & Training Course Announcements (ETCA)				
7.1	Physiological Training	A	--	--	--
7.2	General education requirements	A	--	--	--
7.3	Initial qualification training	A	--	--	--
7.4	Mission qualification training	A	--	--	--
7.5	Continuation training / maintaining currency	A	--	--	--
7.6	Requalification training	A	--	--	--
7.7	Flight Training Records	A	--	--	--
7.8	Standardization/Evaluation duties	A	--	--	--
7.9	Flight Evaluation Folder (FEF)	A	--	--	--
7.10	Life support equipment	A	--	--	--

Line Item	Tasks, Knowledge, Technical References	A		B	C
		3 Skill Level		5 Skill Level	7 Skill Level
		Aircrew Fundamentals	1A8X2 Apprentice	ISR CDP 5 Skill Level	ISR CDP 7 Skill Level
8.	AERODYNAMICS TR: -1 T.O., AFH 11-203v1, T.O. 1-1B-50				
8.1	Fixed wing	A	--	--	--
8.2	Rotary wing	A	--	--	--
8.3	Aircraft general (basic construction)	A	--	--	--
8.4	Flight controls	A	--	--	--
8.5	Instruments	A	--	--	--
8.6	Aircraft Weight and Balance		--	--	--
8.6.1	Principles	A	--	--	--
8.6.2	Solve math problems	1a	--	--	--
9.	AIRCREW ACTIVITIES TR: -1 T.O., -9 T.O, AFI 10-707, 1-202				
9.1	Mission briefings	A	--	--	--
9.1.1	Mission planning documents	A	--	--	--
9.2	Professional Equipment	A	--	--	--
9.3	Perform egress procedures	1a	--	--	--
9.4	Identify aircraft emergency equipment	1a	--	--	--
9.5	Oxygen	A	--	--	--
9.6	Joint Spectrum Interference Resolution (JSIR) / Air Force Spectrum Interference Resolution (AFSIR)	A	--	--	--
10.	AIRCRAFT SYSTEMS / EQUIPMENT TR: -1 T.O., MAJCOM guidance and T.O. 00- 25-172, AFI 11-202				
10.1	Electrical	A	--	--	--
10.2	Hydraulic	A	--	--	--
10.3	Environmental	A	--	--	--
10.4	Communications	A	--	--	--
10.5	Oxygen	A	--	--	--
10.6	Fuel	A	--	--	--
10.7	Concurrent servicing	A	--	--	--
10.8	Fleet Service equipment	A	--	--	--
10.9	Engines	A	--	--	--
10.10	Navigation lighting	A	--	--	--

Attachment 3 Airborne ISR Operator Specialty Training Standard

Line Item	Tasks, Knowledge, Technical References	A		B	C
		3 Skill Level		5 Skill Level	7 Skill Level
		Aircrew Fundamentals	1A8X2 Apprentice	ISR CDP 5 Skill Level	ISR CDP 7 Skill Level
1.	SAFETY				
1.1	Flight line Safety and Aircraft Ground Safety TR: AFI 91-202	--	A	--	--
1.2	SECURITY				
1.2.1	Information Security (INFOSEC) TR: AFI 31-401 & AFI 33-129 AFGM1.4, DODM 5200.01V3, DODM 5200.01V4	--	B	--	--
1.2.2	Communications Security (COMSEC) TR: AFI 33-201V1	--	B	--	--
1.2.3	Operational Security (OPSEC) TR: AFI 10-701	--	B	--	--
1.2.4	Physical Security TR: AFI 31-102	--	B	--	--
1.2.5	Personnel Security TR: AFI 31-501	--	B	--	--
1.2.6	Emission Security TR: AFI 33-200 & AFSSI 7700	--	B	--	--
1.2.7	Computer Security (COMPUSEC) TR: AFI 33-200 & AFSSI 8520, AFMAN 33-282	--	B	--	--
1.2.8	Intelligence Oversight Program TR: AFI 14-104, EO 12333, DoDD 5240.01, DoDD 5240.1-R	--	B	--	--
1.2.9	SCI Classification TR: DoD 5200.1-R, EO 12958-IS00, http://www.intelink.sgov/sites/ssc/capco/default.aspx	--	B	--	--
1.2.10	Security Derivative Classifications TR: DoD 5200.1-R, EO 12958-IS00, DODM 5200.01V1 & DODM 5200.01V2, http://www.intelink.sgov/sites/ssc/capco/default.aspx	--	B	--	--
1.2.11	Safeguarding/Destruction of Classified Material TR: DoD 5200.1-R, EO 12958, as amended, AFI 16-201	--	2b	--	--

Line Item	Tasks, Knowledge, Technical References	A		B	C
		3 Skill Level		5 Skill Level	7 Skill Level
		Aircrew Fundamentals	1A8X2 Apprentice	ISR CDP 5 Skill Level	ISR CDP 7 Skill Level
1.3	US GOVERNMENT, DEPARTMENT OF DEFENSE, & INTELLIGENCE COMMUNITY				
1.3.1	Executive Branch TR: http://www.usa.gov/Agencies/Federal/Executive.shtml	--	A	--	--
1.3.1.1	Strategic Guidance: National Security Strategy (NSS), National Defense Strategy (NDS), National Military and Security Strategies, and AF Next Generation ISR Dominance Flight Plan	--	A	--	--
1.3.2	Air Force Intelligence TR: JP 2-0, Annex 2-0 HAFMD 1-33 AFD 14-2 & AFI 14-202V3	--	A	--	--
1.3.3	Intelligence Community TR: EO 12333, JP 2-0, JP 2-1, JP 2-01, Annex 2-0	--	A	--	--
1.3.4.	Department of Defense (DOD) TR: http://www.defense.gov/About-DoD/DoD-101 , JP 1	--	A	--	--
1.3.4.1	Joint Chiefs of Staff (JCS) TR: https://www.jcs.mil/Doctrine/	--	A	--	--
1.3.4.2	Joint Operations TR: JP 2-0, JP 3-0	--	A	--	--
1.3.4.2.1	Unified Commands TR: JP 1-0	--	A	--	--
1.3.4.2.2	Joint Task Force (JTF) TR: JP 2-0, JP 3-0	--	A	--	--
1.3.4.3	US Cryptologic System and Service Cryptologic Components (SCC) TR: NSA.smil.mil, AFI 14-128, Title 10, 18, 32, 50, United States Code	--	A	--	--
1.4	INTELLIGENCE DISCIPLINES/AFSCs				
1.4.1	Capabilities and limitations of Signals Intelligence (SIGINT) TR: Air Force Enlisted Classification Directory	--	B	--	--
1.4.2	Capabilities and limitations of Measurement and Signature Intelligence (MASINT) TR: Force Enlisted Classification Directory (AFECD), intelligence.gov	--	B	--	--

Line Item	Tasks, Knowledge, Technical References	A		B	C
		3 Skill Level		5 Skill Level	7 Skill Level
		Aircrew Fundamentals	1A8X2 Apprentice	ISR CDP 5 Skill Level	ISR CDP 7 Skill Level
1.4.3	Capabilities and limitations of Human Intelligence (HUMINT) TR: Air Force Enlisted Classification Directory (AFECD), intelligence.gov	--	B	--	--
1.4.4	Capabilities and limitations of Foreign Instrumentation Signals Intelligence (FISINT) TR: Air Force Enlisted Classification Directory (AFECD), intelligence.gov	--	B	--	--
1.4.4.1	Telemetry TR: SIGF1000	--	A	--	--
1.4.5	Capabilities and limitations of Geospatial Intelligence (GEOINT) TR: Air Force Enlisted Classification Directory (AFECD), intelligence.gov	--	B	--	--
1.4.6	Capabilities and limitations of Open-Source Intelligence (OSINT) TR: Air Force Enlisted Classification Directory (AFECD), intelligence.gov	--	B	--	--
1.4.7	Functions of Intelligence Air Force Specialty Codes (AFSCs) TR: Air Force Enlisted Classification Directory (AFECD), intelligence.gov	--	B	--	--
1.5	INTELLIGENCE, SURVEILLANCE, RECONNAISSANCE (ISR) OPERATIONS				
1.5.1	ISR Process	--	--	--	--
1.5.1.1	Planning & Direction TR: AFD Annex 2-0, JP 2-0	--	A	--	--
1.5.1.2	Collection TR: AFD Annex 2-0, JP 2-0	--	A	--	--
1.5.1.3	Processing & Exploitation TR: AFD Annex 2-0, JP 2-0	--	A	--	--
1.5.1.4	Analysis & Integration TR: AFD Annex 2-0, JP 2-0	--	A	--	--
1.5.1.5	Dissemination & Integration TR: AFD Annex 2-0, JP 2-0	--	A	--	--
1.5.1.6	Evaluation & Feedback TR: AFD Annex 2-0, JP 2-0	--	A	--	--
1.6.	ISR ASSETS				

Line Item	Tasks, Knowledge, Technical References	A		B	C
		3 Skill Level		5 Skill Level	7 Skill Level
		Aircrew Fundamentals	1A8X2 Apprentice	ISR CDP 5 Skill Level	ISR CDP 7 Skill Level
1.6.1	Operational characteristics, capabilities, and limitations of US assets TR: AFD Annex 2-0, JP 2-0, AFTTP 3-1 & 3-3	--	A	--	--
1.7.	BATTLESPACE DOMAINS				
1.7.1	Air, Space, Cyberspace TR: AFD Annex 2-0, Annex 3-0, Annex 3-12, Annex 3-14, Annex 3-60, AFTTP 3-1 All Vols, https://doctrine.af.mil/ , http://www.naic.wrightpatterson.af.mil/ae/ro/	--	A	--	--
1.7.2	Ground TR: http://www.ngic.army.smil.mil/functionpgs/armor , AFTTP 3-1 (All Vols)	--	A	--	--
1.7.3	Naval TR: http://www.navy.mil/navydata/fact.asp , AFTTP 3-1 (All Vols)	--	A	--	--
1.8.	GEOSPATIAL INFORMATION & SERVICE (GI&S)				
1.8.1	Identify marginal data & symbology TR: JP 2-3	--	1a	--	--
1.8.2	Manually plot coordinates TR: JP 2-3	--	2b	--	--
1.8.3	Perform time zone calculation TR: http://www.nist.gov/pml/general/time/world.cfm	--	1a	--	--
1.8.4	Geography (based on National Defense Strategy (NDS)) TR: worldatlas.com	--	A	--	--
1.9.	CRITICAL THINKING				
1.9.1	Apply principles of critical thinking TR: Richards J. Heuer, Jr., "Psychology of Intel Analysis" Morgan Jones "The Thinkers Tool Kit"; www.criticalthinking.org	--	1a	--	--
1.9.2	Basic target research	--	A	--	--
1.9.3	Resiliency for ISR professionals; 1A8X2 professionals tailored training	--	A	--	--
1.9.4	Cognitive source performance (Resiliency)	--	A	--	--

Line Item	Tasks, Knowledge, Technical References	A		B	C
		3 Skill Level		5 Skill Level	7 Skill Level
		Aircrew Fundamentals	1A8X2 Apprentice	ISR CDP 5 Skill Level	ISR CDP 7 Skill Level
1.10.	PUBLICLY AVAILABLE INFORMATION (PAI)				
1.10.1	PAI concepts, governance and technologies	--	A	--	--
1.11	PRINCIPLES OF ELECTROMAGNETIC (EM) ENERGY TR: Electronic Warfare Fundamentals, Electronic Warfare and Radar Systems Engineering Handbook, NAVEDTRA 14182, SIGG1160, SIGE2810				
1.11.1	EM Spectrum, TR: ITU RR (article 1)	--	A	--	--
1.11.2	Radio Frequency (RF)	--	A	--	--
1.11.3	RF Spectrum TR: SIGG1160	--	B	--	--
1.11.4	Describe the RF for space-based systems and where in the spectrum these systems operate. TR: https://www.nro.ic.gov/bpo/ocpa/opa/Documents/2017%20GeoSig%20Product%20Guide.pdf	--	B	--	--
2.	WAVEFORM CHARACTERISTICS TR: NAVEDTRA 14184, SIGG1040, SIGG1041, SIGG1046, SIGG2100				
2.1	Amplitude TR: SIGC1046	--	B	--	--
2.2	Cycle TR: SIGC1046	--	B	--	--
2.3	Period (time) TR: SIGC1046	--	B	--	--
2.4	Wavelength TR: SIGG1160	--	B	--	--
2.5	Frequency (rate) TR: SIGG1160	--	B	--	--
2.6.	Phase (distance) TR: SIGG1046	--	B	--	--
2.7	Complex waveforms	--	B	--	--
2.7.1	Linear/Nonlinear Mixing TR: SIGG2100, SIGG1046, SIGC2041	--	B	--	--
2.7.2	Fourier Components (series) TR: SIGG1041, SIGG2100, SIGE2810	--	B	--	--
2.7.3	Bandwidth TR: SIGE2810, SIGGI 160	--	A	--	--
2.8.	PULSES				
2.8.1	Pulse Characteristics TR: SIGE2810	--	B	--	--

Line Item	Tasks, Knowledge, Technical References	A		B	C
		3 Skill Level		5 Skill Level	7 Skill Level
		Aircrew Fundamentals	1A8X2 Apprentice	ISR CDP 5 Skill Level	ISR CDP 7 Skill Level
2.8.2	Pulse Repetition Frequency (PRF) and Pulse Repetition Interval (PRI) TR: SIGG1041	--	B	--	--
3.	MODULATION				
3.1	Basic theory, principles, and terms of modulation TR: SIGG1046, SIGG2100	--	B	--	--
3.1.1	Determine signal external parameters (i.e., carrier frequency, bandwidth, modulation rate, data rate) TR: SIGC2010, VINTAGE HARVEST 2	--	2b	--	--
3.1.2	Frequency Modulation (FM)	--	A	--	--
3.1.3	Phase Modulation (PM)	--	A	--	--
3.1.4	Amplitude Modulation (AM)	--	A	--	--
3.1.4.1	Double Side Band (DSB) TR: SIGG1046, SIGG2100	--	A	--	--
3.1.4.2	Single Side Band (SSB) TR: SIGG1046, SIGG2100	--	A	--	--
3.1.4.3	Independent Side Band (ISB) TR: SIGG1046, SIGG2100	--	A	--	--
3.1.5	Quadrature Amplitude Modulation (QAM)	--	A	--	--
3.2.	Identify visual displays of modulation types TR: SIGG2100	--	2b	--	--
3.2.1.	Carrier Frequency TR: SIGG2100	--	B	--	--
3.2.2.	Bandwidth TR: SIGG1041	--	B	--	--
3.2.3.	Modulation Rate/Data Rate TR: SIGG1046	--	B	--	--
3.2.4.	Upper and Lower Sideband (USB and LSB) TR: SIGG1046, SIGG2100	--	B	--	--
3.2.5.	Recordings TR: SIGC1042	--	2b	--	--

Line Item	Tasks, Knowledge, Technical References	A		B	C
		3 Skill Level		5 Skill Level	7 Skill Level
		Aircrew Fundamentals	1A8X2 Apprentice	ISR CDP 5 Skill Level	ISR CDP 7 Skill Level
4.	SHIFT KEYED CARRIERS				
4.1.	Amplitude Shift Keyed (ASK) TR: SIGG1046, SIGG2100, SIGG2046	--	B	--	--
4.2.	Frequency Shift Keyed (FSK) TR: SIGG1046, SIGG2046	--	B	--	--
4.3.	Phase Shift Keyed (PSK) TR: SIGG1046, SIGG2046	--	B	--	--
5.	PULSE MODULATION				
5.1	Pulse Amplitude Modulation (PAM) TR: SIGG1046, SIGG1041	--	A	--	--
5.2	Pulse Frequency Modulation (PFM) TR: SIGE2810, SIGE3810	--	A	--	--
5.3	Pulse Code Modulation (PCM) TR: SIGG1046, SIGG1041, SIGG2100, SIGG2046, SIGE2810	--	A	--	--
5.4	Pulse Duration Modulation (PDM) TR: SIGG2100, SIGE2810	--	A	--	--
5.5	Pulse Position Modulation (PPM) TR: SIGG2100, SIGE2810	--	A	--	--
5.6	Pulse Group Modulation (PGM) TR: SIGG2100	--	A	--	--
5.7.	MULTIPLEXING				
5.7.1	Frequency Division Multiplexing (FDM) TR: SIGG1045, SIGG2046	--	B	--	--
5.7.1.1	Orthogonal Frequency Division Multiplexing (OFDM) TR: SIGG1045	--	B	--	--
5.7.2	Time Division Multiplexing (TDM) TR: SIGG1045, SIGG2046	--	B	--	--
5.7.2.1	Statistical Multiplexing TR: SIGG1045	--	B	--	--
6.	SPREAD SPECTRUM				
6.1	Types of Spread Spectrum TR: SIGG1045, SIGG1047	--	A	--	--

Line Item	Tasks, Knowledge, Technical References	A		B	C
		3 Skill Level		5 Skill Level	7 Skill Level
		Aircrew Fundamentals	1A8X2 Apprentice	ISR CDP 5 Skill Level	ISR CDP 7 Skill Level
6.2	RADIO WAVE PROPAGATION TR: Electronic Warfare Handbook, Electronic Warfare and Radar Systems Engineering Handbook, NAVEDTRA 14182, SIGG1160, SIGG1047				
6.2.1	Signal Flow TR: SIGE2810	--	B	--	--
6.2.2	Attenuation and Losses	--	B	--	--
6.2.3	Wave front spreading	--	B	--	--
6.2.4	Absorption	--	B	--	--
6.2.5	Scatter	--	B	--	--
6.2.6	Reflection	--	B	--	--
6.2.7	Refraction	--	B	--	--
6.2.8	Diffraction	--	B	--	--
6.2.9	Interference	--	B	--	--
6.2.10	Multi-Path	--	B	--	--
6.2.11	Speed of EM Waves	--	B	--	--
6.2.12	Signal-to-Noise Ratio (SNR)	--	B	--	--
6.2.13	Atmospheric Layers TR: SIGG1160, SIGE2810	--	B	--	--
6.2.14	Terrain TR: SIGG1160, SIGC2160	--	B	--	--
6.2.15	Distance TR: SIGG1160, SIGC2160	--	B	--	--
6.2.16	Signal Power TR: SIGE2810, SIGG2041	--	B	--	--
6.2.17	Probability of Intercept TR: SIGG1047, SIGC3202	--	B	--	--
7.	ANTENNAS TR: NAVEDTRA 14182, NAVEDTRA 14183, Electronic Warfare and Radar Systems Engineering Handbook, SIGG1160, CONTINGENCY OPERATIONS				
7.1	Types TR: SIGG1160	--	B	--	--
7.2	Impedance TR: SIGE2810	--	B	--	--
7.3	Patterns TR: SIGG1160	--	B	--	--
7.4	Bandwidth TR: SIGG1160	--	B	--	--
7.5	Beamwidth TR: SIGG1160	--	B	--	--
7.6	Gain TR: SIGG1160	--	B	--	--

Line Item	Tasks, Knowledge, Technical References	A		B	C
		3 Skill Level		5 Skill Level	7 Skill Level
		Aircrew Fundamentals	1A8X2 Apprentice	ISR CDP 5 Skill Level	ISR CDP 7 Skill Level
7.7	Polarization TR: SIGG1160	--	B	--	--
7.8	Reciprocity TR: SIGG1160	--	B	--	--
7.9	Directivity TR: SIGG1160	--	B	--	--
7.10	Transmission Line TR: SIGG1160	--	B	--	--
7.11.	Function TR: SIGG1160	--	B	--	--
8.	RADAR FUNDAMENTALS TR: Electronic Warfare Fundamentals, Electronic Warfare and Radar Systems Engineering Handbook, NAVEDTRA 14190, Combined Emitter Database, USSID 212				
8.1	Radar system functions (e.g., TT, TA, FC, HF, etc.) TR: AFTTP 3-1, VOL. 2	--	A	--	--
8.2	Characteristics associated with Radar mode; RF, Modulation and Scan	--	A	--	--
8.3	Moving Target Indicator (MTI)	--	A	--	--
8.4	Synthetic Aperture Radar (SAR)	--	A	--	--
8.5.	Pulse Doppler	--	A	--	--
9.	MILITARY ENGAGEMENT TR: Cornerstone, Dynamic Information Operations Decision Environment (DIODE), NASIC adversary studies, MSIC adversary studies, ONI adversary studies, NGIC adversary studies				
9.1	Range of Military Operations (ROMO) TR: JP 3-0, AF Doctrine Annex 3-0	--	A	--	--
9.2	Determine and brief threat systems capabilities and associated Command, Control, Communication and Computers (C4) using authoritative sources. TR: AFTTP 3-1 Threat Volumes, DIODE, VINTAGE HARVEST 2	--	2b	--	--
9.3	Determine and brief air tasking TR: JP 3-0, JP 3-30, AF Doctrine Annex 3-0	--	2b	--	--
9.4	Targeting Cycle: inputs, and outputs TR: JP 3-60, AF Doctrine Annex 3-60	--	A	--	--

Line Item	Tasks, Knowledge, Technical References	A		B	C
		3 Skill Level		5 Skill Level	7 Skill Level
		Aircrew Fundamentals	1A8X2 Apprentice	ISR CDP 5 Skill Level	ISR CDP 7 Skill Level
9.5	Radio Signal Notation (RASIN) TR: USSID 111, VINTAGE HARVEST 2	--	A	--	--
9.6	Communication Emitter Notation (CENOT) TR: USSID 315	--	A	--	--
9.7	Electronic Intelligence (ELINT) Notation (ELNOT) TR: USSID 314	--	A	--	--
10.	INTELLIGENCE ORGANIZATIONS, SYSTEMS, FUNCTIONS, PRODUCTS, AND COORDINATION				
10.1	National Security Operations Center (NSOC) TR: NSOC Web Page	--	A	--	--
10.2	Ground Stations TR: NRO SIGINT Product Guide	--	A	--	--
10.3	Global Net-Centric Cryptologic Centers (GNCCs) TR: USSID 110	--	A	--	--
10.4	Service Production Centers (SPCs) TR: Organizational Relationship Chart for ELINT Modernization, USSIDs 2, 2300, 3150	--	A	--	--
10.5	Joint Intelligence Operations Centers (JIOCs) TR: JP 2-0	--	A	--	--
10.6	Airborne ISR Platforms TR: AFTTP 3-1 MDS Specific, NTTP 3-1 MDS, MDS Specific Capes Brief	--	B	--	--
10.7	Airborne SIGINT Collection Platforms TR: AFTTP 3-1 and NTTP 3-1 Platform specific volumes, USSID 101	--	B	--	--
10.8	National SIGINT Collection Platforms TR: JTENS	--	A	--	--
10.9	Terrestrial SIGINT Collection Platforms TR: U.S. Army and USMC TO&Es	--	A	--	--
10.10	Determine 1A8X2 platform capabilities using authoritative sources TR: AFTTP 3-1 (MDS specific Volumes)	--	2b	--	--

Line Item	Tasks, Knowledge, Technical References	A		B	C
		3 Skill Level		5 Skill Level	7 Skill Level
		Aircrew Fundamentals	1A8X2 Apprentice	ISR CDP 5 Skill Level	ISR CDP 7 Skill Level
11.	INTELLIGENCE NETWORKS AND COMMUNICATIONS TR: Intelink User's Guide, ic.gov, nsa.ic.gov				
11.1	JWICS (Intelink- SCI)	--	A	--	--
11.2	SIPRNET (Intelink-S)	--	A	--	--
11.3	NIPRNET (Intelink-U)	--	A	--	--
11.4	NSANet	--	A	--	--
11.5	Cross Domain Access/Use TR: DODIIS (Information Interchange/Defense Intelligence Agency Web Transfer Portal)	--	A	--	--
12.	INFORMATION WARFARE (IW)				
12.1	Electronic Attack	--	A	--	--
12.2	Electronic Support	--	A	--	--
12.3	Electronic Protect	--	A	--	--
12.4	Cyber	--	A	--	--
13.	GOVERNANCE AND AUTHORITATIVE SOURCES OF INFORMATION				
13.1	United States Signals Intelligence Directives (USSIDs) TR: USSID 2	--	A	--	--
13.2	AIR FORCE TACTICS TECHNIQUES AND PROCEDURES (AFTTP) 3-1				
13.2.1	General Planning TR: AFTTP 3-1 General Planning	--	A	--	--
13.2.2	Threat Volumes TR: AFTTP 3-1 Threat Volumes	--	A	--	--
13.2.3	Mission Design Series (MDS) Specific Volumes TR: AFTTP 3-1 MDS Specific Volumes (add silent shield)	--	B	--	--
13.3	Order of Battle (Cornerstone, AMC OB on Demand) TR: Cornerstone Web Page, MIDB Webpage	--	A	--	--
13.4	Air Tasking Order (ATO) / Special Instructions (SPINS) / Reconnaissance, Surveillance, and Target Acquisition Annex (RSTA) TR: JP 3- 30, AF Doctrine Annex 3-30, MIL-STD- 6040	--	A	--	--

Line Item	Tasks, Knowledge, Technical References	A		B	C
		3 Skill Level		5 Skill Level	7 Skill Level
		Aircrew Fundamentals	1A8X2 Apprentice	ISR CDP 5 Skill Level	ISR CDP 7 Skill Level
13.5	Air Force Instruction (AFI) 11-Series and 14- Series Resources (Air Force Manual (AFMAN))	--	A	--	--
13.6	Comm Card TR: AFTTP 3-1 IPE (General Planning)	--	B	--	--
14.	REPORTING TR: USSID 212				
14.1	Kleight (KL)	--	A	--	--
14.2	Tactical Reports (TACREPs) to include: A/E/G/I/J/N	--	A	--	--
14.3	CRITIC	--	A	--	--
14.4	Serialized Reporting	--	A	--	--
14.5	Threat Warning Types	--	A	--	--
14.6	Rescue/Personnel Recovery	--	A	--	--
14.7	Post Mission Reporting	--	A	--	--
15.	1A8X2 SIGNALS INTELLIGENCE (SIGINT) COLLECTION & EQUIPMENT				
15.1	Fundamental principles of Radio Transmitters	--	A	--	--
15.1.1	Signal flow from transmission antenna to interception	--	A	--	--
15.2	Fundamental principles of Radio Receivers	--	A	--	--
15.2.1	Primary outputs of collection equipment, to include: a. Audio Frequency (AF) b. Intermediate Frequency (IF) c. Video baseband	--	A	--	--
15.2.2	Recorders	--	A	--	--
15.2.3	Spectral Displays/Analyzers	--	A	--	--
15.2.4	Waveform Viewers	--	A	--	--
15.2.5	Modulator/Demodulator (MODEM) TR: VINTAGE HARVEST 2	--	A	--	--
15.3	Narrow and wideband collection	--	A	--	--
15.4	SIGNALS TECHNOLOGIES				
15.4.1	Personal Communication System (PCS)	--	A	--	--
15.4.2	Short Duration Signal (SDS)	--	A	--	--

Line Item	Tasks, Knowledge, Technical References	A		B	C
		3 Skill Level		5 Skill Level	7 Skill Level
		Aircrew Fundamentals	1A8X2 Apprentice	ISR CDP 5 Skill Level	ISR CDP 7 Skill Level
15.4.3	Wireless Communications TR: VINTAGE HARVEST 2	--	A	--	--
15.4.4	Cellular Technologies such as GSM, CDMA, 2/3/4/5G	--	A	--	--
15.4.5	Wi-Fi	--	A	--	--
15.4.6	Satellite Communications (SATCOM)	--	A	--	--
15.4.7	PROFORMA TR: SIGP1000	--	A	--	--
15.4.8	Digital Push to Talk	--	A	--	--
15.4.9	High Data Rate (HDR) TR: VINTAGE HARVEST 2	--	A	--	--
15.4.10	MODERN SPEECH SYSTEMS TR: SIGC2201				
15.4.10.1	Private / Enciphered Speech	--	A	--	--
15.4.10.2	Trunk Mobile Radio (TMR)	--	A	--	--
15.4.10.3	Digital Mobile Radio (DMR)	--	A	--	--
15.4.10.4	Digital Voice/Video TR: SIGG1040, VINTAGE HARVEST 2	--	A	--	--
15.5	New Signals of Interest (NSI)	--	A	--	--
15.6	SWITCHING				
15.6.1	Packet Switching	--	A	--	--
15.6.2	Circuit Switching	--	A	--	--
15.7	MULTIPLE ACCESS TECHNOLOGIES TR: Fundamentals of Wireless Communications Systems (AF Portal Safari Books), Digital Signal Processing 101 (AF Portal Safari Books), VINTAGE HARVEST 2 Training Page				
15.7.1	Frequency Division Multiple Access (FDMA)	--	A	--	--
15.7.1.1	Orthogonal Frequency Multiple Access (OFDMA)	--	A	--	--
15.7.2	Time Division Multiple Access (TDMA)	--	A	--	--
15.7.3	Code Division Multiple Access (CDMA)	--	A	--	--
16.	PARTICIPATE IN CAPSTONE EXERCISE				

Line Item	Tasks, Knowledge, Technical References	A		B	C
		3 Skill Level		5 Skill Level	7 Skill Level
		Aircrew Fundamentals	1A8X2 Apprentice	ISR CDP 5 Skill Level	ISR CDP 7 Skill Level
16.1	Optimize collection based on changes in the operational environment (e.g., MIJI, environmental effects, threat system activation, dynamic changes to friendly or adversary operations or dispositions, time sensitive targets, etc.) TR: JP 2-01.3	--	2b	--	--
16.2.	SITUATIONAL AWARENESS				
16.2.1	Extract relevant data from pre-mission intelligence	--	2b	--	--
16.2.2	Alert crew to potential threats	--	2b	--	--
16.2.3	Bearing, Range, Altitude, and Aspect (BRAA)	--	B	--	--
16.2.4	Prioritize Tasks	--	2b	--	--
16.3	Troubleshoot	--	2b	--	--
16.4	Identify Planning and Direction, Collection, Processing and Exploitation, Analysis and Production, Dissemination and Integration (PCPAD) Requirements and Procedures using authoritative sources (USSIDs, Tasking databases, ATO, etc.)	--	2b	--	--
16.5	Search Strategy and Target Acquisition	--	2b	--	--
16.6	Record signals	--	2b	--	--
16.7	Geo-locate signals	--	B	--	--
16.8	PRE MISSION BRIEF				
16.8.1	Record mission essential information	--	2b	--	--
16.8.2	Verify mission essential information	--	2b	--	--

Line Item	Tasks, Knowledge, Technical References	A		B	C
		3 Skill Level		5 Skill Level	7 Skill Level
		Aircrew Fundamentals	1A8X2 Apprentice	ISR CDP 5 Skill Level	ISR CDP 7 Skill Level
16.8.3	Convey mission essential information	--	2b	--	--
16.9	CREW DEBRIEF				
16.9.1	Reconstruct mission events	--	2b	--	--
16.9.2	Receive constructive feedback	--	2b	--	--
16.9.3	Provide constructive feedback	--	2b	--	--
16.10	OPERATIONS COMMUNICATIONS TR: AFTTP 3-1 MDS Specific Volumes, AFTTP(I) 3-2.18, AFTTP(I) 3-2.5, JP 2-01.3, AFI 11-2 MDS, AFI 14-2 MDS				
16.10.1	Transmit and Receive voice-based communications over radio with professionalism (ex. Flight status, results of mission, threats and reactions, etc.)	--	2b	--	--
16.10.2	Transmit and Receive text-based communications with professionalism	--	2b	--	--
17.	APPLIED MATHEMATICS TR: MATH1030				
17.1	Convert between number systems (binary, decimal, octal, and hexadecimal)	--	1a	--	--
17.2	Convert numbers using scientific notation	--	1a	--	--
17.3	Use RF formulas (ex: Wavelength, Period, Frequency Conversion Math/Factors, decibels (dBm), path loss, etc.)	--	1a	--	--
18.	COMPUTER OPERATION TR: support.windows.com, access.redhat.com				
18.1	Manipulate Operating Systems	--	2b	--	--
18.2	Artificial Intelligence/Machine Learning TR: ISR Dominance Flight Plan 2018	--	A	--	--
19.	GEOSPATIAL INFORMATION AND SERVICES – CHARTS AND APPROPRIATE AUTOMATED MAPPING TOOLS TR: TC 3-25.26				
19.1	Plot and extract Military Grid Reference System (MGRS) points	--	2b	--	--

Line Item	Tasks, Knowledge, Technical References	A		B	C
		3 Skill Level		5 Skill Level	7 Skill Level
		Aircrew Fundamentals	1A8X2 Apprentice	ISR CDP 5 Skill Level	ISR CDP 7 Skill Level
19.2	Extract coordinates	--	2b	--	--
19.2.1	Convert points from Military Grid Reference System (MGRS) values to Latitude / Longitude coordinates and vice versa	--	2b	--	--
19.2.2	Compute azimuth and range	--	2b	--	--
19.3	Digital Terrain Elevation Data (DTED)	--	A	--	--
20.	GEOSPATIAL BATTLESPACE TERMS & CONCEPTS TR: AFTTP(I) 3- 2.18, AFTTP(I) 3-2.5, AFTTP 3-1.GP				
20.1	Bullseye	--	A	--	--
20.2	Search and Rescue Point (SARDOT)	--	A	--	--
20.3	Killbox/Keypad/ Global Area Reference System (GARS)	--	A	--	--
20.4	Gridded Reference Graphic (GRG)	--	A	--	--
21.	Typing				
21.1	Type 25 words per minute at 90% Accuracy	--	2b	--	--